



INTERNATIONAL CONFERENCE

Employment, Education  
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***EMPLOYMENT, EDUCATION AND  
ENTREPRENEURSHIP***

*16-18 October 2013 Belgrade Serbia*

**ENTREPRENEURSHIP: ECONOMIC  
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**EMPLOYMENT, EDUCATION AND ENTREPRENEURSHIP  
(EEE 2013)**

**Belgrade, Serbia, 16 – 18 October 2013**



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**PUBLISHER**

*Faculty of Business Economics and Entrepreneurship  
8 Mitropolita Petra Street  
11000 Belgrade, Serbia*

**PERSON RESPONSIBLE FOR PUBLISHING**

***Professor Goran Kvrđić PhD***, Director of Faculty of Business Economics and Entrepreneurship, Belgrade, Serbia

CIP - Каталогизacija у публикацији  
Народна библиотека Србије, Београд

338.1(082)  
005.961:005.914.3(082)  
658(082)  
336.7(082)

INTERNATIONAL Conference Employment,  
Education and Entrepreneurship (2nd ; 2013 ;  
Belgrade)

Entrepreneurship : economic development &  
finance / #[The #Second] International  
Conference Employment, Education and  
Entrepreneurship [EEE 2013], 16-18 October  
2013 Belgrade Serbia ; [organizers Faculty of  
Business Economics and Entrepreneurship ...  
[et al.]. - Belgrade : Faculty of Business  
Economics and Entrepreneurship, 2013 (Beograd  
: Pegasus advertising). - 550 str. : graf.  
prikazi, tabele ; 25 cm

Tiraž 150. - Str. 13: Preface / Mirjana  
Radović-Marković. - Bibliografija uz svaki  
rad.

ISBN 978-86-6069-094-6  
ISBN 978-86-6069-092-2 (za izdavačku celinu)  
1. Visoka škola za poslovnu ekonomiju i  
preduzetništvo (Beograd)  
a) Предузетништво - Зборници b) Привредни  
развој - Зборници c) Предузећа - Пословање  
- Зборници d) Финансијско тржиште -  
Зборници  
COBISS.SR-ID 201868812

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*Printing 250 copies*



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## PREFACE

As a scientific discipline, entrepreneurship has led a long fight to take its place among the other scientific disciplines and to obtain an equal treatment. In the last ten years, this is happening and there is almost no University in the world or a research center, whose researchers are not working on this issue. Furthermore, not only did it get the scientific verification in the academic world and gathered a great number of researchers, but it is also characterized by the same number of various approaches, which set this issue in a very wide perspective. Some approach this issue from the aspect of gender, others from the aspect of innovation and economic development or from the aspect of creating new jobs and self-employment.

No matter what the angle of analyzing this issue is and which aspect we focus our researches on, what is in common for all of them is the fact that together they give a significant contribution to the development of entrepreneurship, and some of the new theoretical and practical solutions will find their application and will be present in practice. Having in mind that from the great quantity, quality has to come out, it is my opinion that we always have to insist on a large number of researches and international exchange of theoretical and practical experience. Moreover, this publication represents another contribution to the theme of entrepreneurship, and it is the result of efforts of a great number of experts in this area, from all over the world. Publishing in this domain has become almost a tradition and it represents a part of the edition about entrepreneurship which is published once a year by the Faculty of Business Economics and Entrepreneurship from Belgrade. I expect it to be a useful reading material to researches, students and all those who are interested in this theme, but I also expect that it will raise new questions that are constantly imposed by fast changes in the global business environment. Because of these changes and constant challenges, science cannot stay passive, but it should follow them and offer new answers. If we followed this line in designing the structure of this monograph, we have accomplished the part of this mission and gave our scientific contribution to the issues of entrepreneurship.

At the end of this preface, I would like to acknowledge all the authors who responded in large numbers and sent in their quality papers, which is why this publication will be issued in two volumes, for the first time.

October, 2013.  
Belgrade, Serbia

Academician Prof. Dr. Mirjana Radović-Markovic



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***PART ONE***

***ENTREPRENEURSHIP AND ECONOMIC  
DEVELOPMENT***





## ***TRANSITION GAME: WHO PLAYED THE TRANSITION GAME AND WITH WHAT RESULTS***

*Neven Vidakovic*<sup>1</sup>

**Abstract:** This paper looks at the transition process from communist planned economy to free market economy for eleven countries in Europe and treats the whole process as a game. The process is interesting due to the fact all new countries have same goal, join EU and join EMU (European monetary union) join NATO and thus successfully end transition.

The paper perceives this process as a Bayesian game, creating a stochastic dynamic settings where policy makers analyse the policies and have the ability to change learn from their mistakes. The game is solved both analytically and theoretically. The paper does not create a computer generated estimations of the game, but looks at the real life experiment that has occurred in last 15 years in post-communist counties, an index to quantify the results of the game is created to see what were the results of each player. The main findings of the paper are that there is a considerable difference in the strategies which were chosen by each of the participants and with considerable difference in the results. What is most striking in the paper is that the game players do not have the ability to learn or to create forward expectations. Also there is little correlation between the success in the game and economic success indicating high political influence.

**Key words:** Transition, Game Theory, Strategy, Optimal Path, Dynamic Programming

**JEL classification:** N10, C61, C73

**UDC** 005.311.6/.7:338.246.025.88(082); 519.83(082)

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## ***INTRODUCTION***

The process of economic transition is probably one of the most important economic events of the 20<sup>th</sup> century and it certainly is the most unique economic event in the recent economic history. Unlike the economic recession or even the Great depression which might be repeated in the future it is hard to believe that any time soon an economic transformation such as the fall of the eastern block is going to occur again.

The fall of the eastern bloc, was in effect a fall of an economic system. The planned economy has failed, now the free market economy was the only reasonable choice left. Because of this the ex-socialist economies have on the path of transition from planned economy towards the free market economy.

The whole notion of economic transition from one economic system to the other was in fact a journey in the unknown. It would be very hard to say the policy makers have known exactly what they were doing. The policy makers knew where they wanted to end up, but the path was in fact somewhat of a mystery.

The end of communism created a specific state in the economies of the newly capitalistic countries. The process of transition demanded both economic and social transition from one state to another state. Although there was no time limit on the process of transition the countries wanted to finish the process as soon as possible. While in most developed countries today the economies have developed over centuries the ex-communist countries were faced with an abrupt change and very fast transition to capitalism.

Once the communism was over and the political regimes moved from one party to multi party system the main question of economic transition arose: "What now?" All of the countries involved in the process of transition had some general ideas where they wanted to go and some general goals which were mostly political phrases like: "higher standard of living", "stable economic growth" or "more jobs". However each of these phrases had to be accomplished somehow and the only way to actually achieve them was through the monetary and fiscal policies. At the same time as the process of transition started the EU was gaining more and more traction as a new political force in the world. This new force gave countries a course to follow in order to achieve the goals they wanted.

The most general economic and political goals can be presented in the following policy objectives:

- Create a stable government: for most countries this was the first order of business when the multi-party system was adopted.
- Create a stable monetary system: most of the economies were part of another large economy and the secession created a problem of money and country currency. This problem went hand in hand with the first problem.

- Create a stable economic environment where free business will be allowed to develop: this in a nutshell is what we refer to as “economic transition”.
- Optimally transition from the public to private ownership, with minimum overall social costs
- Join NATO: in order to have military stability
- Join EU: as part of the new European global political set-up
- Join EMU: this step is the full integration into EU and the final step of the political transition.

In essence the newly created countries were facing a game. The goals have been set and after the revolutions and overthrowing the communism the game was afoot. People in respective countries were electing government in belief the elected government will provide the country with the optimal strategy in achieving the set goals.

If we look at the above stated goals the first four are prerequisites for the last three. So each step is a sine qua non condition for the joining of EU, NATO and EMU. Because of this we can look at the EU, NATO and EMU as the end goals or the main objectives of the policy makers. The policy makers should conduct themselves with the end goals in sight. In essence we have a multi stage game, played by several separate players, but with the same objectives.

The purpose of this paper is to look at the results of the above mentioned game, first from a game theory perspective and then from the economic perspective. The paper's goal is to create a model which will represent the game and then analyse the results of that game on very specific policies.

Because of the space constraints we are only going to make a short review of the literature on the whole transition, but the literature on the economic transition and many of its aspects is more than extensive. The process of economic transition and different perspectives on economic transition have been heavily researched in economic literature. Various aspects were analysed like privatization (Aghion and Blanchard 1998; Bolton and Roland 1992; Konings, Lehmann, and Schaffer 1996; Roland and Verdier. 1994). The whole process of transition and the speed of transition was also part of significant portion of research either on specific example like (Berg and Blanchard, 1994) or as whole (Castanheira and Roland, 2000; Murphy, Shleifer, and Vishny, 1992). Certain effects of the transition of the economic variables was also part of the research like employment in (Bilsen and Konings, 1997) or output in (Rosati, 1994). Overall (Roland, 2000) is a great analysis of the overall impact of the transition and the economics.

This paper is going to take an alternate route. It is not going to analyse any specific policy or any specific choice, it will look at the actual process of transition from decision making perspective and how did the policy makes behave.

This paper is set up as follows; after the introduction part two develops and explains the transition game, part three analyses the model in case of one particular decision in the process of economic transition, part four creates a dynamic model for the whole process of the transition. Part five creates and index which gives quantitative results to the model and the results of the transition game. Part six concludes.

## ***THE TRANSITION GAME***

The model that will be developed here will be based on the standard game theory models. However, in mathematical representations of the problems we shall be using tools from rational expectations econometrics as summarized in (Blanchard 1983; Sargent and Ljungqvist, 2004). The reasons for using rational expectations in game theory models and using game theory models in macroeconomics have been long advocated by economists and can be seen actively used in (Sargent 1993; Sargent and Hansen, 2001; Lucas and Stokey 1989; Woodford, 2005).

Each country is one player in this game. The player is rational, utility maximizing player who creates expectations rationally. In the game the player tries to maximize the utility. The utility maximization comes from implementing the policies which bring the player closer to the end of the game. We are going to use the rational expectations model, but with bounded rationality of a player. What this means is the expectations are created rationally, however the reactions to the expectations are not optimal, also the agents might not follow what their expectations are telling them they should do. The examples the use of rational expectations representative agent with different strategies and suboptimal outcomes can be found in (Sims 1998,2003; Reis, 2004). These works point out a possibility of rational expectations representative agents, but with bounded rationality where the agent has one true model and several other models working around the true model.

In a game theoretical set up the difference between the true rational expectations model and other non-rational expectations model leading to bounded rationality gives us opportunity to explore alternate paths to the same goal of the game.

Although the goals of each player are the same there are many different strategies each player can try to implement. There is also a problem of time preference and the speed of adjustment. Some players might want to end the game as soon as possible, while other might want to prolong the game. These two problems will be discussed as well in the paper and we shall see the impact of the time preferences of each player on the utility obtained from the end of the game.

The players are not allowed to copy strategies explicitly and economically this might not make sense in some cases, the players are allowed some limited cooperation in the form of interaction and communication, so we are giving an opportunity of learning through time. This is especially true in reality where countries have the ability to copy some policies and to share experiences.

Each of the representative agents has a set of rational strategies; the set of rational strategies represents a response of the player to a set of problems the player is facing. In essence we are dealing with a min-max problems presented in (Sargent and Ljungqvist, 2004; Sargent 1993; Sargent and Hansen, 2000). The player is trying to maximize the benefit of a certain strategy and at the same time minimize the social cost of that strategy.

## **MODEL**

Before we move into the actual model there are several things we need to point out. First of all we are going to approach the problem of transition in general terms. We are not going to analyse any particular policies. We are more interested in how the transition was played in terms of the results of overall economic policies, not in terms of what strategies were used. Also we are interested in where in the game each player is, not how the player got to a particular point in the game.

We are going to model two separate processes. First we are going to model the decision making regarding one particular policies. Here the policy maker has the option between analyse and react. So for each particular problem the player is faced in the transition the player has the possibility to analyse the situation or just to react to a particular situation. This general model is valid for any decision made during the process of transition regardless what is the nature of the decision. In the second part of the model we are going to model the whole economic transition into one dynamic game and we are going to find the optimal path for the transition game. Here we are going to leave room for the participants to learn the process and learn from their mistakes. So we are going to allow the game participants to evolve over time.

In order to adjust the players for their individual set-ups we are going to impose the rational expectations process in terms of decision making, however the information distribution of which the decision is made is not going to contain full information. So the players are going to make the optimal decision given the existing information set, however this decision might not be the same under full information set.

### *ECONOMIC DECISIONS DURING THE TRANSITION PROCESS - OPTIMAL CHOICE THRESHOLD*

First we are going to look at individual problem a policy maker is faced with. Let us assume there is some element, economic or non-economic, of the country the policy makers wish to change or to *transition* from socialist and planned into capitalist and free market economy. This element is a subject to transition and there is a need to change this particular element. The main reason for the change is to *transition* this element into a new state with the objective of getting one step closer to the main goals: NATO, EU, EMU.

The model we will follow is standard optimization approach which can be found in (Casti and Larson, 1982). We are going to assume that there are two states of the system, the first state is going to be denoted as A and it means the state of the system is acceptable. Acceptable state means the element is in such a state has no need to *transition* into another state. If the element is in state A the element does not need any *transition*. The second states of the system is going to be noted as U which means the system is in state which is not acceptable. In this case there is a need to transition the element into a new and better state. The policy makers are trying to move all elements within their power from the U state into the A state. It is important to note the policy makers **do not know** what the effects of their policies are going to have on each particular element, so the policy makers do not know for sure the policy is going to

move the system from U to A. The policy makers also do not know is the element in state U and not in state A with certainty. The decision of the policy maker is based on subjective assumption is element in state U or state A.

Since we are dealing with the multiple players in the game we are going to allow for the states U and A to be completely subjective and depending on each players. So there is going to be a noticeable difference between U and A between the players for exactly the same element. Subjective variations on states U and A will cause players to have different actions for the same problems and different results for same policies.

Once the socialism was over there was a legitimate need to make some changes in the transition countries. Some of the changes were absolutely necessary, but the need for some other changes was somewhat ambiguous. The best example of the changes which had to be made were the laws which allowed the freedom of speech and multi-party political system. However the need to privatize banks to foreigners was more arguable and it is not a type of the change which had to be done under any circumstances. The problem of privatization banks was analysed by Ribnikar (2004). So it boils down to the policy maker's view is something in state U or in state A based on a subjective, not objective probability distribution.

Considering the fact the policy maker does not exactly know which state the system is in, there are two operations he can perform. The first operation is R, this type of operation reduces the probability that the system is in state U by factor of  $0 < \alpha < 1$ . This action can also be called the reform of the system. The second type of operation is the operation E, this type of operation is type of operation used to determine the actual state of the system and then depending on the state of the system to produce reaction. It is obvious R stands for reaction and E stands for examination. The policy R a priori assumes the system in is the wrong state and imposes a policy which changes the state of the system from U to A with some probability  $\alpha$ . On the other hand the policy E is the analytical tool used to determine what state the system is in and then to act. We are going to impose there can be only one policy at the time. So it is impossible to have both R and E policies at the same time implemented on one element of the economy. We are also going to impose each policy takes one unit of time. We are not going to explicitly define what is the unit of time.

Now we can define the problem of the policy maker. The policy maker tries to set up the best sequence of R and E policies in order to transform the system from U to A with complete certainty. Obviously there is no time constraint, but we shall assume that there is a time preference which is also the case in real life. The policy makers want to be in the state A as soon as possible. The expediency assumption is realistic. It is hard to imagine the policy can be implemented and at the same time analysed what the situation is and what should be done. Also it is obvious the policy makers have just one mandate to perform political and economic actions, so although the time is not of the essence it is important to get things done in time.

We are going so assume there is a probability  $x$  the system is in state U, also by default there is  $1-x$  probability that the system is in state A. We are going to have a function  $I(x)$ , this function is the expected time which is required to transform the system into state A with complete certainty, given the probability  $x$  the system is in U. The function  $I(x)$  assumes the optimal policy is followed.

As a result of decision R the probability of  $x$  is transformed  $x \rightarrow \alpha x$ , while with the decision E transforms  $x \rightarrow 1$  if the system is in state A and  $x \rightarrow 0$  if the system is in state

U. This is the mathematical constraint for the fact the action E determines the true state of the system. This immediately point out it is better and optimal to first perform E for every problem in order to determine the true state, rather than just act. Following this system we can use the Bellman principle of optimality to get the following set up:

$$I(x) = \min \begin{cases} R : 1 + I(\alpha x) \\ R : 1 + xI(1) \end{cases}, \text{ with } I(0)=0$$

To solve the above equation we note that there exists a value  $x^*$  (breaking point) such that we choose E if  $x < x^*$  and R if  $x > x^*$ . This means there has to be some level of threshold between the points when we are certain about the state of the system and the policy maker will choose to act and the values of  $x$  for which we are not certain about the state of the system and we choose not to act, but to analyse first. The parameters  $x^*$  (the threshold) is completely subjective for each player in the game. If we set up to have  $x = x^*$  in that case we have

$$1 + x^* I(1) = 1 + I(\alpha x^*)$$

Since  $\alpha x^* < x^*$  we must have

$$I(\alpha x^*) = 1 + \alpha x^* I(1)$$

If we combine (2) with (3)

$$2 + \alpha x^* I(1) = 1 + I(1)$$

We can now solve for (4) and consequently for the critical value of  $x^*$  we obtain

$$x^* = \frac{1}{(1 - \alpha)I(1)}$$

Equation (5) if the threshold when each participant is going to choose to react and when each participant in the game is going to choose to analyse. The fact  $x^*$  is subjective allows for the players in the game to have different outcomes of the game and to be in different stages of the game at the same time.

In order to obtain the solution to the problem at hand we have to know how to calculate  $I(1)$  in terms of  $\alpha$ . In order to be able to do that we are going to use a little bypass. We are going to note that there must be a positive integer  $M$  such that:

$$I(1) = 1 + I(\alpha),$$

$$I(\alpha) = 1 + I(\alpha^2),$$

$$I(\alpha^2) = 1 + I(\alpha^3),$$

.

.

$$I(\alpha^{M-1}) = 1 + I(\alpha^M),$$

$$I(\alpha^M) = 1 + \alpha^M I(1)$$

Then we have

$$I(1) = M + 1 + \alpha^M I(1)$$

If we rearrange the above equation we are going to get:

$$I(1) = \frac{M + 1}{1 - \alpha^M}$$

The unknown value of M has to be some positive interferer which minimizes the above equation, thus we have

$$I(1) = \min_{M=1,2,\dots} \frac{M + 1}{1 - \alpha^M}$$

We have now determined what is the minimum need to differentiate between R and E. Once again the minimum is differentiated between each player and it is subjective. This problem is more then obvious in practice. Again we can go back to the privatization of banks. Slovenia chose not or privatize banks and this seemed like a good idea in the 90s, when banks were an integral part of the economy. Whoever in recent years those banks are in serious problems and present a burden for the economy. On the other hand Croatia chose the privatize banks and those banks were not an integral part of the economy, but have proved the most stable part of the economy after the crisis of 2008.

In order to better and more fully understand the transition process in the next part we are going to move to the realm of the game theory which will make the whole mathematical model much more tractable.

## ***GAME THEORY AND ECONOMIC TRANSITION***

We can look at the transition as a game with a clear ending of the game. The full transition is achieved when the economies of the eastern bloc were on equal footing with the economies of the western Europe, the free market economies. The only way the ex-socialist economies could be on the equal footing with the free market economies was if the ex-socialist economies joined the same associations that the free market economies were members of and as a matter of fact have created. In this paper we are identified this as joining NATO, EU, EMU. Within joining the EU there were three separate objectives: join the EU as an association of countries, join the Schengen system in order to be able to remove the physical borders between the countries and join the EMU in order to gain economic integration within the single currency system.

In this paper we are approaching the transition as a game theory, but for mathematical and practical purposes it is important to note the participants did not have any a-priori knowledge of the problem. In most cases the policy makers do know or have general idea what effects their policies are going to have. In the case of large economies, in most cases, there is some past data and there is history of the occurrences after similar policies have been undertaken, however in the case of the transition process all of the policies where performed could not rely on existing empirical data.

This presents an important modelling challenge. Since the policy makers did not know exactly what they were doing, the only way of doing things was to just act, since the analysis would probably be deficient. We can also relate this problem to the previous chapter of this paper.

We have discussed the policy makers have two possible actions and that is to examine the situation E and to react with a policy R. But at the same time we have left open for the fact that the policy makers are not sure which state the system is in and thus what reaction is needed. Now we have provided the policy makers with the mathematical tools to tell us when and how to reach and which reaction to use, but there were a lot of deficiencies in the previous model. For starters it related only to one part of the economic system, we are now going to rectify that problem. Also the model did not allow to the policy makers to learn from their actions. We are now going to change that as well.

Again we are going to assume the policy makers are utility maximizing agents who get utility from performing economic policies, the better and more successful the policies are the more utility the policy makers get.

We are going to set up a model where the policy maker has the ability to evolve over time. Let us go back to the model from the previous part of the paper. In that model the policy maker was faced with two options, examine or react, but the model presented was for one time period, for just one economic problem and the model did not show the evolution over time, but it has calculated the threshold between to actions for a particular policy, we did not analyse the option if the policy maker chooses R and then needs to see the result of the polices in the next time period. What happens if the state of the system is A and the policy makers chooses R? Does the system change from A to U and after that action does the system need to be fixed to come back to A? From the transition perspective of the policy makers these are the fundamental questions.

The policy maker needs to determine what the current state of the system is; this determination comes from a lot of noisy observations. In order to determine the optimum estimation of the system the policy maker uses a following discrete system equation:

$$x(t+1) = g[x(t), w(t), t]$$

Where  $x$  is an  $n$  dimensional state vector,  $w$  is an  $r$  dimensional random forcing function and  $g$  is an  $n$  dimensional vector function. The policy maker does have a model which he uses to measure the system and the equation is

$$z(t) = h[x(t), v(t), t]$$

Where  $z$  is an  $s$  dimensional measurement vector and we are going to assume that  $s < n$ ;  $h$  is an  $s$  dimensional vector function and  $v$  is the  $d$  dimensional vector of random noise.

The probability density function  $p[w(t)]$  and  $p[v(t)]$  are going to be assumed to be known and independent from sample to sample. The probability density function of the initial state before any measurements are received denoted as  $p[x(0/-1)]$  is going to be assumed to be known.

The policy maker receives a lot of information. Some of the information might be completely irrelevant and some of the information might be extremely relevant, but it is possible for this information just “flies under the radar”. Even in these simple two functions we were able to present a very realistic problem for the policy maker in the transition country.

The initial assumption about the state of the system might be the most controversial function and hard to translate into the real world. The initial state of the

function is more subject to uncertainty than risk, therefore the initial state of the system might have been more subjective than objective. If the initial assumption regarding the state of the system is more subjective than objective there is a possibility for a policy error just because the policy maker is overestimating his strengths and underestimating his weakness.

Going back to the problem we can formulate the problem as follows. Given the system which was described by the equation (10) and the measurement system which described by function (11), given the probability functions  $p[w(t)]$  and  $p[v(t)]$  and the noisy measurement of the system  $z(1), z(2), \dots, z(k)$  we need to find the maximum likelihood estimate of the entire trajectory  $x(0), x(1), \dots, x(t)$ , this estimate of the trajectory is noted as  $X(t/t)$ .

Keep in mind we are looking to the entire trajectory of the system since we have a clear end game definition. We are trying to model the game with a known ending, but a variable length of time it is important for the policy maker to arrive at the ending as soon as possible, but there are no time constraints.

Although we are going to use the Bayes' theorem this problem is somewhat different from the usual problems. It is custom to have the existing data and then figure out what is the state the system is in. In this particular problem we are not doing that. We are assuming we know the state of the system (based on subjective distribution of each player) and then trying to create the trajectory of the system, while learning as we go along, which is the same case the policy makers in the process of transition have faced. In real life the problem of decision makes was the inability to correctly determine the state of the system. This the reason why both in real life and in our model players in the game have subjective probability distributions instead of objective probability distributions.

The process we are going to use here is very similar to the dynamic programming, the procedure and the logic of the dynamic programming are going to be used here. But instead of the principle of optimality we are going to derive iterative relation for the maximum trajectory estimate by applying Bayes rule. This will give the participants in the economy ability to learn over time. The players in the game have possibility to learn from their mistakes and speed up the game in order to reach the end game faster.

We are going to make the following definitions

$$X(t) = \{x(t), x(t-1), x(t-2), \dots, x(0)\}$$

$$Z(t) = \{z(t), z(t-1), z(t-2), \dots, z(0)\}$$

In that case the function  $I[x(t), t]$  is defined as

$$I[x(t), t] = \max_{x(0), x(1), x(2), \dots, x(t-1)} \left\{ P \left[ \begin{array}{c} x(t), x(t-1), \dots, x(0) \\ z(t), z(t-1), \dots, z(0) \end{array} \right] \right\} = \max_{x(0), x(1), x(2), \dots, x(t-1)} \left\{ P \frac{X(t)}{Z(t)} \right\}$$

What we are now looking to do is to obtain the desired relationship by deriving  $I[x(t+1),t+1]$  in terms of  $I[x(t),t]$ . Bayes' rule can be written as

$$p\left[\frac{X(t+1)}{Z(t+1)}\right] = \frac{p\left[\frac{z(t+1)}{x(t+1)}\right] * p\left[\frac{X(t+1)}{Z(t)}\right]}{p\left[\frac{z(t+1)}{Z(t)}\right]}$$

The term  $p[X(t+1)/Z(t)]$  can be written as

$$p\left[\frac{X(t+1)}{Z(t)}\right] = p\left[\frac{x(t+1)}{x(t)}\right] * p\left[\frac{X(t)}{Z(t)}\right]$$

Substituting this relationship into equation (15) we get

$$I[x(t+1),t+1] = \max_{x(0),x(1),x(2),\dots,x(t-1),x(t)} p\left[\frac{X(t+1)}{Z(t+1)}\right] = \max_{x(0),x(1),x(2),\dots,x(t-1),x(t)} \left\{ \frac{p\left[\frac{z(t+1)}{x(t+1)}\right] * p\left[\frac{x(t+1)}{x(t)}\right]}{p\left[\frac{z(t+1)}{Z(t+1)}\right]} * I[x(t),t] \right\}$$

The above equation yields the desired result, the maximization is now done over a single value of  $x(t)$ , rather than over the entire set of past series  $x(0), x(1), \dots, x(t)$ .

The quantity  $p[z(t+1)/x(t+1)]$  is determined by equation (15) and the knowledge of  $p[v(t+1)]$  while the  $p[x(t+1),x(t)]$  is determined by the equation (17) and  $p[w(t)]$ . The function  $p[z(t+1)/Z(t)]$  serves only as a normalization factor, and the maximum likelihood estimate can be determined without explicitly computing it. The recursive relationship can then be written as

$$I^*[x(t+1),t+1] = \max_{x(0),x(1),x(2),\dots,x(t-1),x(t)} \left\{ p\left[\frac{z(t+1)}{x(t+1)}\right] \times p\left[\frac{X(t+1)}{x(t)}\right] \times I^*[x(t),t] \right\}$$

Where the function  $I^*[x(t),t]$  is proportional to, but not equal to,  $I[x(t),t]$ . We are constantly working with  $t+1$ , and we have  $t$  as a terminal condition and end of the transition process. Setting up the process is not hard and it analogues to the forward dynamic programming.

We just need to quantify the state vector  $x(t)$ . We are going to use a priori probability density function as the initial condition

$$I^*[x(0),0] = p\left[\frac{0}{-1}\right]$$

Each quantified value of  $x(1)$ , the quantity inside the brackets in equation (18) is evaluated for every quantified value of  $x(0)$ . Naturally then the maximum value for is selected as  $I^*[x(1),1]$ . The corresponding value of  $x(0)$  is stored along with it. From then on we are going to calculate each  $I^*[x(j),j]$  is computed based on  $I^*[x(j-1),j-1]$  and the corresponding value of  $x(j-1)$  is carried along with it. This procedure is then naturally carried on up to the terminal point of  $I^*[x(t),t]$  when the game is over.

The maximum likelihood trajectory is then determined by computing the value of  $x(t)$ , which maximizes the  $I^*[x(t),t]$ . Then retrieving the  $x(t-1)$  that corresponds to this

value, finding  $x(t-2)$  corresponding to this value of  $I^*[x(t-1),t-1]$  and repeating until all values of  $x$  along the trajectory have been found. Following this feed forward-feedback procedure we are able to calculate the optimal path of the transition.

Also keep in mind the  $t$  value here is not the time how long it takes to reach the terminal point, but rather number of steps which have to be undertaken in order for each country to reach its objective of becoming a member of all integrations. Naturally the value  $t$  is going to depend from player to player.

The model presented in this part predicts the process of transition can be solved and policy makers can find the optimal path and spend for the process of transition. Naturally if the policy makers where the perfect forward looking agents, or even simple Bayesian agents the process of transition would have been much shorter, easier and fruitful for everybody; alas the policy makers are not such agents. If this model was used in real life there would be no problems with the process of transition and by 2013 all ex-socialist countries would be part of the NATO, EU and EMU, however this is not the case.

One of the main reason why this is not the case certainly lies in the fact the policy makers are humans and are part of the political cycle. Because there is a political cycle and different politicians are in charge there are going to be changes in the economic and political policies. These changes have to be reflected in the speed of transition. The model also opens a possibility for Bayesian learning, this is also not reflected in the data. The game participants have very limited ability to learn and do not learn from mistakes or others.

## ***REAL LIFE OF THE TRANSITION GAME***

In this part of the paper we are going to try to set up a game result for the players. The game result is going to be presented as a simple index starting from 100 and we will calculate this index from the start of the data to the end of 2012. The index is not going to start in 1990 since for most countries we are going to investigate the data is not readily available. Also some countries have had extremely high inflation in some periods which causes severe disturbances in our model. Because of this most of the data starts at 2000. In some cases if the game is over we going to also analyse how the participant did once the game was over.

The index is going to take into parameters following four basic economic variables: real GDP growth per annum, inflation, fiscal deficit and unemployment rate. Since all of the variables are in percentages the game scoring will be simple for each variable. If the variable has positive value the player will be awarded a positive point (equivalent to percentage points), if the variable has negative value the player is going to be awarded negative points.

For the real GDP we are going to set up a benchmark of 3% points. If the economy has higher growth per annum it is going to receive the positive difference which will be added to the overall points. If the economy has negative growth or growth below 3% the points will be subtracted from total index. For example if real growth is 5% per year the country is going to receive 2 positive points, if the growth is -2%, the country is going to receive negative 5 points. The value of 3%

was chosen a standard benchmark of technological progress over the long run for large economies.

Same will be done with inflation. The initial benchmark will also be at 3%. For inflation below 3% and deflation the country is going to receive positive points for values over 3% country is going to receive negative points. This is an adjusted non dynamic benchmark as part of the Maastricht criteria.

Fiscal deficit will be also be put at 3%. Economies will get positive points for fiscal deficit under 3% and negative points for fiscal deficit over 3%. Following Maastricht criteria the points are going to double negative and double positive if the debt is over 60% of GDP. So we are going to award "good behavior" and punish more "bad behavior".

Unemployment is not going to have a benchmark the players are going to be given a straight difference between the increase and the decrease in the unemployment on the annual level. So decrease in the unemployment is going to be awarded as plus points and increase in unemployment is going to be punished with negative points.

The obvious question now is: why such simplicity? The generally accepted theory is that the joining of EU, EMU and NATO should have positive impact on the economies. Also if the economies are making adjustments to meet the criteria for joining there should be positive impact on the economy. The obvious best way to look for any positive impact on economy should be in these four variables. If there is positive impact we have to see GDP growth, decrease in unemployment and decrease in fiscal deficits. The main rationale behind the game scoring we have set up lies in simple fact: as the game is coming closer to the end the benefits of the game should be more and more clear.

The countries we are going to analyse are going to be a selected group of transition countries. For example Poland will be excluded due to its size. Also some USSR former republics are going to be excluded since not all of the ex USSR countries fall into our definition of end game. In our model we will look for the countries which are similar in size and economic properties.

The analysis of the data is very straightforward. The eleven countries we chose in our analysis are: Czech Republic, Estonia, Lithuania, Latvia, Slovenia, Slovakia, Croatia, Bulgaria and Romania, Serbia. The countries were chosen due to their similarity in economic size, population and general political structure. Bosnia and Herzegovina, Montenegro, Macedonia and Albania have been excluded due to lack of data or political instabilities which are so severe they make the economic analysis almost impossible.

As we can see from the data we are provided with the countries which have had the same starting point in 1990 as the initial start of the game, but very different paths. From table 1 we can see that three of the countries have completely ended with the game (Estonia, Slovakia, Slovenia) and all others are still playing the game and are at various stages.

Table 1 represents general data about each player. The table also gives us the GDP, GDP per capital and their PPP equivalents, unemployment rates in order to be able to compare their economic strengths and weaknesses. The data has also been separated before and after to 2008 so we can see what was the impact of the crisis on the economies.

*Table 1: General data for the countries observed*

in EUR	Bulgaria	Croatia	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Romania	Serbia	Slovakia	Slovenia
AREA*	110.879	56.594	78.867	45.228	93.028	64.589	65.300	238.391	88.361	49.035	20.273
POPULATION	7.621.337	4.437.460	10.256.760	1.340.194	10.075.034	2.067.900	3.195.702	21.698.181	7.186	5.422.366	2.050.189
DENSITY	69	78	130	30	108	32	49	91	91	111	101
GDP (nominal) 2008 (in mln)	35.431	47.538	154.270	16.235	105.536	22.890	32.414	139.765	32.679	37.244	64.414
GDP (nominal) per capita 2008	4600	10700	14800	12100	10500	10500	10100	4400	6500	18400	11900
GDP PPP 2008 (in mln)	82.938	70.078	210.963	23.128	160.335	31.845	51.553	252.001	66.263	45.903	98.109
GDP PPP per capita 2008	10.900	15.800	20.200	17.200	16.000	14.600	16.100	11.700	9.000	22.700	18.100
GDP (nominal) 2012 (in mln)	39.668	43.904	152.311	16.998	97.674	22.258	32.864	131.747	29.932	35.466	71.463
GDP (nominal) per capita 2012	5400	10300	14500	12700	9800	10900	11000	6200	4.144	17200	13200
GDP PPP 2012 (in mln)	88.434	66.572	212.450	23.474	167.125	32.329	53.283	267.677	65.140	43.148	104.028
GDP PPP per capita 2012	12.100	15.600	20.200	17.500	16.800	14700**	17.800	12.600	8700**	21.000	19.200
Unemployment 2008 ILO	5,4%	8,9%	4,7%	7,6%	9,9%	9,0%	8,5%	5,9%	14,4%	4,4%	9,0%
Unemployment 2012 ILO	12,5%	18,1%	7,2%	9,8%	11,0%	13,8%	13,3%	6,7%	23,1%	9,4%	14,4%
NATO membership	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES
EU membership	YES	EXPECTED 2013	YES	YES	YES	YES	YES	YES	START OF NEGOTIATIONS	YES	YES
EMU membership	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	YES
* in kilometers squares	GDP data from EUROSTAT										
** Data for 2011											

*Source: statistical institutes and central banks of individual countries*

Now we are going to present the index for the game we have created and see what results the index gives us. What is most interesting is that the winner in terms of the value of the index is Croatia. This can easily be explained because of the fact Croatia did not have large volatility in numbers. There is no large government deficit or double digit inflation, yet in terms of the game Croatia has just joined the EU. Winners of the game are three countries which have ended the game.

*Table 2: Results of the game in terms of index*

	Bulgaria	Czech Republic	Estonia	Croatia	Latvia	Lithuania	Hungary	Romania	Srbija	Slovenia	Slovakia
2000	99,0	98,3	102,5	103,3	101,8	104,5	99,8	97,8		93,6	84,3
2001	107,7	95,0	101,5	107,7	103,1	109,7	98,5	73,2	72,3	89,2	77,6
2002	109,7	95,9	104,0	111,8	106,4	114,3	95,2	60,7	68,8	86,4	73,7
2003	108,8	97,6	110,7	120,1	106,3	124,6	95,9	54,7	62,9	85,3	69,7
2004	116,4	99,3	113,7	124,9	105,8	130,7	95,5	56,2	81,8	87,0	68,3
2005	117,7	101,1	119,5	131,1	102,8	136,0	95,7	52,7	77,4	90,7	68,9
2006	123,8	103,7	125,2	140,1	100,7	142,9	84,3	58,1	79,7	93,7	70,2
2007	119,9	105,2	125,1	143,9	89,2	145,4	82,9	56,8	76,9	97,4	77,8
2008	123,2	105,3	127,4	139,2	84,7	139,0	81,5	55,1	71,6	99,6	79,9
2009	118,5	97,7	133,6	125,3	84,2	123,8	60,9	41,2	60,8	89,0	75,7
2010	118,6	91,3	131,3	129,0	75,0	115,5	55,4	29,4	53,9	87,0	73,6
2011	119,4	87,7	130,2	136,5	69,7	110,9	71,7	26,3	51,2	83,0	70,2
2012	120,2	82,6	126,9	139,3	66,4	113,2	73,4	21,8	35,1	77,8	68,1

*Source: Authors calculation*

In Table 3 we use the data for all available periods. In countries where the data does not exist we use neutral value: 3% for inflation, GDP and deficit so the total value is 0 and 0 for change in the unemployment.

As we can see the results from Table 3 are significantly different from Table 2. The main purpose of this table is to justify why data was used for all periods when it was available, not when particular data was available.

*Table 3: Results of the game in terms of index for data for all periods available*

	Bulgaria	Czech Republic	Estonia	Croatia	Latvia	Lithuania	Hungary	Romania	Srbija	Slovenia	Slovakia
1996	91,0	105,8	107,2	105,9	102,8	104,1	102,4	102,6	109,0	105,5	100,0
1997	89,4	111,7	111,5	113,8	103,9	96,5	104,2	96,3	118,0	111,6	94,8
1998	101,3	111,9	110,1	115,2	108,4	99,5	100,5	93,9	127,0	115,9	91,3
1999	103,0	112,0	109,2	111,0	107,5	104,0	93,3	93,2	136,0	120,9	77,3
2000	102,0	110,3	111,7	114,3	109,3	108,5	96,1	94,0	34,1	114,5	61,6
2001	110,7	107,0	110,7	118,7	110,6	113,7	94,8	69,4	6,4	110,1	54,9
2002	112,7	107,9	113,2	122,8	113,9	118,3	91,5	56,9	2,9	107,3	51,0
2003	111,8	109,6	119,9	131,1	113,8	128,6	92,2	50,9	-3,0	106,2	47,0
2004	119,4	111,3	122,9	135,9	113,3	134,7	91,8	52,4	15,9	107,9	45,6
2005	120,7	113,1	128,7	142,1	110,3	140,0	92,0	48,9	11,5	111,6	46,2
2006	126,8	115,7	134,4	151,1	108,2	146,9	80,6	54,3	13,8	114,6	47,5
2007	122,9	117,2	134,3	154,9	96,7	149,4	79,2	53,0	11,0	118,3	55,1
2008	126,2	117,3	136,6	150,2	92,2	143,0	77,8	51,3	5,7	120,5	57,2
2009	121,5	109,7	142,8	136,3	91,7	127,8	57,2	37,4	-5,1	109,9	53,0
2010	121,6	103,3	140,5	140,0	82,5	119,5	51,7	25,6	-12,0	107,9	50,9
2011	122,4	99,7	139,4	147,5	77,2	114,9	68,0	22,5	-14,7	103,9	47,5
2012	123,2	94,6	136,1	150,3	73,9	117,2	69,7	18,0	-30,8	98,7	45,4

*Source: Authors calculation*

From the data we can see large differences in the values of the index and also large differences in terms of the current position in the game vs. the value of the index. Bulgaria and Romania are at the extremes in terms of the index, although their position in the game is the same. Both countries joined the EU at the same time, but as

we can see have different results in term of the index. The reason for this is the high inflation in Romania.

The crisis has also had significant impact on the economies. We see sudden decreases in the index after 2008 in Lithuania and Hungary. Both countries first had a problem with inflation in period 2007 and 2008 and then there was the economic downturn followed by high government deficit.

We can see there is a significant difference between the countries, but the result does not have any bearing on the results of the transition game. Slovenia and Slovakia have finished the game and their results are much lower than Estonia or Croatia which are still playing the game. This brings us to a startling conclusion: depending on the policy preference the results of the transition game are not influenced by the economy. Here we can see the transition was not an economic game at all, but more of a political game. Since different players have different economic results, but are in various stages of the game, the only explanation for this is the politics.

The variables we have analysed fall into the category of policy maker's choice. As we see each country has different policy preference. For example Bulgaria and Estonia prefer small government deficit and low debt over GDP ratio. So for them this was an important policy variable, on the other hand inflation was not since in 2008 it was in double digits. Similar example of policy variable choice can be found in all other countries. The policy choice clearly has two main conclusions:

- Each player is good in one particular policy, but not in all of them
- In the long run the policies and economic results even out.

Now there are economists which might argue it is better to have higher economic growth at the expense of the inflation, but this is not the case in Japan where economic growth has clearly been put aside versus the low inflation (deflationary) environment. The policy variable is the personal preference of the policy maker and we are going to leave it at that.

If there is no significant winner who has done well both economically and in terms of the game, then what is the reason the players are at such different stages of the game? The answer is politics. This paper has clearly demonstrated the economy as a science has long left the process of transition. The whole process of economic transition has been taken over by the politicians which run the country and have little regard for the economic developments. In countries who had better politicians the end game came sooner. The countries with "bad politicians" are still playing the game.

## **CONCLUSION**

The purpose of this paper was to look at the transition from communism to free market economy in eleven countries and compare the results. The paper creates an index using four variables: GDP growth, employment, inflation, budget deficit; in order to quantitatively measure the results of the game. Given the amount of problems new countries faced the whole transition process looked like a game; this paper creates a mathematical background of the game and then analyses the results eleven countries. Using the data from the real life experiment called transition we can draw several general conclusions:

1. All of the countries are better off today then they were ten years ago. This is clear from the GDP from the economic data since the total real growth from the 1990 until today is positive.
2. Overall results of the game up to this point in terms of economic success are different from the results in the transition game.
3. The variance of results is very big, and there is a clear difference between results of each player. This suggests different strategies for same problems used by the players.
4. The players have had very little or no cooperation in the process of transition. This is clear from different stages of the game at the end of 2012.
5. The process of the transition with the end game as presented in this paper is not the process of economic transition, but has in fact become a process of political adjustment to the political structures in EU

The game is not over, the ultimate goal of having the same standard as the rest of Europe is far off, even for the best of player, but we can already see which player are playing the game the best way. The game will end when all the players adopt euro as their currency.

Another point made in the paper is the issue of time preferences. The model assumes there is not time preference, but the players would like to finish the game as soon as possible. However with the recent crisis and the problems within the eurozone it is possible the countries decide to wait and see how the crisis is going to develop. This is especially important in terms of joining the EMU.

From the data it can be clearly see the main reason for the success in the transition game are correct economic policies chosen by some of the players. If we assume the economics would make all decisions in each country is similar manner then the differences in the game can only be attributed to the politicians.

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# ***THE ROLE OF INSTITUTIONAL INVESTORS IN CORPORATE GOVERNANCE AND SUSTAINABLE DEVELOPMENT***

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*Milica Kovacevic*<sup>3</sup>

**Abstract:** In recent years, the role played by institutional investors - pension and investment funds and insurance companies has increased significantly. The changed role of institutional investors is a phenomenon that attracts the attention of researchers, because it represents a significant change in financial markets, and especially in capital markets. Moreover, a change of their role in the development and reform of corporate governance is present, but not so visible. This research focuses on the role of institutional investors in corporate governance, through two aspects: their role both as objects and subjects of this process. The ambition of this paper is to investigate the conditions that are necessary and that must be considered by institutional investors, in order to achieve effective corporate governance that gives priority to sustainable development. The paper will also give an analysis of a marketing information system that provides a good basis for decision-making. The main assumption is that the role and influence of institutional investors on corporate governance, in corporations in which they are shareholders, is realized directly through their ownership of the shares and indirectly through trading of shares, and that full contribution to corporate governance can only be achieved through strategy of sustainable corporations, which will have an incentive to respect community interest, not just their own. In this regard, an important role is played by a well-developed system of internal and external communications. The methodology will include a historical analysis in order to evaluate the impact and importance of institutional investors, primarily to assess the current impact of institutional investors on corporate governance. In addition, statistical methods, SWOT and trend analysis will be used, as well as methods of abstraction in order to obtain answers to the problem of research.

**Key words:** Institutional Investors, Corporate Governance, Sustainable Development, SWOT analysis, Marketing Information System

**JEL classification:** L26, Q01

**UDC** 005.21:334.72.021]:336.1.07(082); 502.131.1(082)

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## ***INTRODUCTION***

The past practice has shown that institutional investors were not sufficiently involved in the process of corporate governance. On the other hand, numerous analyses and research that have been conducted demonstrate that institutional investors are such important subjects that can contribute to a better, more transparent governance of the company. This paper aims to point out to the conditions that are necessary to change the awareness and operations of both investors and the companies they invest in, that could generate long-term investments that contribute to the sustainability of the companies themselves and the society in general.

The introductory part of the paper gives a brief overview of the very essence of corporate governance, its development, and the role of institutional investors as a significant phenomenon in the financial markets. Afterwards, their role in corporate governance will be presented, and the ways in which they can influence the decision making of the company. Special emphasis is given to the importance of creating an effective system of dissemination of information about the company, which is the basis for investment decisions of existing and potential investors. A special attention has been paid to the importance of long-term investments and socially responsible investment and business. Following the recommendations of more active involvement of investors in corporate governance, an overview of the situation in this field in the transition countries has also been given.

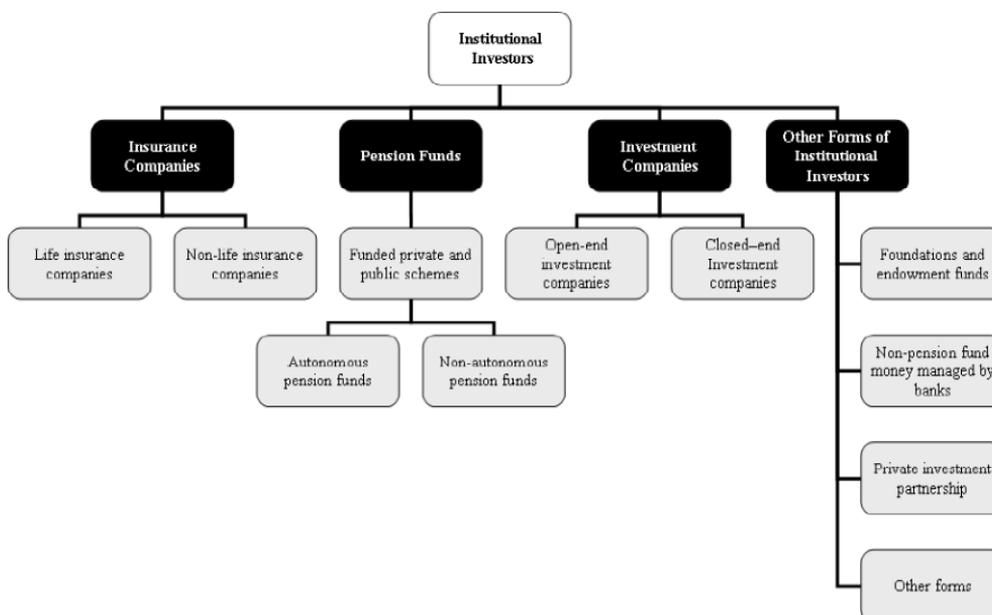
## ***CORPORATE GOVERNANCE***

The need for corporate governance occurred as a result of the agency problem or the existence of imperfect information and different objectives of stakeholders in the corporate structure - owners of the company and managers, as well as the existence of fragmented ownership of shares. Corporate governance as a set of mechanisms that allows a company's growth and development is defined in different ways. One of the definitions is given by the Organization for Economic Co-Operation and Development (OECD): "The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs".

On the one side corporate governance is an integral part of the wider context in which the company operates (such as the economic policy, development and competitiveness of the market) and which affects the behaviour of an investor. On the other hand, the corporate governance framework has been largely shaped by external factors, different regulatory and institutional conditions. Precisely, a synthesis of all these conditions shape and regulate the internal relations in the corporation, between managers and owners, as well as the rights and obligations of external stakeholders, investors who expect a return on investment.

## ***ROLE OF INSTITUTIONAL INVESTORS IN CORPORATE GOVERNANCE***

In recent years, the role played by institutional investors – such as pension and investment funds and insurance companies has increased significantly. Over the last twenty years, institutional investors have owned an increasing share of public equity markets—more than 70 percent of the largest 1,000 companies in the United States in 2009, for example (Heineman, Davis, 2011, pp. 4). Whether investors actively influence corporate management depends on the type of investor one is referring to. Although analysts sometimes discuss investors without differentiating among them, shareholders obviously come in many shapes and sizes. Historically, major institutional asset managers are autonomous pension funds, insurance companies and mutual funds, while other forms such as sovereign wealth funds, hedge funds and private equity represent only a smaller share of the industry. According to the Organization for Economic Cooperation and Development (OECD) detailed classification of these *major collectors of savings and suppliers of funds to financial markets* (Diederich, 2009, pp.38-42) is illustrated below.



*Figure 1: Classification of institutional investors by the OECD*

*Source: Diederich, 2009, pp.38*

In OECD countries, these institutions held over USD 70 trillion euros in assets by December 2011. Over 40% of this amount is accounted for by institutions from the United States. The annual inflow of new funds is also significant, for example, pension funds collected about USD 1 trillion in new contributions in 2011. Financial assets under management by institutional investors include not only equities, but also bonds, loans and deposits.

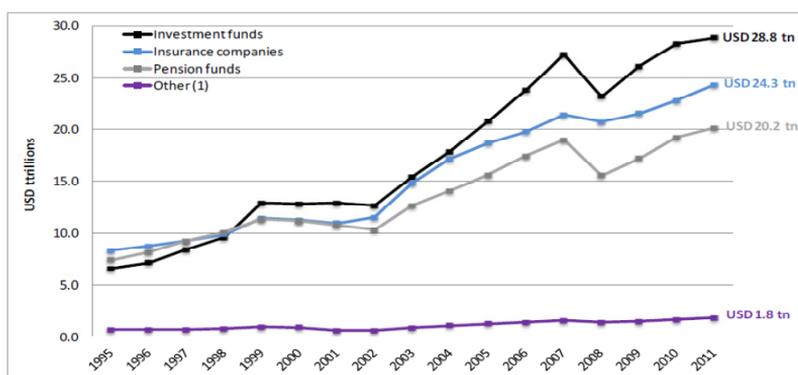


Figure 2: Total assets by type of institutional investors in the OECD, 1995-2011 (in trillion USD)

Source: OECD Global Pension Statistics, Global Insurance Statistic and Institutional Investors database, and OECD estimates

The importance of institutional investors for national economies can be measured by the size of their asset holdings relative to GDP. Pension funds and insurers are major investors in a large number of developed economies, with assets representing over 60% of GDP in countries such as Canada, the Netherlands, the United Kingdom and the United States. In emerging and transition countries, institutional investors tend to be less developed, with exception of well-developed pension fund and mutual funds in countries such as Chile and Brazil and South Africa (over 60% of GDP) (OECD, 2013, page 13-18). Despite the recent financial crisis, the prospect for future growth for institutional investors is unchanged, especially in countries where private pensions and insurance markets are still small in relation to the size of their economies, and where financial systems are largely bank-based. Nevertheless this development largely depends on key policy decisions, such as the establishment of a national pension system with a funded component.

Due to the separation of ownership and control in modern corporations, traditional shareholders are owners without property rights in relation to the company's assets, which have been limited to their shares in the company, while property rights and control over corporate assets are placed in the hands of the board of directors and senior management. Due to the diffused ownership structures of large companies, the high economic costs of shareholder activism, free-rider problems and inability to

influence voting mechanisms, they are traditionally viewed as powerless to prevent the self-interested actions of directors and senior management. However, the change in investment patterns that appeared with the emergence of institutional investors changed some of the fundamental presumptions about corporate governance, the role of shareholders in public companies and corporate regulation itself. In fact, institutional investors, with concentrated share ownership, good reputation and access to a broad range of financial resources are able to change a picture of shareholder activism.

Institutional investors, as equity owners, are increasingly significant external mechanism that can influence corporate governance. They have the potential to influence company's activities directly through their ownership, and indirectly by trading their shares, which can be relatively strong. The fact is that corporate governance changes have been mostly implemented in countries with a high level of institutional investors. Other important factors that influence these changes, as well as broader corporate governance framework and institutional investors are government actions and changes in the regulatory environment.

Institutional investors are subject to broadly varying levels of regulation. A great deal of the regulatory framework that has influence on institutional investor's shareholder activism refers to issues in the insurance, pension and other type of institutional investor's areas. That is because they do affect investment strategies, which are closely related to their corporate governance responsibilities and actions as shareholders.

Beside his regulations, the most important professional codes of behaviour of institutional investors in order to promote good governance are:

- *OECD principles*. Principle II F 1 recommends disclosure of overall corporate governance and voting policies of institutional investors with respect to their investments, and Principle II F 2 recommends disclosure resolution of conflicts of interest that may affect the exercise of key ownership rights (OECD, 2004, 21-23).
- *UK Stewardship code*, which was based on an earlier industry code by the Institutional Shareholders Committee. This arose in response to the financial crisis and the observation in the Walker Report (2009) that institutional shareholders had failed in the run up to the crisis (OECD, 2011, 32-45).
- The European Commission Green Paper on Corporate Governance in Financial Institutions (2010)
- UN Principles of Responsible Investment.
- Professional organization – European Fund and Asset Management Association (EFAMA, 2011) recommendations
- The German Association for Investment and Asset Management Code (2005)

Implementation of the new directive related to collective investment in transferable securities (UCITS) into local laws is of high importance for the EU. It regulates exercising of voting rights attached to the instruments held in managed portfolios in order to be of benefit to the fund. Furthermore, procedures for monitoring relevant corporate events are regulated in a way that exercise of voting rights is in accordance with investment objectives.

In most jurisdictions there is no explicit obligation to vote, in some others there is an obligation to vote for some types of resolution, and some jurisdictions set thresholds

for the need to vote. More jurisdictions now require disclosure of actual voting (e.g., Australia, US, India, Chile, and Spain after UCITS amendments and possibly also Switzerland).

By respecting mentioned regulative framework institutional investors should play an important role in ensuring good governance of their investment-companies. The role of institutional investors that can contribute to sound corporate governance can be summarized as follows:

- *Activist shareholder*, which can be described as proactive influence by institutional investors as shareholders on corporate management in order to achieve individual interest - to increase their property and asset value. Shareholder activism includes a lot of actions such as: openly talking to other shareholders, putting forward shareholder resolutions, public and private meetings and discussion with board and management. One way on which institutional investors can exert their interest, and act proactively, is to take part in Annual General Meetings by directly voting on corporate issues, by bringing in new agenda items even against the interest of the management, and by requesting information about corporate issues.
- *Monitoring role over Board performance*. If dissatisfied with Board performance institutional investors have following choices: to sell their shares, hold shares and vote dissatisfaction along with requiring changes, or to hold shares and do nothing. Choosing one of these alternatives, that can be summarized as exit, voice and loyalty, depend on the cost benefit analysis carried out by the investor in order to determine whether the monitoring costs and engagement in corporate decisions brings benefits, or it is more cost – effective to “vote with their feet”. Institutional investors are often characterized as one of the most powerful external monitors of companies in which they invest.
- *Information transmission* to the financial markets - to other investors. Large institutional investors that maintain investment for sufficiently long time period, and hold enough shares to alleviate free rider problem, can maintain information from the managers and transmit to other shareholders. This costly monitoring, often called “relationship investing” can result in payoff for both sides - institutional investors and managers.
- *Engagement in governance of companies in which they invest*. According to EU legislation related to company law and corporate governance, institutional investors are required to disclose their investment policy on the corporation they invest, as well as a way of exercising their voting powers. This should lead to greater engagement in company’s activities and decisions. Moreover, institutional investors, by using their voting power, make significant influence on business community, and send a picture of great importance of good governance for their investment.
- *Participation in supervisory board seats*. Every shareholder can be elected to the supervisory board in order to monitor and advise the executive board, and this instrument is estimated as highly important by institutional investors. Having in mind that large institutional investors have greater voting power, they usually have advantage over minority shareholders.

- *Institutional investors do pick their investments based on governance characteristics.* Through a public declaration of their preferences for corporate governance, institutional investors encourage companies to implement good corporate governance to attract investments.

## **TRANSMISSION OF INFORMATION AS AN IMPORTANT ASPECT OF STEWARDSHIP**

One of the most important preconditions for investors in order to actively participate in corporate governance is an efficient marketing information system that provides a good basis for decision-making.

Institutional investors succeed to make returns by making a better use of the available public information – focusing on fundamentals like operating history, prior earnings, size, and liquidity. This is a significant observation for securities regulators and lawmakers. If investors improve performance by focusing on a company's publicly available information, then preserving access to such information is critically important, for both investor protection and capital formation. In that regard, there is good data to suggest that independent confirmation of internal controls actually promotes good financial reporting.

Given the number of studies indicating the positive impact on capital formation when investors have an access to useful and reliable information, it is troubling that disclosures are being scaled-back. Reducing the quality of information is simply unproductive. Regrettably, there continues to be efforts to lobby for limiting disclosure requirements, on the claim that reducing the amount of required disclosures will lower the cost of capital-raising.

Institutional investors – like all investors – depend on the assurance of a level playing field, access to complete and reliable information, and the ability to exercise their rights as shareowners. That is why fair and intelligent regulation is necessary for proper functioning of capital markets. Companies that fail to provide sufficient and accurate information in a timely manner often trade at a discount, as investors are uncertain about future prospects. Integrated reports of financial and non-financial information should be created. Integrated reports reflect their strategic focus on financial, environmental, and social factors. Web-based reporting and the use of social media platforms help satisfy the specific information needs of social stakeholders.

Marketing materials should clearly outline the fund's investment objectives, its strategy, the investment manager's ownership structure and organization, and outline other key elements and information that will enable investors to make their own assessment on the attractiveness of the strategies. Potential institutional investors should be provided with information which allows them to understand the key risks of their investment and have a clear description of its strategy/strategies and an appraisal of its performance (profits earned and losses incurred) to date.

With the help of public relations it is possible that institutional investors indirectly influence the management of a corporation, through publishing information about their own activities as well as information about certain companies. The focus groups of such publications are other institutional investors and shareholders or the management

of the targeted company. Besides this, institutional investors use different instruments for public relations such as ranking lists and articles in the business press.

Institutional investors' expectations and preferences:

- Company objectives and strategy are clearly defined.
- Ownership structure explained and easily understandable.
- History of firm/individuals made available with clear disclosure on each.
- Strong cultural statements to offer potential investors an understanding of the firm's aspirations.
- The marketing team responds within a reasonable timeframe.
- Due diligence documents are comprehensive and made available in a reasonable timeframe.
- References made available upon request.
- Investor requirements anticipated and documentation is comprehensive.

These are some of the methods and instruments that can be used by institutional investors to influence promoting good governance in companies they invest. On the other side, some structural characteristics of these investors, as well as changes in capital market and legal framework are significant barriers for them to be more active shareholders.

## ***INSTITUTIONAL INVESTORS – SHORT VS. LONG TERM INVESTMENT***

One of the OECD Principles of Corporate Governance highlights the importance of institutional investors as active shareholders: *“The effectiveness and credibility of the entire corporate governance system and company oversight will, therefore, to a large extent depend on institutional investors that can make informed use of their shareholder rights and effectively exercise their ownership functions in companies in which they invest”*

As the dominant owners of listed companies in many developed markets, institutional investors have been under increasing pressure to act as responsible shareholders. Having in mind that the nature of institutional investors has changed over the years into a complex system of financial institutions, the old question of investors that oversight the company board needs to be examined.

A recent research by the Organization for Economic Co-operation and Development concluded that institutional investors were generally not effective in monitoring investee companies. A reason for this can be found in the fact that recent investment and management strategies and practices do not support long-term ownership, which is one of the prerequisites for more engaged shareholder activism. Characteristics of these tendencies in modern investment strategies that have impact on lower stewardship can be summarized as follows:

- a) Investment strategies have evolved and investment holding period have shorten
- b) Criteria for performance metrics that stimulate short-term returns
- c) High portfolio diversification
- d) Investment chains have lengthened
- e) Highlighting importance of quantitative data over qualitative when fulfilling fiduciary duty

a) In general, institutional investor's investment strategy means allocation that ensures regular flows to different asset classes and certain stability in the allocation of capital. The strategic allocation is the most important decision for investors and it is reviewed regularly. In order to make changes in strategic allocation, some investors are engaging in short term departures from basic allocation, in order to benefit from price differences from asset relative to fundamental. These changes in investment strategy are introduced trough passive strategy which includes index tracking and active, which includes security selection and market timing. Financial crises and dissatisfaction with strategic investing approach increased an interest in hedge funds. The main reason is active investment management which could bring returns and performance over the index, so passive investment was retained for the more traditional part of portfolio (Croce, Stewart, Yermo, 2011).

Implementation of this type of investment strategies resulted from declining of investment holding period in the last twenty years by between one and three years. Beside hedge funds, mentioned as a reason for short term investing, other traditionally long term investors such as life insurance companies and pension funds have become the most important investors in hedge funds, and in that way they significantly contribute to the shortening of a holding period and increasing a frequency of trading.



Figure 3: Institutional investor's ownership and average holding period

Source: Wong, 2010, pp. 409

b) Evaluation of asset managers is done related to the short-term performance, so it was expected that managers put pressure on companies in which they invest to maximize profits in a narrow time interval. Evaluation and compensation of managers is done based on the extent by which they outperform or underperform the market index (FTSE 100, S&P 500, etc.), or, in other words, a benchmark is used in order to assess the performance. This way of assessing and evaluating performance, along with frequent quarterly monitoring process encourage a short-term focus.

A problem of short termism is also caused by: the way in which financial markets operate, the lack of good instruments to allocate finance in the long term, and regulative framework which in some way stimulates short-term investment. The regulations, such as Basel III and Solvency II have created a difficulty for investors. In brief, the requirements, in Solvency II, for matching assets and liabilities and risk-weighting assets do not stimulate a long-term investor who could be able to have longer investment horizons. For example, Solvency II Directive, in Europe, discourages insurance companies and pension funds from holding infrastructural assets, not allowing for a proper matching of long-term liabilities and assets on their balance sheets, and they are pushed towards pro cyclical investments.

c) Forming portfolios around the market benchmark often resulted in excessive diversification. In order to optimize return in accordance with the targeted level of risk, institutional investors impaled different diversification strategies which have led to a situation of equity portfolios containing hundreds or even thousands of stocks. Diversification is, in a number of cases, also driven by prudential regulation such as capping the percentage of a company's equity that can be held by an institutional investor. Also, a recent trend of passive diversification funds, with lower cost, has proved as disempowering to the promotion of good corporate governance. All of these make difficulties in monitoring by raising cost of engagement, and lowering interest of managers to supervise and monitor a large portfolio of companies they have invested in.

The most obvious cost for institutional investors is a direct financial cost of monitoring - intervention in the governance. It includes legal and professional advice, employee time engaged for governance issues and opportunity costs arising from resources used on a particular investment-company. Given that institutional investors are primarily traders for profit, the cost and time expended on governance matters may not equal the benefits received for their effort. Also, active monitoring creates a free-rider effect.

d) If relationship between institutional investor and its investment-companies is seen as shareholder-management relationship, it can be noticed that instead of being the solution to the agency problem, institutional investors became a cause of that problem. However, complications arise as institutions are not the actual shareholders of the investment-companies; in fact, real shareholders are the clients of the institutional investor. Lengthening the investment chain made this situation more complex. Outsourcing of management to include investment managers and sub-advisors, funds of funds, external asset managers, resulted in further distancing between the ultimate investor and the investee - company. A number of intermediaries have significantly risen, which makes it more difficult to implement performance measurement and investee strategies that will encourage corporate governance practice at every stage of the process.

e) An obligation of all institutional investors is to perform in the best economic interest of their clients. Relying only on economic interest has led to the principle that investment is evaluated solely on the quantitative criteria. When deciding whether to sell holdings, managers are mainly guided by a short-term influenced stock price, and usually long-term company's prospects were not considered.

## ***LONG-TERM INVESTING AND SUSTAINABLE DEVELOPMENT***

As mentioned above, one of the preconditions for active stewardship of institutional investors is long-term investment, which means more engaged investment managers in issues of the company governance. The World Economic Forum defines long-term investing as: “investing with the expectation of holding an asset for an indefinite period of time by an investor with the capability to do so”. Usually, the length of investment period is from five to ten years (by institutional investors such as insurance companies, pension funds). This type of investments shows a slow, steady increase with a significant yield at the end of the term, allowing for a much greater degree of stability and a much lower risk.

Long-term investments can deliver a sustainable economic growth and make better stewardship's relations between companies, investors and intermediaries. According to the OECD, the main benefits of long term investment is counter-cyclically acting, direct engagement of shareholders and consideration of longer-term risks in investment and risk management strategies, an active role in the financing of long-term, productive activities that support sustainable growth, such as cleaner energy, infrastructure projects, and venture capital. Respecting by company and investors of the “three pillars” of sustainable development presented by integrated economic, social, and environmental issues, helps to create an environment for innovative thinking about how to create new processes, strategies, and actions that may positively impact multiple stakeholders, provide competitive advantage, and reduce both political and financial risk.

Institutional investors, acting in a fiduciary capacity, are increasingly using their leverage as shareholders to influence corporate behaviour on social responsibility and governance issues, as well as sustainable investments. Most institutional investors tend to focus on shareholder advocacy—selectively engaging portfolio companies to help strengthen social, environmental, and corporate governance performance. Numerous examples of successful engagement have been seen in changes in company practices and policies or increased transparency on issues of concern. Motivated by the belief that long-term shareholder value is enhanced by their actions, more corporate leaders are showing that fiduciary responsibility and corporate social responsibility are related and compatible goals.

Growing relationship between corporate responsibility actions and financial performance seems to be occurring for a number of reasons. Consistent with sustainable development, efficiency is an important starting factor. For example, a number of studies have shown a strong relationship between responsible companies and a higher quality, more productive and innovative workforce (Paine, 2003, pp. 38-42). Responsible companies can also benefit in the marketplace, enjoying improved reputation for their social and environmental actions, possibly leading to access to new markets. Responsible actions can also reduce risk—being subjected to new regulations, being pressured to change policies by special interest stakeholders, and being affected by higher business costs due to externalities such as forces of nature or civil conflict.

## ***CORPORATE GOVERNANCE AND INSTITUTIONAL INVESTORS IN TRANSITIONAL COUNTRIES***

In most of the countries in the Central and Eastern Europe (CEE), institutional investors were one of the products of mass privatization and they include former privatization funds (created as a result of the mass privatization), pension funds (created as a result of the transition from a state to a market-driven capitalized pension system), foreign investment funds, banks and insurance companies, which invest in equity. They are usually small shareholders, with no power, size and capacity to significantly influence the corporate governance structure.

According to WEF's Global Competitiveness Index 2011-2012 common characteristics of transitional economies are: an unstable and non-transparent institutional framework, a high degree of ownership concentration, a possibility of expropriation of small shareholders, underdeveloped capital markets, short business practice, the agency problem between the majority owners (shareholders) and minority owners (shareholders), unprofessional management and a gap between formal regulations and substantive practical application of regulations and institutional arrangements. Those economic conditions and the institutional area was a non-stimulating environment for corporate governance development. In those conditions it was not surprise that newly created institutional investors took advantage of weaknesses of the regulatory framework and the market ambient, which did not provide incentives for changes in the corporate control mechanism as the main focus of corporate governance. Some of the main problems that tickle corporate governance in those countries are: non-transparent ownership structures, a direct connection between control and property, inadequate and inexperienced corporate bodies, abuse of shareholder rights.

In most former Yugoslav countries, the privatization process allowed the increase of property, but while it meant transfer of property rights from the state to private investors, it also meant a change of control and management in companies, protection and specification of property rights, increase of enterprise efficiency. But all the efforts made for the improvement of corporate governance and strengthening of shareholders rights still have not brought good results (Lojpur, Draskovic, 2012, pp.38-41).

The results of the research that was conducted in Montenegro (Kalezic, 2011, pp. 48) show that Montenegrin companies are still in the beginning phase of implementation of basic principles of corporate governance. Although the basic regulations related to shareholder rights exist, it is evident that rights of minority shareholders are often not respected in a proper way, and the practice of electing the members of the Board of Directors is problematic and there is a lack of awareness of stakeholders' approach to corporate governance. On the other side, according to research findings it can be concluded that even in this phase of corporate governance development, a positive relation between quality of corporate governance and profitability of Montenegrin companies is visible.

Besides that, communication with local private investors in Montenegro is still largely based solely on education and often on correcting misconceptions about the functioning and opportunities in the capital markets. In communicating with professional investors in Montenegro and those coming from the markets in the region that are usually already

familiar with the basic characteristics of the Montenegrin capital market, the greatest attention is paid to the direct communication between individual companies and investors, as most common way of transmission of information.

In order to achieve the goal of more developed and effective corporate governance in transition countries it is necessary to strengthen regulatory framework for institutional investors, with tougher enforcement of the rules, together with respecting the principles of fairness, transparency, management responsibility to the owners and responsibility of the company. Also, public education on investing, through civil society organization and institutional investors association, is needed to raise awareness and knowledge about investing fundamentals and shareholders rights.

## ***SWOT ANALYSES OF ROLE OF INSTITUTIONAL INVESTORS IN CORPORATE GOVERNANCE***

With the help of SWOT-analysis some of the main aspects of the role of institutional investors in corporate governance are summarized:

*Table 1: SWOT-analysis*

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Facilitate outside financing</li> <li>• Reduce collective action problem</li> <li>• Monitoring of institutional investors in corporate governance contribute to better company performance</li> <li>• Participation in supervisory board seats in order follow the work and advise the executive board</li> <li>• Providing information to minority shareholders through regular disclosure of information</li> <li>• Contribution to company reputation trough implementation of good corporate governance principles</li> <li>• Positive relation between quality of corporate governance and company profitability</li> </ul>	<ul style="list-style-type: none"> <li>• Represents their own interests which are not necessarily compatible with the ones of the shareholders</li> <li>• Are not familiar with the internal structure as well as internal monitors</li> <li>• Insufficiently developed system of information transmission</li> <li>• Lack of transparency in business</li> <li>• Not enough used the legally defined rights of shareholders</li> <li>• Currently more focus is given to short term investment instead of long term investment, that can provide sustainability</li> <li>• High portfolio diversification</li> <li>• Investment chains have lengthened</li> <li>• inadequate and inexperienced corporate bodies and abuse of shareholder rights in transition countries</li> </ul>

<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Power to change corporate action</li> <li>• Strengthening the reputation of the company, that institutional investors invest in, influences the attraction of new investments</li> <li>• burden of active engagement for smaller investors can be reduced by encouraging collaboration via investor groups</li> <li>• Compliance with EU regulations, and implementation of principles of corporate governance stipulated in different codes in transition countries</li> <li>• Public education on investing, through civil society organization and institutional investors association, should raise awareness and knowledge about investing fundamentals and shareholders rights</li> <li>• Transferring of knowledge of foreign institutional investors, with experience in corporate governance through foreign direct investments, to investors in transition countries.</li> </ul>	<ul style="list-style-type: none"> <li>• Short term profit maximization without long-term planning</li> <li>• “Exit” instead of “voice”</li> <li>• Non-stimulating regulatory framework</li> <li>• Reduced possibility of long-term planning because of the unstable financial environment.</li> <li>• Lack of clear priorities by the government to invest in long-term investments (infrastructure)</li> <li>• Presence of small shareholders, with no power, size and capacity to significantly influence the corporate governance structure in transition economies financial markets</li> </ul>

## ***DISCUSSIONS AND CONCLUSION***

Researches of corporate governance in light of recent global financial crises have shown that shareholders have tended to be reactive rather than proactive. An ineffective monitoring and lack of active participation of institutional investors is one of the key weaknesses in the system of corporate governance. Shareholders have been largely passive in exercising their rights, in many cases voting in a mechanical manner relying on proxy voting advisers, and generally failing to hold boards to account to make a difference.

Institutional investors lack information about the companies they owned, as they could need for effective oversight, and in many countries they do not have the rights or incentives to act as responsible owners. Also, many did not invest necessary time or resources, necessary to act as responsible investor (Heineman, Davis, 2011, pp.4-6). While all of this is indeed worrying, there are a number of potential actions that could help to provide a more conducive setting for stewardship. Some of the changes require a transformational change in investor behaviour, as well as policy initiatives in a range

of areas. Following are some important issues and recommendations necessary for improvement of institutional investors' stewardship:

- In order to support long-term investing, some essential changes in policy frameworks are needed. Transparency and stability should be improved; there is a need for government long-term policy planning with clear mid and long term development objectives, risk transfer mechanism, and similar actions that will result in more engaged long term investment such as infrastructure.
- As owners, institutional shareholders should take care that boards have necessary competence to manage risk and carry out business on a profitable way, and independent board evaluation should be fully disclosed to the market.
- Shareholders should be able to appoint and dismiss boards, must be treated fairly and be able to influence in proportion to their capital at risk.
- Regulative measures and measures by institutions involved in voting to remove obstacles to voting (such as share blocking<sup>4</sup> and cross border voting), and to encourage the use of flexible voting mechanisms such as electronic voting.
- Pension funds and other long-term asset owners should try to eliminate unnecessary steps in the ownership chain and invest in in-house expertise. Empirical evidence is that pension funds with internally employed expertise had higher annual average return compared to others that employed outside managers more extensively.
- Managers performance evaluation, fee structure and portfolio turnover should be formulated in a way to encourage long-term thinking and active ownership by investment managers. Some of the recommendations are that performance evaluation should be done on longer term bases (five to ten) to be more adjusted to length of market cycle. "Fee arrangements that will have negative influence on stewardship should be avoided – for example, zero management fee structures where the asset manager earns income exclusively from securities lending" (Wong, 2010, pp. 409-412). Institutional investors need to ensure that boards develop policies that reward sustained performance, and do not encourage employees to take excessive risks provided they are given a right to vote on remuneration policy; shareholders should take responsibility voting for such long term strategies that will align owners and shareholders interest.
- Asset owners and managers should strive to reduce the number of portfolio holdings in order to improve monitoring capabilities and ease free-rider issues.
- Asset owners and asset managers should work on changing the business model and governance approach of passive funds so that stewardship is more present, by focusing on ensuring a sound regulatory framework and undertaking engagements with portfolio companies.
- Beside quantitative data, investment decisions should be driven by qualitative assessments, which in some cases can be equally important, especially when precise calculations cannot be made easily (such as the value of a vote).

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<sup>4</sup> Share blocking is the practice under which shares, when voted, can be temporarily blocked from trading

- Shareholders also need a disclosure framework which affords them the ability to exercise their rights in an informed way.
- Improvement should be done in the area of credit rating agencies, and they should not have exclusive rights to information that may be of value to all investors in making informed assessments of risk, as well as credit rating agencies should not serve as the only source of information for institutional investors.
- In line with modernization of financial market, regulators should also become better acquainted with long-term risks and new financial instruments. In order to fulfil this requirement, governments and other stakeholders should support information collection, public awareness and financial education campaigns, which will support promotion of long-term investment and risk management.
- The cost and burden of active engagement for smaller investors can be reduced by encouraging collaboration via investor groups.
- Joint private and public efforts could contribute to creation of a more favourable framework for active informed shareholders.
- Data collection on long-term investments and their performance should be promoted at both the national and international level subject to cost and efficiency considerations. Such data collection can facilitate monitoring by supervisors, enhance the knowledge of institutional investors, reduce information asymmetries and improve the functioning and liquidity of markets.
- Governments and international organizations should consider promoting the establishment of an international information platform accessible to investors that would provide comparative information on existing or foreseen long-term investment projects.
- Institutional investors should disclose information in the extent to which their investment strategies are in line with their investment horizon and in the extent to which they address long-term risks.
- Institutional investors should be required to report their past allocation to and performance of different assets – including long-term investments - following a standardized classification, while ensuring the confidentiality of any market-sensitive information. The reporting should have an appropriate frequency and should include performance measures calculated over sufficiently long periods. Such information should be at least available for members, policyholders and other beneficiaries as well as supervisory authorities.
- Long-term investment by institutional investors should be regularly monitored by the competent authorities.

Institutional investors have a great deal of power in capital markets, but also that power brings great responsibility. As the dominant owners of listed companies in many developed markets, institutional investors have been under increasing pressure to act as responsible shareholders. It can be concluded that an ineffective monitoring and lack of active participation of institutional investors is one of the key weaknesses in the system of corporate governance, especially visible during financial crises.

Shareholders have been largely passive in exercising their rights, generally failing to hold boards to account to make a difference. Also, many of them do not invest necessary time or resources, needed to act as responsible investor. While all of this is

indeed worrying, there are a number of potential actions that could help to provide a more conducive setting for stewardship. Some of the changes require a transformational change in investor behaviour, as well as policy initiatives in a range of areas.

Global authorities should continue to work with market participants to develop enhanced governance practices, and most importantly is securing and maintaining the rights of shareholders and developing the transparency needed for them to exercise these rights in a responsible, informed and considered way. However shareholders must also recognize that they should use their share ownership rights responsibly in the interest of creating long-term value for their beneficiaries.

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# ***ENTREPRENEURS AND ENTREPRENEURSHIP AS A DRIVING FORCE OF ECONOMIC DEVELOPMENT IN SERBIA***

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**Abstract:** In all industries where a large number of participants involved, they have to be cohesion, coherence and coordination. Entrepreneurship, as an activity of creative combining of available resources in the enterprise, is the driving force of the companies that are being created, grow and develop on the market. As the process of creating new values, organization, and forms of organization, entrepreneurship encompasses the activities and forecasting processes (vision), innovation, risk-taking and learning. The result of combining these various processes is birth, reproduction and performance of the new venture.

For the development of entrepreneurship and the private sector we need to create the appropriate conditions and business environment, which requires the support and advancement in many social spheres. To establish an adequate business infrastructure, and create the appropriate business climate, significant contribution can be given by modern forms of business support. In this way, work on improving entrepreneurship, growth, employment and starting new businesses is intensifying.

The subject of this research are: entrepreneurs, entrepreneurship, small and medium-sized enterprises, local economic development, national economic development.

The main aim is to get through the theoretical and practical analysis of relevant data, processes and relationships, understand the role and importance of entrepreneurship and entrepreneurial initiatives, as well as small and medium sized enterprises in local economic development, and economic development in general. Also, within the work there will be discussed about mechanisms required to help companies and entrepreneurs in starting and realization of new projects, during the initial period of operations that are crucial for the survival and further development of the business.

**Key words:** Entrepreneurship, Entrepreneurs, Businesses, SMEs, Economic Development

**JEL classification:** L26, M21, O10

**UDC** 005.961:005.914.3(497.11)(082)

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## ***INTRODUCTION***

In countries around the world, the majority of new jobs are being created and opened in new and small enterprises, which are in "growth" and that specialize in the production of new goods and services. New and small businesses are vital to a healthy economy of each country, their communities, because they provide major employment and income. Small businesses are also the reality of the global economy - in which individual creativity and flexibility play a much larger role than in the past. Therefore, it is important to take actions to encourage the creation of new, and stimulating the growth of existing small businesses.

Since the late 80's of last century, countries in transition take actions in transformation of its political, economic and social systems towards a market economy. The essence of this process is the development of the private sector and entrepreneurship, and part of this process is the creation of small and medium-sized enterprises (Small Medium Enterprises - SME). In these activities, the focus was on creating a favorable business climate and the environment in which it will be possible to transform existing businesses to a market economy. Promotion of entrepreneurship has an important role in increasing competition in the market.

The first year is the most difficult and critical period for newly established businesses. Managing the growth and development of new skills in areas such as accounting, law and regulations, and marketing are a great challenge and difficulty for entrepreneurs. All this can lead to deterioration of newly established enterprises in the first years of operation. The biggest reason for their decline is that these companies usually have to go through this initial period without any support provided directly to entrepreneurs, to help them maintain their enthusiasm when faced with the harsh conditions of work and business. In transition countries, complicated registration, tangled legal procedures and the lack of support services for companies, make this first year of operation particularly difficult.

Inadequate external conditions, government regulations, and a difficult macroeconomic environment in almost all the countries in transition, an obstacle to the development of entrepreneurship and the private sector. To facilitate the transition process in many areas, it is necessary to provide additional work and many activities. In addition to financial support, it is necessary to progress in the field of education and training of employees, as well as the transfer of knowledge. Important stage is the creation of business infrastructure, to stimulate entrepreneurship and small business promotion.

In order to help small businesses and entrepreneurs to overcome the initial period of operations, significant contribution can be given with modern tools of business support - free zones, industrial and technology parks, business incubators, which makes the possibility of supporting job creation and economic development. The establishment of these instruments represents an effective means of helping entrepreneurs and companies in starting new businesses, supporting start-ups and providing a variety of assistance in order to survive, during the initial period of operations. In this area there is a chance for local agencies, institutions and authorities, to demonstrate the will and take concrete actions to support entrepreneurs. Resources that can help to provide changes exist, but these resources need to be better organized and better used. Experience shows that this type of help can bring real benefits to the local economy.

## ***CHARACTERISTICS AND IMPORTANCE OF ENTREPRENEURSHIP***

Entrepreneurship is the practice of starting new identified opportunities. Entrepreneurship is often a difficult undertaking, as a vast majority of new businesses fail. Entrepreneurial activities are substantially different depending on the type of organization that is being studied. Entrepreneurship ranges in scale from solo projects to major undertakings creating to build the many job opportunities. In fact entrepreneurial ventures seek to raise business (Hojjati,2012).

Entrepreneurship is an activity of creative combining of resources available in the company, which, with the assumption of risk, makes certain company performance. This is the process of creating new values, organization, and organizational forms, the basis of the innovation, or the ability to create something new. Entrepreneurship encompasses activities and processes of prediction (vision), innovation, risk-taking and learning. The result of combining these processes is the emergence of a new business venture (Zivkovic, 2007).

Entrepreneurship is an innovative and dynamic process of creating, organizing, implementation and development of a specific business enterprise or commercial activity to a newly created value and business success in a changing and uncertain environment. This is a specific and original work or business generated by finding and exploiting market opportunities and conditions or approaching problems in the system of consumption and solve them in a different and better way than the so far applied and famous. It is sometimes treated as a separate factor of production and business - in addition to capital, land and labor - whose task is finding the most convenient and most effective way of combining and coordinating the other components of production. In all industries where a large number of participants involved, there have to be cohesion, coherence and coordination. Entrepreneurship is being adjusted to meet and coordinate the needs of entrepreneurs and investment capital, employees and the society.

Entrepreneurship can be defined as an effort to create value based on the perception of business opportunities, acceptance of appropriate risks in proportion with capabilities, applying expertise in communication and leadership that is needed to mobilize the human, financial and material resources to enable implementation of the project (Milisavljević,2007). Entrepreneurship is associated with creativity, and it implies new ideas and practices. Creativity is a competitive tool of entrepreneurship. Entrepreneurship is the ability to identify opportunities that are based on new ideas and approaches and their translation into something tangible that is used. It is a process that involves people and organizations, and through which innovation occurs.

The essence of entrepreneurship is the ability to find good business ideas and turning them into successful outcomes through the products and services that meet customer needs and make a profit for entrepreneurs, as well as other satisfactions. It is a process that has essentially different attitude towards the environment, the search for opportunities that others did not see. The importance of entrepreneurship in the broad sense is reflected in the existence and fostering the tradition and culture of entrepreneurship, as well as the attitude of the state towards entrepreneurship and entrepreneurs from within the economic and social environment and economic policy.

Entrepreneurship, in terms of dealing with jobs and keeping jobs, received a special impetus and importance to the development of commodity production and competition, as well as more complex work processes. These conditions have increasingly emphasized the need for continuous monitoring of the market and reacting to his impulses, in order to successfully adapt activities and actions of the company to requirements of supply and demand. Enterprise features and capabilities in modern economy become more complex mix of production, good organization and marketing activities.

## ***FEATURES AND CHARACTERISTICS OF ENTREPRENEURS***

An entrepreneur is a person who accepts the risks and opportunities that appear in the creation and management of new business venture. Entrepreneur initiated and implemented this new business venture, accepting risks it carries. The main characteristic of entrepreneurs is that it creates a new business venture, the basis of creativity, risk and uncertainty in their work. The task of the entrepreneur is to combine the factors of production into a complete business system that performs a specific economic (business) activity. As an entrepreneur appears individual, but also a group of people who are willing and able to create new ideas and new opportunities for them to provide the necessary capital and people. They create and modify enterprise, create the organization and management of business, and overtake risks (Zivkovic, 2007).

From the point of view of the famous French theorists, entrepreneurs are those who transport the economic resources from the areas of low productivity in the areas of high productivity. It would be easier to say, entrepreneurs create value by using some form of change, whether in technology, materials, prices or demographics. In fact, entrepreneurs create new demand and find new ways of exploitation of existing markets. To some extent it can be said that the essence of entrepreneurship itself changes, which creates opportunities for exploitation. Sometimes the initiative for change is initiated by the entrepreneur, sometimes it's by the environment.

As the creator of important changes, new business ideas and opportunities, entrepreneurs initiate and encourage the development and organization, thus providing an appropriate position of the company and its advantages over other companies. The effects of a successful entrepreneur are visible and are reflected in the high efficiency and effectiveness of the company, the faster the pace of its growth and development over competing companies. Lack of or insufficient entrepreneurial ability can cause lag of enterprises in all business parameters and development, loss of market position or even dissolution and bankruptcy of the company.

It should be noted that all small business owners are entrepreneurs, if they are willing to take a job that will not be developed. Entrepreneurs are characterized in another way, as people with creativity, vision to transform their dreams into reality. It is believed that the identification of entrepreneurs with small business owners is wrong if they do not have these characteristics. When it comes to large companies, it is difficult to speak about entrepreneurship, since they are mainly focused on efficiency and effectiveness, and the uniformity of their employees, rather than on creativity and innovation.

## ***THE ROLE OF ENTREPRENEURSHIP AND ENTREPRENEURS IN ECONOMIC DEVELOPMENT***

Entrepreneurship, as an innovative and dynamic business activity inspired by creative people, is very interesting and attractive for the modern economy. As a renowned and proven factor of growth and prosperity, entrepreneurship is important in the economies of different levels and degrees of development. It's a common feature of the business in the context of rapid change, uncertainty and risk which demands a new approach to business, new business orientation and strategy. Greatest impact and best results in such conditions are being achieved by entrepreneurs and growing companies that foster entrepreneurial management.

Entrepreneurship and entrepreneurs are the basic driving force of enterprise and economic development. The driving mechanisms of the market economy can not be understood without an understanding of entrepreneurship and the entrepreneurial function. It is irrelevant whether this function is performed by the owner or professional manager on behalf of the owner. The success or failure of the company, faster or slower pace of economic growth and development is primarily explained by successful or less successful performance of the functions of entrepreneurship.

Evolutionary path of entrepreneurship research showed that it was present in some form in every civilization and that his roots go back to ancient history of purposeful human activity. It has always been a challenge for people who like to decide about their business fate, standard and way of life, themselves or associated with other organized like-minded people. Definite and strong affirmation of entrepreneurship and entrepreneurs have experienced in the U.S. in the seventies and eighties, since when an accelerated development of entrepreneurial business, and its penetration into economies with different characteristics has been recorded. Then began a very intense interest in the study of entrepreneurship as in the middle of this century was the management, which has led to the definition of principles of entrepreneurship as a scholarly discipline.

Developed economies of the world in the XXI century, entered a period of transition from information to knowledge era, or the economy and the knowledge-based economy as the leading and irreplaceable factor of development. Underdeveloped countries and developing countries are also in a period of transition from a traditional agricultural and industrial development in new information - technological stage, such as the transition of the former socialist countries of closed economic structure with dominant state ownership. Entrepreneurship as a driver of development, a factor that can significantly accelerate the growth and mitigate the effects of changes of economic structures through self-employment and job creation is interesting for all transition economies, including the Serbian economy.

*Table 1: Entrepreneurship in Transition Countries (Adapted from Aidis, 2009)*

<b>Factor</b>	<b>Basic features</b>
Environment	Macro: The dramatic changes of socio-economic and political conditions
	Micro: Reorganization of work
	Lack of "productive" entrepreneurial tradition
	The unfavorable economic environment
	Initial expansion of business activities accompanied by declining number of new small and medium-sized enterprises
	Lack of business infrastructure and support activities
	The lack of external funding
The role of government	Government with a new liberal attitude, reluctant to intervene in market processes
	No previous experience related to tax and legal systems for businesses
	The negative attitude towards entrepreneurs
	Over-regulation, interference, corruption
Characteristics of Entrepreneurs	New job, new career
	Different social background
	Primitive (and outdated) business methods
	Dependence on aid through private networks
	Government skepticism
	Passive, bureaucratic attitude
	No previous experience related to tax and legal systems for businesses
	Progressive and more market-oriented population
	Illegal entrepreneurship experience (experience in the informal economy)

Entrepreneurship has been confirmed as a new and effective way of solving problems in consumption, as well as the right way to find new places and positions in existing markets despite the massive supply and fierce competition, but also as a way of creating and developing new markets. Therefore, entrepreneurship is considered as a new sector of modern economy and entrepreneurs as creators of new jobs. Thanks to

entrepreneurship and entrepreneurs number of new jobs is growing faster than the number of employees in the existing institutions, organizations and enterprises (Group of authors, 2004).

Every successful entrepreneur brings about benefits not only for himself/ herself but for the municipality, region or country as a whole. The benefits that can be derived from entrepreneurial activities are as follows (Hojjati,2012):

1. Enormous personal financial gain,
2. Self-employment, offering more job satisfaction and flexibility of the work force,
3. Employment for others, often in better jobs,
4. Development of more industries, especially in rural areas or regions disadvantaged by economic changes, for example due to globalizations effects,
5. Encouragement of the processing of local materials into finished goods for domestic consumption as well as for export,
6. Income generation and increased economic growth,
7. Healthy competition thus encourages higher quality products,
8. More goods and services available,
9. Development of new markets,
10. Promotion of the use of modern technology in small-scale manufacturing to enhance higher productivity,
11. Encouragement of more researches/ studies and development of modern machines and equipment for domestic consumption,
12. Development of entrepreneurial qualities and attitudes among potential entrepreneurs to bring about significance changes in the rural areas,
13. Freedom from the dependency on the jobs offered by others,
14. The ability to have great accomplishments,
15. Reduction of the informal economy,
16. Emigration.

Due to the nature of the role of entrepreneurs and the growing importance of entrepreneurship as their business activities for the economic development of the society, and the provision of secure human existence, interest in acquiring knowledge in this field is constantly growing. Essential for entrepreneurs is ongoing process of education, because they often at the same time have the opportunity to design, predict, plan, organize, implement, manage and control their business ventures. For such tasks a significant volume of useful knowledge from various fields is required.

## ***ENTREPRENEURIAL VENTURE, ORGANIZING AND STARTING A NEW BUSINESS***

In relevant economic and social environment, and the environment that supports innovation and encourages entrepreneurial activity, many people of different occupations, social status and position, are interested in changing their work, their profession and social status. Most people have a desire, alone or with others, to enter the jobs that will be professionally fulfill them, to perform a business, make money, become an owner, actions or other forms of work. However, research in the U.S. shows

that only 10% of people who want to start their own business achieve that in practice. A large number of small start-ups fail within a short time, and many bankruptcies happen because people come into the deal with the fear of failure, in a hurry, without proper preparation and realistic assessment of their capabilities, the requirements and conditions of the future work (Statistics in the U.S. shows that 30% of start-ups fail within the first year of establishment, while 62% do not survive the first six years.).

Entrepreneurial venture is the work of individuals - entrepreneurs, their choices and actions in the independent creation, taking and leading a job or their participation in strategic decision-making at the firm, which means major changes in its business and results of this business. Basic and necessary prerequisite of successful entrepreneurial venture is realistic and fair estimate of market opportunities where entrepreneurs need to find business ideas, and their ability to turn that idea into a new value and economic endeavor that brings success.

Before starting a business entrepreneurs should choose an area that offers a chance for long-term success in the environment and conditions in which they will perform business. This approach assumes a detailed advance planning, analysis and reflection on the future approach to business. Selection of the right job is typically a difficult and complex problem for every entrepreneur. In this election, the requirements of future work should be put in relation with personal knowledge, experience, skills, capital, and desire for success. When choosing a new job, focus should be on those areas and activities to suit preferences, talents, interests, hobbies and experience for future entrepreneurs. It is useful, even necessary, to consult with experts in the given field and consider their recommendations and experiences.

Decision to enter into a new business is a complex and risky. It should be based on the (Group of authors, 2004):

- Realistic assessment of their own or collective opportunities (partner, family, etc..)
- The available capacities and resources (space, knowledge, capital, etc..)
- Complex analysis of the future of work and business.

When opting for a new business it is necessary to exclude personal feelings, desires and emotions, and appreciate and analyze real economic parameters and other objective indicators of future performance and business. The success of a new business can be achieved by the patient work, will, persistence and face the risk, due to taking all necessary measures and actions in the business. Bearer of a new business usually isn't an expert in all areas of its business and future operations. He/she should have the necessary level of knowledge about key aspects of the work performed, such as finance, accounting, information, costs, marketing, control and the like. Excessive guidance and consideration for only one field as the only and decisive is usually harmful, unilaterally and lead to business failure.

By analysis of needs and demand it should be seen what future consumers of our products or services really should be, in the short and long term. It's certainly not unrealistic desires, ideas and concepts, but the real present and future needs of customers. In defining the new business ventures entrepreneurs should choose an developing market, not current, fed, selective or steady market. Since the products and services have their own life and timed cycle, they should strive to enter into the

business at the beginning of this cycle because in the later stages, especially at the top of the cycle, numerous and fierce competition is on the way.

There is an important approach to entrepreneurship through performance evaluation, that emphasizes the assessment that must be made in qualitative, quantitative, strategic and ethical sense, which are related to the entrepreneur, the business enterprise and the environment (Avlijas,2010):



*Figure 1: Entrepreneurial assessment*

*Source: Avlijas, R.(2010), Entrepreneurship, Singidunum University, Belgrade*

In the process of organizing and starting a new business, owner needs to patiently build team, recruit and organize the necessary personnel, take the initiative and establish contacts with the business environment. At the start of business entrepreneur is also a manager, organizer and administrator. He must be constantly proven and versatile engage, in order to survive in the business and to spread and promote it.

## ***FACTORS OF BUSINESS SUCCESS***

From the distinctive goal of entrepreneurship to initiate and implement new business project, and the role of the entrepreneur as a creator and the project owner, its necessary to identify key factors that influence the outcome or final result of the business enterprise. These factors include: personal characteristics and entrepreneurs potential, the circumstances of life's journey, and the characteristics and potential of the external environment.

Entrepreneurs potential depends on personal characteristics that include the appropriate combination of talent, skills, knowledge and experience of a person who pretends to be a successful launch, develop and management of specific business.

Starting from the key stages of the entrepreneurial process, the task of the entrepreneur is the (Group of authors, 2004):

- Recognize business idea and opportunity and define the strategic vision and objectives for future work, in order to answer the question as what was expected and wanted from the deal, and in which direction the business is to develop,
- Define a model of organization and ensure its smooth functioning in order to enable the successful realization of the business vision and effectively achieve business goals,
- Identify and provide vital resources to successfully start and develop their businesses, such as information, financial resources, human resources, raw materials, materials, equipment, facilities and rank them according to the system of the importance,
- Permanent works to identify and assess potential opportunities and possibilities in the environment to secure their business prospects and conditions for its expansion into new areas and diversify through new programs.

In order to successfully accomplish these and other tasks, the entrepreneur should possess appropriate characteristics. According to the American experience successful entrepreneur has seven properties (Group of authors, 2006):

- 1) Independent, self-confident, competitive (competitive minded), energetic,
- 2) Oriented towards action, determined and eager – with calculated risk performance, avoiding the inconvenience, proving with success,
- 3) Highly motivated, persistent and willing to work continuously to achieve their goal - especially long-term; Self-realization identifies with the success of his company,
- 4) Quickly learn from new experiences,
- 5) Creative, innovative problem solving; focused at solving problems; generally is intelligent and learns quickly,
- 6) It has a gift for communication, observes and analyzes the psychological counterparts, known to listen to others, in personal relationships tends to be authoritarian, paternalistic appearance or, in the example of high-tech enterprises, to the spirit of group management according to the principle "one for all and all for one",
- 7) Professional management - the ability to recognize the need for an organized approach to information.

Sometimes life circumstances have a great, if not the decisive role that the individual becomes an entrepreneur. It is often the case that dissatisfaction at work, due to various reasons compel an individual to quit his/her job and move into an entrepreneurial venture. The situation is similar when it comes to difficult life circumstances such as divorce, death of a spouse, and more. This situation is another name called negative shift and influence the direction toward entrepreneurial venture. We should not neglect the importance of experience related to the family environment in childhood, education, age, and work history.

Characteristics of the external environment are critical and affect the operations of all stakeholders, including the business activity of entrepreneurs. The effect of environmental factors are often difficult to predict, evaluate and measure. They can

stimulate and encourage or discourage and restrict entrepreneurial ventures and the success of their performance. Entrepreneurs should have the necessary information and knowledge about the most important influences in the environment, in order to prepare to maximize the positive effects and avoid the negative or reduce them to a minimum. The characteristics and potential of the external environment are evaluated through (Group of authors, 2004):

- General socio-historical, cultural and political factors (the dominant social norms and attitudes towards business activities of entrepreneurs, the openness of society to promote and foster entrepreneurial initiatives, security and guaranteed safety and protection of property, the demographic characteristics of the population, etc..)
- Economic and financial factors (the role and impact of state institutions on economic and business development, the ability and the power of financial markets and financial institutions, credit and monetary and fiscal policy, openness and availability of financial resources for entrepreneurial activities, etc..)
- Technical and technological factors (general conditions of development of science and technology, openness and availability of formal and informal sources of information technology and new scientific knowledge, organization and development of scientific research, etc..).

Entrepreneurs have pointed out three major problems ranked according to the severity with which they were faced in setting up and running their businesses. The biggest problems for entrepreneurs were: low purchasing power, lack of working capital and credit and high cost of raw materials. A particular problem that entrepreneurs highlighted was related to poor dissemination activities and opportunities to acquire new equipment, which is certainly related to the low liquidity and profitability of the sector. On the other hand, obtaining various permits and certificates is a difficult task for entrepreneurs. Entrepreneurs believe that the procedures for the acquisition of permits and certificates are very bureaucratic, quite complicated, expensive and time-consuming.

## ***THE PROBLEMS IN THE OPERATIONS OF SMALL BUSINESSES AND ENTREPRENEURS IN SERBIA***

Entrepreneurs in Serbia and small businesses are faced with many problems in business, both in the start-up, daily operations, and in the case of termination. Among the many obstacles to SMEs, there are:

- Unresolved issues: gray economy, still relatively high tax burden, unreliable and slow legal process of debt collection and bankruptcy,
- Lack of funding - according to the owners of SMEs, it is the main problem in this sector,
- Credit financing is still the only solution for the vast majority of SMEs (in addition to personal savings),

- Banks can not provide sufficient resources, even though interest rates and credit conditions are not favorable for SMEs,
- Other issues: poor functioning of the insurance system and the claims collection, lack of mortgages and the unsettled state of the land registers, which limits the possibility of using a mortgage, and so on.

The business of the SME sector, in the opinion of their respective owners burdens (Implementation of the European Charter for Small Enterprises in the Western Balkans, the working group Small and medium enterprises and entrepreneurship, 2009):

- Advanced payment of taxes, high tax rates, as well as unfavorable costs of electricity, telephone, etc.,
- Pending legal aspects, the slow process of obtaining the necessary permits and long legalization procedures,
- Tariff barriers.

Entrepreneurs expect activation of existing budget lines to support innovation and it is necessary to define a range of different instruments to support the development of new products, services and processes, in a small start-up companies as well in companies - big exporters, and raise the general level of innovation culture in the country and create an environment which encourages innovation and development. At the same time education should adapt to the needs of the economy, and it is essential to reduce the brain drain as much as possible, because it is impossible to introduce new technologies and develop without an educated workforce.

Development of various organizations that provide services to small businesses is uneven both regionally and by quality of service (regional agencies and centers, business incubators ...). In these organizations is noticeable and distinct and unsystematic support as a lack of planning and regional development, especially the development of peripheral regions and SMEs expect a lot of the new Law on Regional Development. SMEs expect a lot more from the existing chamber system (eg from missions abroad expect adequate and timely information on developments in these markets). Since the competitiveness of our economy is one of the main factors in our development, and therefore the successful entry into the EU, and innovation are the essential element of competitiveness, it is more than necessary to work on innovation support measures. Occasional support in the form of a dedicated credit line with favorable interest rates is not enough, and small grants of Republic Agency for SME represent a step forward, but there is still much work to do on broader support for innovation and development. At the same time, the activities of the Ministry of Science on the innovation projects and the development of innovation, encourages and inspires optimism. The real problem is that the fund is small and insufficient for serious incentives.

Analysis of the above-mentioned problems of the SME sector is constantly coming back to the problem: where and how to convey the needs of the SME sector, as well as how to point to the real business problems. Businessmen aren't satisfied for so far achieved through dialogue between the SME sector and government institutions. Therefore, the question about representing the interests of SMEs arises, and small business advocacy as one of the effective levers for possible implementation, which might contribute to government measures to be taken promptly due to the consideration

of the actual needs of SME's, and thus to provide a much larger effect for one and for the other side: the development of the SME sector and the improvement of state policy.

At the same time, it is important to accept other European indexes for monitoring the development of the SME sector, such as, for example, the largest international study Entrepreneurship Global Entrepreneurship Monitor, and engage in this kind of reporting.

To review the current status, needs and problems of small and medium enterprises and entrepreneurs, there has been conducted a field survey from 20 May to 20 June in the year 2009th The survey was conducted by the Republic Agency for SME Development (Ministry of Economy and Regional Development). The sample size was 3,000 SMEs (98.8% of the sample realization). Surveyed units are economically active small and medium enterprises and entrepreneurs and businesses who submitted the APR, or NBS, the annual financial statements for the year 2008, as well as entrepreneurs who are in the VAT system.

The following figure shows the factors that, by the respondents opinion, have the greatest impact on the success of the business, as well as improving business conditions (Status, needs and problems of small and medium enterprises and entrepreneurs, the Republic Agency for SME development, 2009):

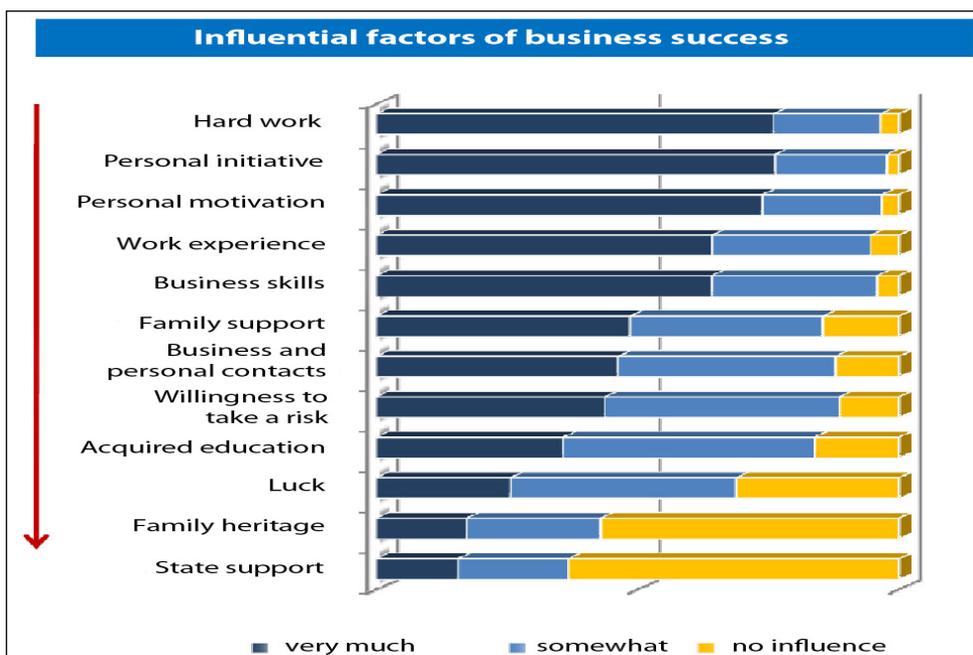


Figure 2: Influential factors of business success

Source: (Status, needs and problems of small and medium enterprises and entrepreneurs, the Republic Agency for SME development, 2009)

As the most important factors that influence the performance of the business, listed above all are hard work, personal initiative, motivation, work experience, business skills, family support, and then both the business and personal relationships,

the willingness to take risks, educational background, etc. When it comes to improving business conditions, subjects surveyed believe that they are most dependent on greater support from the government (28.8%), fewer state restrictions (18.9%), greater support from banks (17.6%), more support from the local environment (14%), better business relationships with partners (9.1%), better control (6.2%), and so on.

Among the administrative barriers, which after a lack of funding are the biggest problem in the operations of small businesses and entrepreneurs, it states (Status, needs and problems of small and medium enterprises and entrepreneurs, the Republic Agency for SME development, 2009):



*Figure 3: Administrative obstacles in business*

*Source: (Status, needs and problems of small and medium enterprises and entrepreneurs, the Republic Agency for SME development, 2009)*

Respondents ranked the problems from grade one to eight, where one has the greatest intensity. Average values are shown. Based on the data presented, it is evident that the major problems among the administrative obstacles are quoted tax regulations and procedures (weight 2.6), obtaining building permits for renovations (2.7), the work of inspection authorities (3.2), registering property (3.6), registration fee for employees (3.7), the registration of business (3.8) etc.

## **CONCLUSION**

Based on the foregoing, it is obvious that Serbia needs to create stability and continuity in the conduct of economic policy that would ensure a stable and predictable environment for entrepreneurs. It is necessary to ensure a competitive environment similar to one in developed market economies. This means that Serbia should ensure macroeconomic stability, continue with economic reforms, improve the efficiency of competition policy, reduce political risk, continue through the accession to the EU and attract foreign investors, implement a general deregulation of business, and other.

The process of entrepreneurship development, small and medium enterprises in Serbia in the last three years has significantly accelerated, but the structure of activities of small and medium-sized enterprises is not consistent with the state in developed countries. Due to the uncontrolled establishment, without systematic guidance in certain activities, entrepreneurs decide to choose less capital-intensive activities, especially service activities, and less production.

In the future the biggest challenge for SMEs will be the integration of our country into the EU and the internationalization of business. Problems that will occur during this period are related primarily to complying with the operating standards within the EU. For this reason it is essential that the state institutions are active, so that the SME sector in Serbia can reach a position equal to the position of SMEs in the European Union.

Capabilities of the private sector and small enterprises in the initial periods of their business, as well as mechanisms to help companies and entrepreneurs in starting new businesses, are not yet sufficiently developed and efficient. In this sense, it is primary objective to raise awareness on the local level that establishing modern business support instruments will help creating new businesses and new jobs, and to create implementation teams „locally“, composed of suitable partners.

It is necessary to establish an appropriate regulatory framework and new mechanisms to facilitate the flow of private investment in small and medium enterprises and entrepreneurs. That process might be helped with changes of the regulations and the creation of conditions for micro-lending, and establishment of independent guarantee fund with a fair and transparent competition. Equally important is to improve the efficiency of public administration. Research shows that administrative barriers, in addition to financing, are the biggest problem in business that is demotivating both entrepreneurs and potential investors.

In Serbia, the grey economy sector remains widespread, although in recent years has significantly reduced its participation. The negative effects of informal economy are reflected in the loss of tax revenues, the loss of workers in the informal economy (taxes and contributions are not being paid), the inefficient allocation of resources, in reducing the chance of leading macroeconomic policy and others. The informal economy represents unfair competition for those companies that regularly pay their fiscal obligations. The goal of economic policy should not be fighting the gray economy, but wherever possible, its translation into legal channels.

The problem is the fact that Serbia is late in the integration process. Even eight years after the start of serious reforms Serbia failed to ensure that the Stabilization and

Association Agreement take its effect. It is imperative to, as soon as possible, remove all barriers to enter into this Agreement, and that Serbia in the next year provide as a candidate for EU membership. This would eliminate the part of the barriers that exist for Serbian exporters to the EU market and to provide more resources to the Serbian economy from EU funds. Harmonization of Laws in Serbia with the EU practice will certainly create a more favorable business environment for economic development, especially the development of SMEs, faster privatization and restructuring, as well as agricultural development.

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## ***ECONOMIC ANALYSIS IN ENTREPRENEURSHIP***

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**Abstract:** The authors discuss the importance of economic analysis in entrepreneurship. Entrepreneurship is, in fact, a very significant factor in modern economies and businesses, which is accompanied by a high degree of risk, especially in conditions of instability and crisis cycles that characterize contemporary society.

Economic analysis is a useful methodological approach, which provides a wide range of instruments and procedures for monitoring the operations of the economy, businesses and entrepreneurial activities. It is a scientific research use to explain the economic reality, processes, data, effects and development trends. Economic analysis is carried out by different methods, combining qualitative and quantitative economic research, supported by descriptive and statistical data.

Out of the many methods of economic analysis the authors are especially considering the following: business plan, profitability analysis, cost analysis, analysis of market and price, financial analysis, gross margin analysis, cost-benefit analysis, SWOT analysis, benchmarking analysis. They are applicable, according to the authors at all stages of the entrepreneurial process.

**Key words:** Economic Analysis, Entrepreneurship, Profitability, Production Costs, Market, Marketing

**JEL** classification: A11, B40

**UDC** 005.52:[ 005.961:005.914.3(082)

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## ***INTRODUCTION***

Economic analysis is an important methodological approach. This analysis provides a wide range of instruments and procedures for monitoring the operations of the economy and the subjects of entrepreneurial activity. Entrepreneurship as a factor in modern economies that has specific benefits of this type of analysis. It is a scientific research to explain economic reality, appearance, relationships, processes, indicators, performance and development trends. Economic analysis is carried out by different methods, combining qualitative and quantitative economic research, supported by descriptive and statistical data.

On the example of agricultural production (conventional and organic), which can be partly linked to entrepreneurship, the economic analysis is explained.

The basic economic problems of agricultural production results from two groups of factors: macroeconomic and microeconomic.

The macroeconomic determinants are: first of all, the socio-economic conditions for engaging in this business, and secondly agrarian policy of the state (especially willingness to support agricultural production); financing terms (obtaining soft loans), market conditions (relations of supply, demand and prices, export opportunities) level of organization (associations, cooperatives, clusters).

Seen from a microeconomic point of view successful development and economic power of agricultural production depends on many external and internal factors: the size of farm, the utilization of production factors as well as the structure of production, cost, productivity, and profitability of production, types of farms (crop, livestock production, mixed), regional specificity (lowland, highland farms), and so on.

Economic analysis provides a range of tools and methods for monitoring the production. Out of many methods of economic analysis the following are explained: business plan, profitability analysis, cost analysis, analysis of market and price, financial analysis, gross margin analysis, cost-benefit analysis, SWOT analysis, benchmarking analysis.

## ***THE IMPORTANCE OF ECONOMIC ANALYSIS***

Economic analysis provides the answer to many questions, which are crucial for starting agricultural production, as well as for the maintenance and development (improvement) of this production.

Business plan (business plan) is the "alpha and omega" of economic analysis. It contains an integrated set of objectives, policies, strategies, and a set of individual programs aimed at implementing the chosen business concept of farms (companies). It is a conceptual framework for the design and proper linking of the vision, mission, business goals, policies, directions, method and pace of current development and behavior of households (businesses). On the basis of this framework functional areas such as marketing, production, human resources, finance, procurement, research and development are planned. In addition to management, this plan is facing creditors,

internal public and all others whose help and support are needed to implement the planned business (farming).

In addition to the business plan other economic documents are necessary and other agro-economic analysis: profitability, cost analysis, analysis of credit conditions, analysis of the financial results, production analysis, analysis of demand, competitor analysis, market analysis, analysis of marketing costs, etc.

One of the fundamental questions of economic analysis is to define the farm model. For example, the elements of the farm model for crop-livestock farming orientations are available arable land; buildings; machinery and equipment; labor; production line in cattle production and identified structural units; production line in farming; prices of inputs and outputs. The elements of the model for pig farming are: production capacity - machines, buildings, etc., the number of sows farrowing index - the pig production, the number of pigs (per livestock unit) - for fattening; labor; price of raw materials and finished products.

Economic input-output model parameters are transferred, further, on the mathematical simplex method. Procedure of optimizing preceded, in fact, the formation of the initial simplex matrix containing the starting solution based on the assumption that if the under-use of all factors of production on the farm there is a loss in the amount of fixed costs, which have already been made, labor, and so on.

## ***ANALYSIS OF PROFITABILITY***

Analysis of the profitability of farming involves testing and evaluation of business performance in the final business results achieved in the field of production and trade. Starting with this point of view, the analysis of profitability is reduced to analyzing the profitability achieved in the total volume of actual sales. Profitable business means that the outcome of the entire business is achieving positive financial results. In contrast, unprofitable business ends with negative financial result or loss. The knowledge what the financial result will be is possible after the products are introduced to the market, ie. during the sale.

One of the major issues that are encountered in the analysis of profitability in general, and in agricultural production is: method of measuring profitability? Concerning this issue in theory and practice, the analysis appears in many ways. According to some profitability of investment is the relationship between financial performance and investment. For others it can be measured by profitability of only part of the funds, ie. profitability of fixed assets (such as the relationship between the financial effects on investment and fixed assets). For the third, it is the realization of profitability or sales or total revenues (the relationship between the financial impact and implementation). What, therefore, can be taken as the basis for measuring profitability, whether invested assets or realization? In our opinion, when it comes to organic farming both criteria should be taken into account, because it is a new, specific and relatively expensive production whose interest is not only to the owner farms, but also the broader public interest.

Depending on the adopted method of measuring profitability the subject of analyzes is determined. If we are using formula:

$$\text{Profitability} = \text{Realized surplus}/\text{generated realization}$$

then the cost-effectiveness analysis is investigating the effect of the following factors of profitability: the impact of the cost change to the level of profitability, the effect of changes in selling prices, the effect of changes in the range of sales.

If, however, to measure profitability we are using the formula:

$$\text{Profitability} = \text{Realized surplus} / \text{Investing business funds}$$

then the cost-effectiveness analysis engages in a detailed criticism of the policies of investment funds, with a special focus on the effectiveness of investment in fixed and working capital investment effectiveness. The analysis and critique of the effectiveness of investments is oriented to test the following problems: an analysis of investment trends, an analysis of the intensity of investment, and the analysis of the appropriateness of investing, ie. optimal relationship between the size of investment and the actual effects.

When we are studying and monitoring the profitability one of the important issues is the breakpoint of profitability. This analysis is carried out to investigate the relationship between costs - revenue - results. Break-even point or B/E point is the point at which the value of sales and the total costs are the same. To calculate the break-even point farm managers (companies) need to know the unit price of products sold (P), the variable cost per unit (VC) and total fixed costs (TFC):

$$\text{BE} = \text{TFC} / (\text{P} - \text{VC})$$

Farm (firm) has a positive turning point when its total income is quite sufficient to cover its total costs. But the total cost has two sides: fixed and variable. Fixed costs are costs that do not change, regardless of volume. Variable costs change in proportion to performance (output) and include raw materials, labor costs and energy costs.

The above formula shows that: (1) that the total income will be equal to the total cost when one sell enough units at a price that covers all unit of variable costs, and (2) that the difference between price and variable cost, when multiplied by the number of units that were sold, will be equal to the fixed costs. The relationship is tested and can be represented graphically:

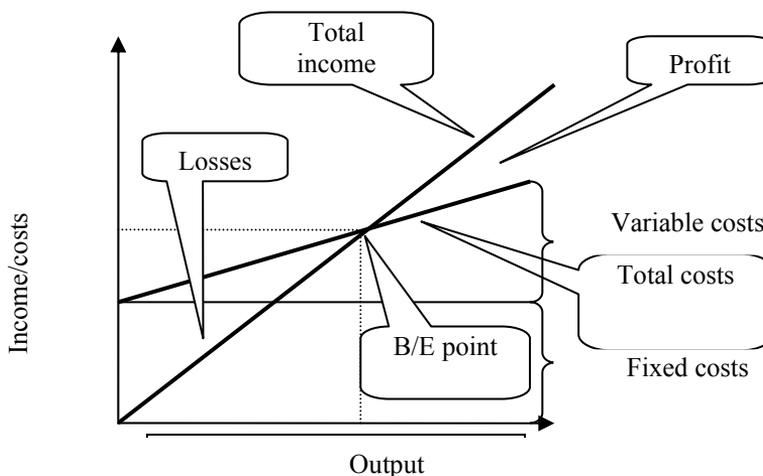


Figure 1: Analysis of break-even point (profitability graph)

The break-even point is the point of intersection of the total income and expenses. This is the point at which positive results arises or ceases. It is this combination of factors of production that allows the holding (company) a minimum condition of existence.

The importance of breakpoints profitability for the current sale is that it can affect the orientation of management regarding the refund and risk, as well as in the direction of reducing the cost of doing business.

## ***COST ANALYSIS***

Cost analysis means examining the dynamics and structure of total costs of reproduction and their relationship with other categories, or results of operations. Cost analysis is the basis and part of the cost-effectiveness analysis.

Cost analysis starts from the analysis of the total cost of reproduction, in order to access various forms of de-compilation, which can be performed in three ways: type of cost; places of costs; carriers of cost. There are also, combined parsing as: types of costs and places; cost of carriers and places (the total cost of the product by production stages), types of costs by carriers and locations (phase product calculation).

The major form of cost de-compilation by type is the separation between fixed and variable (proportional, progressive and regressive), to analyze the extent of costs in connection with the production volume. Most all variable costs are treated as a proportional to the volume of production.

Of particular importance is the observation and analysis of the types of costs broken down by stages of the production process: the cost of sales and operations, costs of procurement of materials and supplies; costs of production preparation, costs of production (in terms of technological stages); overheads, costs of administration.

The purpose of cost analysis is to discover the places and types of costs that can be reduced or avoided and thus achieve better results in the business period.

The analysis includes testing and detection of features in order to cut down costs. Therefore, the objective of the analysis is its cost reduction. In order to achieve this it is necessary to analyze the causes of the increase or decrease in cost.

Great importance for the analysis of the cost is its content, because if they are installed correctly, they are absolutely fixed costs, and absolute proportional costs clearly separated from other costs, which have a mixed character, then the cost of the analysis can be clear about the causes of related the digressive and progressive character of the cost of those results which reflect the effective energy and waste.

Based on the analysis of costs calculation of production should be made:

Table 1: Calculation of production per 1 ha in conventional agricultural production

Indicator	Measurement unit	Volume	Price per unit (d)	Value (d)
<b>I</b> VALUE OF PRODUCTION				_____
- Seed				_____
<b>II</b> DIRECT VARIABLE COST				
- Seed				
- Fertilizes				
NPK 15:15:15				
Urea 46%				
- Protection				
insecticides				
.....				
herbicides				
.....				
fungicides				
.....				
- Mehanization				
- Tractor				
- Tractor				
- Tractor				
- Universal harvester				
- Insurance				
- Interest				
- Other variable costs				
TOTAL (II):				_____
<b>III</b> COVER MARGIN				
<b>(I-II):</b>				_____

Table 2: Calculation of production per 1 ha in organic agricultural production

Indicator	Measurement unit	Volume	Price per unit (d)	Value(d)
<b>I VALUE OF PRODUCTION</b>				_____
- Seed				_____
<b>II DIRECT VARIABLE COSTS</b>				
- Seed				
- Manure				
- Mehanization				
- Tractor				
- Tractor				
- Tractor				
- Universal harvester				
- Insurance				
- Interest				
- Other variable costs				
<b>TOTAL (II):</b>				_____
<b>III COVER MARGINE (I-II):</b>				_____

When it comes to organic agricultural production cost analysis must take into account the costs of the application of appropriate legally established agricultural practices. One of the important requirements for cost-effective production of organic agriculture is providing nutrients to the soil. Due to the efficient and relatively low-cost provision of the necessary nutrients using fertilizers, the use of organic fertilizers in intensive crop production in our country has been largely ignored. The use of nutrients from manure was very modest, especially on large farms. Due to the small number of animals and modern housing conditions, small quantities of manure are obtained. According to some estimates, instead of every four or five years, plots were manures even every 18-20 years. In terms of organic production methods, if manure application was done with obtained at the farm, it is necessary to determine:

- amount of solid and liquid waste in animal production per head;
- total annual amount of manure for all the animals on the farm;
- content of major nutrients in the total estimated amount of manure;
- needs of individual crops for major nutrient elements;
- all of their needs for the crop nutrient elements.

In the application of fertilizers in terms of organic production methods, attention is given to the analysis of some problems, such as.: the cost of soil fertility control; the use of fertilizers and control of environmental factors in crop production, in order to achieve high stable yield, good quality, with the minimum investment of materials, energy and labor - economic optimization and protection of agro system, environment and pollution of the biosphere.

To improve the effectiveness of organic farming, because of both biological and agrotechnical organizational and economic reasons, the most significant is the

introduction of crop rotation. Planning, preparation and introduction of crop rotation requires knowledge of its internal structure, and a good knowledge of crops, in order to maintain the humus in the soil and control the occurrence of pests, weeds and disease. Today there are a number of practical observations and experimental results on the impact of the preceding crop to the yield of next crop. Purposeful rotation provides numerous advantages of organizational-economic and environmental characteristics, which are of particular importance for the whole farm.

## **MARKET AND PRICE ANALYSIS**

Market analysis involves the identification and measurement of the factors that define the potential size of the market (domestic and foreign). Aspects of the market can be understood as the number of customers in a certain area at a certain time which would like to buy our product. The potential market is usually less than the number of buyers and defined by the number of potential buyers who show an interest for a given (organic) product. Qualified market is one that has economic assumptions to buy a given product. It is important to establish desired participation as a percentage of potential and qualified markets.

Demand analysis is an important analytical process that aims to identify and measure the factors that affect or will affect the sales of the product. Demand can be defined as the volume of sales that could be implemented in a particular market at a certain time in a certain area at a given marketing environment, and with a marketing effort. Demand factors vary by product category and its applications. Thus, different factors of demand exist for product for reproduction than for products intended for final consumption. We can also differ the factors of demand for durable and non-durable consumer products.

Marketing cost analysis is the next question in this domain. These are the costs that occurred as a result of the use of certain marketing activities. These costs include two categories of costs: costs of meeting demand and the cost of creating demand. The first category includes a number of costs such as marketing research, create and design products and selling expenses, and other costs including promotion (personal selling, advertising, sales promotion, direct marketing).

To achieve the same economic result as the conventional production method, the organic products should be sold with higher prices. The lowest selling price of the farm product, which can be achieved by the same amount of cover margin as in conventional production, can be calculated with following equation (Sredojević, 2000):

$$P_1c_1 - VT_1 = MP_1$$

$$P_2c_2 - VT_2 = MP_1$$

$$C_2 = P_1c_1 - (VT_1 - VT_2) / P_2$$

or

$$c_2 = (P_1c_1 - \Delta VT) / P_2$$

or more simply expressed in terms of cover margin, price of the product in terms of alternative methods of production can be obtained as follows:

$$c_2 = (MP_1 - VT_2) / P_2$$

Where:

P1 - the amount of product (yield) in terms of the conventional methods of production;

P2 - the amount of product (yield) in terms of organic production methods;

c1 - the price of the product in terms of conventional production methods;

VT1 - external direct variable costs in terms of conventional production methods;

VT2 - external direct variable costs in terms of organic production methods;

MP1 – cover margin in terms of conventional production methods.

To determine the price of some products, it is necessary to calculate the amount of the indicators for each product. These indicators are determined by assembling the differential calculation for individual production lines. In a similar way the minimum cost of finished products on the farm level are determinate.

In the countries of the EU over the past decade, there has been a radical change in agricultural policy. Since 1992 the EU supported the farming methods that take care of the environment, natural resources and the diversity of plant life. Rural development policy for the period from 2000 confirms the essential role that farmers play in ensuring functions of the environment that goes beyond the conventional way of keeping agricultural production at basic legal standards. In this sense, to the farmers who take responsibility for the agricultural production in relation to environmental protection, support is paid by the state for at least five years. It is envisaged that for certain types of liability a longer period is granted, depending on their effects on the environment. Assistance shall be granted annually and is calculated according to the loss of income and additional costs that arises due to commitments. According to the reform of the EU Common Agricultural Policy 2003 the single farm payment (SFP) as a new method, independent of the volume of production was introduced. These payments are linked to environmental protection, good manufacturing practice, health and food security, protection of plants and animals and using appropriate production standards, and maintaining agricultural land in good environmental and production conditions (Bogdanov, 2004).

## ***FINANCIAL ANALYSIS***

Corps of activities aimed at creating and maintaining financial strength of the company is called the financial function. It should provide a lasting ability of the company (holding) for the following issues: (1) payments, (2) funding, (3) investment, (4) enlargement of the owner property, (5) meet the financial interests of the other participants. As a function that takes care of the financial aspects of the company it has to understand the goals and structure of the company's activities and to ensure lucrative and sustainable financial growth of companies.

Financial analysis is a set of techniques for converting data from the financial statements to the relevant information for the management. In the financial analysis liquidity, indebtedness, activity and profitability of enterprises (farms) is shown.

Basically, financial research and analysis lies quantitative correlations between some of the balance sheet and the income statement, that such financial statements on

the status and success are the subject of research. This analysis is a necessary condition for the analysis of the general economic - financial position of the company, as it reveals the financial situation of the company and its potential earning or profitability. One can therefore accept the view according to which testing requirements of companies and financial equilibrium measure of profitability on investment is the overall objectives of financial analysis.

The aforementioned general goals constitute a general framework for closer set of specific goals that vary depending on the user analysis. From this point we distinguish internal goals - when the examiner or the user analyzes the enterprise and external objectives - when the observers and users outside the company analysis, so-called third parties.

So there is a number of criteria for distinguishing types of analysis: (1) the analysis of the customers - internal and external, (2) according to the analysis - analysis of balance sheet and income statement analysis, (3) from the point of time of observation - static analysis and dynamics, and (4) the method of preparation - in absolute terms, in relative numbers, or in the form of graphs, and others.

The success of financial analysis depends on the finding of the financial status of the enterprise and its profitability. The most important assumptions of the financial analysis are: (1) the usability of balance data, (2) consolidating balance sheet and income statement (if necessary), and (3) the classification of balance sheet items.

Regardless of whether it is a static analysis of the financial situation and results of the analysis and development of financial position and results analysis procedure is the same and includes the following phases: (1) preparation of balance sheet and income statement analysis, (2) the selection of analysis tools, and (3) inferences about the state's financial health and profitability levels. Financial analysis is used primarily as an instrument of control of fiscal policy in the past and as a basis for the design of financial policies for the company in the future.

A financial business is business related to cash. In the process of business operations (farms) funds on the one hand, are coming to the firm (farm) and), on the other hand, it is discharged through costs of business. In this way the funds are in the business means. There are two main purposes of the funds that are in operating assets: the current payments and long-term investments.

Special part of the business is to make cash investments: term deposits, short term loans, short-term pooled funds, long-term loans, long-term pooled funding. Reserve assets of the business are also in money form and sticks to the appropriate accounts and may also be combined or invest in securities.

The financial operations and affairs of the company represent a different way of thinking, which is different from accounting in general. The accounting system takes material and financial categories as it is - the original amounts and sizes. In the financial way of thinking, which is based on the categories of income and financial benefits, possible benefits that funds can achieve immediate benefits or during time ("time value") is taken into account, as a result of the so-called, time value of money?

Financial resources should, therefore, be managed to produce an immediate positive impact on net income and financial results in a narrower sense, given the fact that money is more preferred in the present than in the future, simply because the money that is available at present may be invested in certain activities.

Financial operations are conducted within the financial policy of the company, made up of selected assets, roads, measures and methods for achieving financial goals.

## ***ANALYSIS OF GROSS MARGIN***

Gross margin is one of the financial indicators that is now increasingly used in business analysis of agricultural holdings. It represents the output (output value) minus the variable costs that are specific to each production. Total gross margin of all lines of production on the farm is the amount from which all fixed costs are deducted to calculate the profit on the farm level.

*Table 3: Fixed costs of agricultural holdings*

Amortization of buildings, mehanization and equipment
Costs of interest
Leasing costs
Tax
Insurance
Wages of permanent labor
Costs of management
Other fixed costs

Gross margin of some production shows how much a farmer earns above variable costs.

*Table 4: Variable costs of agricultural holdings*

Seed and seedlings
Fertilizers
Plant protection
Feed
Veterinary services
Contract services
Additional labor
Fuel and lubricants
Maintenance of mehanization
Other variable costs

Gross margin reflects the relationship between the sales price and volume of production, on the one hand, and variable costs, on the other hand. These three factors stand out for their impact on the gross margin.

Gross margin indicates how farmers gain or lose the invested funds. At the same time, it shows the economic strength of the agricultural products on the market. Higher gross margin indicates a less risky business. Farms with higher gross margin can spend more variable costs than the competition. On the other hand, farms with low gross margin per unit, which have a relatively small margin but high volume of production and sales, can also be successful.

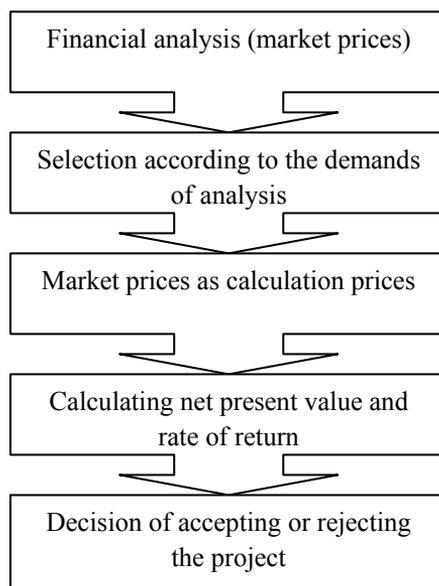
Factors that influence gross margin are: production volume, sales price and variable costs. Changing any of these factors could be due to different circumstances. If one reduces the selling price and production volume, and variable costs remain the

same, the gross margin will decrease and vice versa. In addition to the above a natural factors (geographical area, weather conditions, soil type, etc.) which affects the gross margin, can be largely controlled by the farmers.

Gross margin gives, therefore, the basis for the continuous monitoring of operations, improving product competitiveness and improving profitability of production lines, and the farm as a whole. Accordingly, the gross margin is a good starting point for good planning.

## ***COST-BENEFIT ANALYSIS***

Cost-Benefit Analysis is a method for the evaluation and comparison between two or more projects for the purpose of the right choice between the two. This method measures (in monetary terms) all costs and benefits to be expected in future of a project, in order to accept the project in which the greatest positive difference is (economically speaking) the most cost effective. A simplified representation of the steps in the cost-benefit analysis is presented in Figure 1.



*Figure 1: Steps in COST-BENEFIT analysis*

The method of cost-benefit analysis allows comparison of solutions related to the involvement of scarce resources to alternative usage purposes. On the basis of this analysis capturing, measuring and comparing all relevant costs and outcomes of one or more projects and project options is done, and on this basis choice is made depending on suitability and profitability from the enterprise point of view or the economy as a whole. Cost-benefit analysis helps to analyze which economic activities should or should not be taken because it may happen that in comparing two or more projects, none of them is optimal. This would mean that there is a possibility that this method

determines that none of the proposed projects is not satisfactory in terms of achieving development objective, and therefore must be rejected as project variations. On this basis it can be concluded that this method should not be equated with economic theory and the theory of optimal economic comparison condition. The purpose of this method is that all projects are assessed from the standpoint of economic criteria, and not arbitrary, all with the goal of solving the problem of proper allocation of scarce resources development and selection of investment priorities for research purposes.

As a scientific theory, methods and techniques, cost-benefit analysis represents a powerful tool for programming and project planning in the strategic management system.

## **SWOT ANALYSIS**

Matrix analysis of opportunities and risks, known as SWOT or TOWS analysis (an abbreviation of the words Strengths, Weaknesses, Opportunities and Threats), its main goal is to determine the position of the company, depending on the intensity of the opportunities and threats affecting its present and future operations. It is a strategic management technique that allows the identification of external factors in the form of opportunities and threats in the environment, and identification of factors in the form of internal strengths and weaknesses of the company. Based on the data obtained from the analysis, the company sets goals and strategy for development, adapting an organizing structure and control system to implement the chosen strategy.

This analysis includes: (1) the complexity and uncertainty surrounding the company and its impact on the business entity (company, holding), (2) internal resources of entities (firms, households). The analysis is focused on the analysis of the company mission, strategic policy, and current and prognostic information in respect to the future strength, weakness, opportunity and threats, in order to determine what was the position of the company, where and which way it wants to go, what is the essence of its strategy.

Example of matrix analysis of opportunities and risks and possible strategic options, depending on the impact of external and internal factors are shown in Figure 2:

<b>Internal factors</b>	<b>STRENGTH (S)</b>	<b>WEAKNESSES (W)</b>
<b>External factors</b>		
<b>OPPORTUNITIES (O)</b>	Maxi-maxi strategy	Mini-maxi strategy
<b>THREATS (T)</b>	Maxi-mini strategy	Mini-mini strategy

*Figure 2: SWOT matrix*

Based on the presented matrix it can be seen that depending on the analyzed factors, there are four possible alternative strategies:

- Mini-mini strategy that seeks to minimize internal weaknesses and external threats,
- Mini-maxi strategy aimed at minimizing internal weaknesses and maximizes opportunities in the region,
- Maxi-mini strategy, as the firm seeks to maximize its existing strengths and minimize the threats from the environment,
- Maxi-maxi strategy as the most desirable type of strategic situations, where the company seeks to maximize its own power use of all existing opportunities in the region.

Analysis of opportunities and threats includes internal enterprise and external analysis of environmental factors.

Internal analysis of the company is concerned with identifying the factors of its strength (competitive advantage, financial resources, distinctive capabilities, advantages in cost, technology, etc.), and its potential weakness (worse competitive position, lack of profitability, outdated skills, operational problems, poor market image, narrow product line, etc.).

External environmental factors analysis deals with the identification of potential opportunities offered by the environment (new markets and segments, variety of related products, rapid market growth, vertical integration, and so on.), and the potential dangers that can come from the environment (the entry of new competitors, slow market growth unfavorable government policy, recession, changing tastes and needs of customers, unfavorable demographic changes, etc.).

Based on a constellation of opportunities and threats the company have to select the optimal development strategy, ie. those strategies that will increase your chances and reduce or completely avoid the potential hazards to its future performance.

Concept analysis of opportunities and risks is a convenient instrument of strategic management, which enables the integration of forecasting and planning, as well as setting realistic planning assumptions and for future strategic actions towards a more efficient management of companies.

## ***BENCHMARKING***

Benchmarking is a systematic and continuous process of measuring and comparing the business processes of an organization in relation to the business processes of the organization leaders, anywhere in the world, in order to obtain information that will help the organization take action to improve their performance.

Benchmarking is a method of strategic management with a wider application in enterprises started in the beginning of the 90s of the last century.

The word benchmarking means standard for comparison, and the strategic management of an established technique for the comparative analysis of their business with the best business organization in a particular domain.

Based on comparison of their own business processes and its products with the competitors and market leaders in the industry, it strives to implement best practices in their business operations by taking action to improve their own product performance. Areas of the benchmarks are many, the most important among them are: strategic

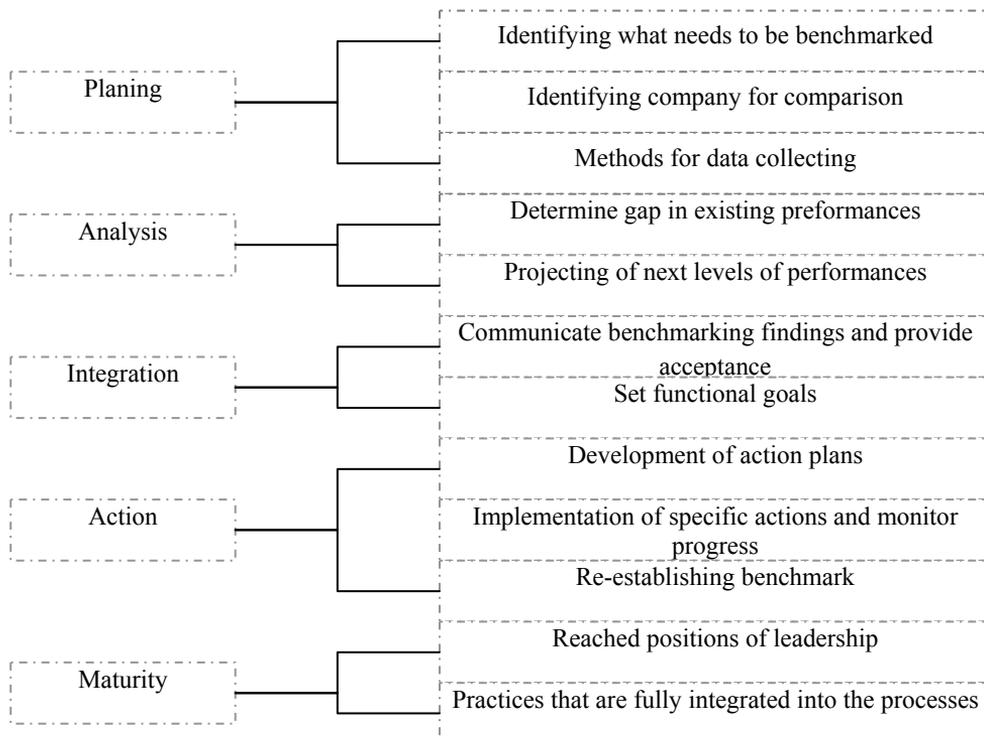
planning, forecasting, developing new ideas, comparing products and production processes and establishing goals.

Depending on the purpose and methods of comparison there are:

- Internal benchmarking and
- External benchmarking.

Internal benchmarking refers to comparing certain areas and organizational units within a company, with the aim to identify the best examples of internal business standards. External benchmarking is done comparing business enterprises with direct competitors in order to identify those products and services which are currently the best on the market, which would represent a standard to improve their own operations. In addition, there are: a comparative benchmarking (comparison of one organization with similar or identical organizations), functional benchmarking (comparison of products, services, workflow, business process best organizations regardless of the job they do), generic benchmarking (similar to the functional, but focuses on key business processes).

Benchmarking process takes place in stages, as shown in Figure 3:



*Figure 3: Steps in benchmarking*

As you can see from the picture, the first stage is carried out with planning what to compare, identify the company that will be used for comparison, as well as methods of data collection.

It then analyzes the collected data, determines the gap in the existing performance and projects future levels of their own performance.

The stage of integration achieved in the communication process to accommodate new standards and formulate operational objectives to achieve these changes.

The stage action is done by making concrete plans for action, its implementation, and monitoring and assessment of new policies and standards.

At the end of the performance there is a stage of maturity which means provided leadership position and set standards that are fully incorporated into the existing business processes of the company.

Based on the presented it may be acquired the false impression that the benchmarking process is identical to the strategy of imitation. However, the fact that benchmarking encourages innovative and creative capabilities of enterprise management indicates that this is an extremely useful tool in strategic management that enables more efficient operations and creates a more favorable strategic position of the company.

## ***CONCLUSION***

Successful development and economic power of companies, entities (farms) of agricultural production depends on many economic factors, external and internal.

It is necessary to systematically and continuously track the impact of macroeconomic and microeconomic factors on business, in our example, in conventional and organic farming.

Fundamental and critical issue that needs to be continuously monitored and analyzed is the question of economic feasibility of a production, in this case agricultural production. In order to achieve this it is necessary to organize unique statistical and accounting records of all farms. This would allow real insight into the real costs of production, price and cost comparison, as, in addition to quality, the significant factors of competitiveness.

In addition, we should choose appropriate methodological instruments for scientific and technical analysis of the production, such as farm modeling, production optimization, cost-benefit analysis, the analysis of the break-even point, profitability, auditing, market analysis of price and market, and so on.

Economic analysis provides the answer to many questions, which are crucial for starting agricultural production, as well as for the maintenance and development (improvement). Rational use of all factors of production is one of the important conditions of agricultural production efficiency. Particularly important, necessary and required (permanent) are following analysis: analysis of profitability, cost analysis, analysis of price and market of (agricultural) products and gross margin analysis. Each of these analyzes is in a function of productivity, profitability, economic and environmental sustainability as key principles in the modern economy.

When it comes to economics and business organization of farms it is necessary to constantly monitor and analyze the experience of the European Union and some developed countries of the successful economic groups. This experience shows, in short, that the necessary measures of agricultural policy and other methods are

constantly encouraged and supported in this production. Just like that, in conjunction internal efficiency and external support from the state, it is possible to maintain and develop this important and promising production.

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# ***ANALYSIS OF OPPORTUNITIES AND LIMITATIONS FOR STARTING MICRO AND SMALL ENTERPRISES IN SERBIA***

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**Abstract:** The youth unemployment rate in Serbia is about 50%, so many are trying to find a solution in self-employment, starting their own micro and small enterprises. There are some opportunities for launching and ensuring growth and development of a company, but there are also a number of limitations.

This paper contains identification and analysis of opportunities and limitations for starting micro and small enterprises in Serbia, interviewing young people in several towns in Serbia, data collection and hypothesis testing using ANOVA and factor analysis methods.

The general conclusion is that all the participants in the survey assessed very negatively about 87% of variable conditions for starting and conducting business in Serbia. Test results confirmed the hypothesis H0: There are small features and large number of barriers to business start-up and successful growth and development of micro and small enterprises in Serbia.

**Key words:** Entrepreneur, Micro And Small Enterprises, Factors Of Opportunities And Limitations

**JEL** classification: L26

**UDC** 334.713(497.11)(082)

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## **INTRODUCTION**

In 2011st from the total of 319,802 companies, the entrepreneurial sector accounts for 99.8% (319,304 companies). SMEE sector generates 65.3% of employees (786,873), 65.5% of turnover (5.200 billion Dinars), 55.2% of GVA (878.2 billion Dinars) and engages 55.7% of investments in non-financial sector in 2011st. The sector of SMEE hires 45.1% of total employment, 51.7% of total investments, realizes 46.5% of exports, 52.7% of imports, generates 61.7% of the foreign trade deficit of Serbian economy and accounts for about 33% of GDP.

Observed by size, sector structure SMEE most numerous are micro enterprises (307,430), while small and medium enterprises (11,874) dominate in all observed indicators (54.4% of employment, 60.6% of turnover, 61.5% of GVA, 76, 0% of exports, 74.4% of imports of SMEE). In 2011st The number of medium-sized enterprises has been reduced by 1.7%, while the number of employees to 2,416 employees (1.0%). However, on the level of reduced employment of SMEE sector, decisive influence had a decrease in employment at entrepreneurs (28,656 workers or 12.3%). (Ministry of Finance and Economy, Ministry of Regional Development and Local Government, the National Agency for Regional Development, 2012, p. 8).

Total number of employees during the 2011st in the Republic of Serbia was 1,001,757. The participation of micro enterprises in total employment was 15.5%, small 19.5%, medium 23.2%, and large enterprises 41.8%. The participation of micro enterprises in total number of employees increased from 10.8% in the 2005th to 15.5% in the 2011st. Small businesses also achieved increasing number of employees. Their share increased from 14.8% (2005) to 19.5% (2011). Large enterprises have reduced their participation from 50.4% to 41.8%, while medium remained at approximately the same level (24%, ie 23%). Based on presented data is perceived that the total number of persons who are employed by micro, small and medium enterprises in 2005th was below the number of employees who are employed by large enterprises (49.6% : 50.4%). In contrast, in the 2011st the number of employees in micro, small and medium enterprises has exceeded the number of employees in large companies (58.2%: 41.8%) (Statistical Office of the Republic of Serbia, March 2013, p. ii).

Most established micro enterprises was in the area of "Wholesale and retail trade and repair of motor vehicles" (38.0%), then in the "Manufacturing" (17.0%), "professional, scientific, innovation and technical services" (12%), "The construction industry" (7.7%), "transportation and warehousing" 5.3% etc. For small business sector "Wholesale and retail trade and repair of motor vehicles" participates in the total number of companies with 28.4%, sector "Manufacturing" with 27.3%, sector "Civil Engineering" with 9.2%, sector "Expert, scientific, innovation and technical activities"(8.9%), "Transport and storage" with 6.0% etc. (Statistical Office of the Republic of Serbia, March 2013).

The employment rate is the percentage of employees in the total population aged 15 and over, and in October 2012th stood at 36.7%. Out of that the employment rate for men was 44.0% and for women 29.8%. The unemployment rate, which is the share of unemployed in the total number of active population (employed and unemployed), in the Republic of Serbia amounted 22.4%, and 21.5%

for men and 23.7% for female population. The unemployment rate in the Beograd region amounted 20.1%, and in Vojvodina 25.7%. In Region Šumadija and Western Serbia the unemployment rate was 20.3%, while in the region of Southern and Eastern Serbia amounted 23.8% (www.stat.gov.rs).

The greatest difficulty in finding a job have Individuals with secondary education (ages 15-30), which was about 46% (Hutchinson, 2012). Does above applies to all countries, or it is a generalized statement?

Serbia in the field of self-employment has to find space for solving the problem of unemployment. In this regard needs to create conditions and incentives. The justification of such a policy is confirmed by the report the Global Entrepreneurship Monitor (GEM) for 2011, which, based on the results of interviews over 140,000 adults (18-64 years of age) in 54 economies of different geographical and developmental levels, assess the following: in 2011st the approximately 388 million of entrepreneurs was engaged in starting and running a new business (Kelley, 2011).

Self-employed make 21.6% of total employment, of which 75% are men. The highest percentage of self-employed are aged 65 and over (64.1%), the lowest percentage is in the age group 24-35 years, and approximately 12.7% of the total number of employees are in the same age group (Statistical Office of the Republic of Serbia, December 2012, p. vi).

This paper is organized by following: after the introduction, in the second part is a literature overview about the problems of access and barriers for launching micro and small enterprises in Serbia, then the third part explains the research methodology, fourth part presents results of the research+ and a discussion of the results. In the fifth part is conclusions and suggestions for further research.

## ***LITERATURE REVIEW***

Launching enterprises is an entrepreneurial activity that depends on the economic, political, psychological, sociological and other factors. Therefore, entrepreneurship is considered multi-dimensional phenomenon that includes different units of observation, from individual to company, region or industry, and the nation (Davidsson, 2004). It is widely accepted that political measures affecting the level of entrepreneurship (Store, 1994), because the government can influence the level of entrepreneurial activity through direct aid and the reduction of barriers for entrepreneurship, such as administrative, financial and other burdens.

Entrepreneurs have a specific role in the countries in transition. In the paper the Central Role of Entrepreneurs in Transition Economies, (J. McMillan and Woodruff Ch., 2002), it is explained in the following way: The importance of entrepreneurs in the transition economies is a reminder that the task of economic transition is not just a matter of government of social enacting certain policies or setting certain rules of operation for the new economy. Entrepreneurs acted as reformers, too. Indeed, much of the task of devising the new ways of doing business in transition economies has been taken on by entrepreneurs.

Problems of conditions, possibilities and limitations for increased entrepreneurial activity are studied, analyzed and published in the form of various periodical reports in many national, European and international institutions.

Global Entrepreneurship Monitor – GEM ([www.gemconsortium.org](http://www.gemconsortium.org)) each year, provides a wide range of data on social attitudes, levels of participation of individuals at different stages of the entrepreneurial process and the characteristics of entrepreneurs and their companies. This information may allow comparisons within and between individual businesses, states, geographic regions, etc. Based on the results of GEM studies, it can be identified main areas within the entrepreneurial conditions (from a total of 9 areas), necessary to improve conditions for entrepreneurial activity, namely: education, government policies and transfer of results from research and development activities in sector of micro, small and medium-sized enterprises.

In a report (World Economic Forum, 2013), Serbia is ranked on 95th place of 144 countries. It is classified in Stage 2: Efficiency-driven (33 economies), characterized by: GDP per capita (U.S. \$) thresholds from 3.000 to 8.999, Weight for basic requirements subindex 40%, Weight for efficiency enhancers subindex 50% and Weight for innovation and sophistication factors 10%. The Global Competitiveness Report identified as the most problematic factors for doing business in Serbia: low efficiency of public administration, corruption, unstable politics, tax rates, restrictive labor laws, access to financial resources, tax regulations, poor work ethic of national workforce. Unfavorable position and mentioned problems require significant work on improving the ranking of all the pillars of competitiveness, such as institutions, infrastructure, macroeconomic environment and health and primary education from the basic requirements, then the pillars to increase efficiency (higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, and market size), and innovation and sophistication factors (complexity of business and innovation).

In a report (Doing Business Report 2013, p.142) is stated that some improvements of business conditions are made: Starting a business - Serbia made starting a business easier by eliminating the paid-in minimum capital requirement. Enforcing contracts - Serbia made enforcing contracts easier by introducing a private bailiff system. Resolving insolvency - Serbia strengthened its insolvency process by introducing private bailiff s, reducing the starting prices for the sale of assets, prohibiting appeals, expediting service of process and adopting an electronic registry for injunctions to make public all prohibitions on the disposal or pledge of movable or immovable property. Despite these improvements Serbia is ranked on unfavorable 86th in place out of 185 ranked countries. It is necessary to improve processes, simplify many procedures, reduce costs, etc. which directly affects the conditions for starting and conducting business in Serbia.

In Serbia, among other institutions, a very active organization is "Naled" ([www.naled-serbia.org](http://www.naled-serbia.org)) whose mission is to improve the economic environment of Serbia through institutional reforms with the active participation and cooperation of industry, municipalities and citizens. By organizing a large number of events and business meetings, Naled monitors legislative activity, performance measurement of public administration, promotion dialogue between the public, private and civil sectors, etc. In Grey Book V (NALED, Gray Book V, 2012/13), on argumentative and

convincing way are, are proposed a number of changes to administration for changing rules in accordance with the needs of business and citizens.

The success of the Serbian economy is closely associated with entrepreneurial activity (Šljivić, Siziba M., & Stefanovic, 2012), and construction of strategy for entrepreneurial education is no longer an option, but a necessity. Progress in the construction of such a strategy should be based on the experience of the EU. In this sense were necessary a number of improvements for training entrepreneurs and external environment (Benzing, Chu & Kara, 2009), an innovative orientation, attitude to risk and the development of competitive environment (Frese, Brantjes & Horn, 2002).

It is necessary to make significant progress in the process of institutionalization of support micro, small and medium enterprises (Stefanovic, Prokic & Rankovic, 2010). This can be achieved by creating an environment that will allow the development of entrepreneurship through numerous stimulating activities, such as incentives which will facilitate cooperation of micro, small and medium enterprises and large enterprises and creation of clusters, the establishment of organizations providing assistance to entrepreneurs (eg associations of entrepreneurs, government agencies for the development of SMEs, business incubators, industrial parks, etc.) and by providing easily accessible capital.

## ***SURVEY AND METHODOLOGY***

Given that more than half of young people (54%) believe that the business environment is negative, and that 70% of young people believe that the risk of doing business in Serbia is high (Stojanovic et al, 2012), the null hypothesis is defined as follows:

**H<sub>0</sub>: In Serbia, there are small opportunities and a large number of barriers to business start-up and successful growth and development of micro and small enterprises.**

Regardless of whether the result will confirm or reject the null hypothesis, in research will be searched for answers to questions such as: whether there are significant differences in attitudes (1) among female and male populations, (2) between students from second to fifth year, (3) between students who live in different cities of Serbia, and (4) between students of different age.

**H1: There are not significant differences in the statements of the null hypothesis between women and men.**

**H2: There are not significant differences in the statements of the null hypothesis between students from second to fifth year.**

**H3: There are not significant differences in the statements of the null hypothesis between students from different cities.**

**H4: There are not significant differences in the statements of the null hypothesis between students of different ages.**

The research was conducted by direct surveying during April 2013th on the sample of 143 subjects of both sexes (61 males and 82 females), aged 20-55 years. The main research instrument was a questionnaire that participants completed in the following cities in Serbia: Beograd, Loznica, Ruma, Kanjiža, Vrbas and Senta. The respondents were students of

economic direction. All participants completed questionnaires correctly, so that the final statistical analysis was performed on a sample of 143 questionnaires.

The questions in the questionnaire will be treated as a variable possibilities and limitations. Factors, which may affect the variables, the authors imply the sex, place of residence, age (age) and the current year of study.

In Table 1 are listed the names of influential factors, with the following meanings: TOWN means the place in which the survey was conducted. SEXfm stands for the population of female and male. AGEyear means age range and STUDYyear indicates the current year of study of those who filled out the survey. The number in each factor is the code that is used in SPSS program.

*Table 1: Bookmarks of factors and the number of completed questionnaires*

Between-Subjects Factors							
Bookmarks of factors	No. of questionnaires.	Bookmarks of factors	No. of questionnaires.	Bookmarks of factors	No. of questionnaires	Bookmarks of factors	No. of questionnaires
TOWN	N	SEXfm	N	AGEyear	N	STUDYyear	N
Beograd (11)	24	female (1)	82	20 to 25 year (1)	60	Second year (2)	33
Loznica (22)	39	male (2)	61	28 to 30 year (2)	21	Third year (3)	66
Ruma (33)	15	Total	143	31 to 35 year (3)	23	Forth year (4)	36
Kanjiza (44)	32			36 to 40 year (4)	23	Fifth year (5)	8
Vrbas (55)	21			41 to 45 year (5)	9	Total	143
Senta (66)	12			46 to 50 year (6)	6		
Total	143			51 to 55 year (7)	1		
				Total	143		

The questionnaire had 22 questions (Table 2), which according the authors are basic variables of necessary conditions for the successful startup and operation of the

enterprise. To measure perceptions of opportunities (favorable conditions) or barriers (unfavorable conditions) we used a Likert scale with five levels of TOWNation:

1. "Do not agree" (not a single element of a favorable evaluation in any segment)
2. "Few agree" (a very small number of elements in question may receive a positive evaluation - sufficient)
3. "Medium agree" (50% of elements in question may receive evaluation - sufficient or good)
4. "Mostly agree" (over 50% elements in question may receive evaluation - very good)
5. "Strongly Agree" (all elements in question can be rated with positively high estimate).

*Table 2: Survey questions and marks in SPSS*

O. no.	Questions	Mark in SPSS
1	The procedure of opening the company is simple taxes are low, the time of obtaining license is short?	Procedure
2	State institutions provide assistance (free courses, legal, financial or other advises), etc.?	HelpState
3	I have necessary knowledge and skills to start a business?	KnowledgeEntre
4	I have my own resources, or I can get them from parents?	HaveMoney
5	I will take a loan from a bank, lending to SMEs is affordable?	Credit
6	The state gives non refundable financial resources as an incentive?	StateGives
7	The market is free, the competition is intense and regular	MarketFree
8	State efficiently solve problem of corruption?	Corruption
9	Trading in the country and beyond the borders is simple the customs barriers do not burden business?	Trading
10	Suppliers are reliable, meet the standards and agreements?	Suppliers
11	Infrastructure (roads, railways, airline) is good and provides a cheap and fast transportation?	Infrastructure
12	Fixed and mobile telephone infrastructure is of good quality?	TeleInfrastructure
13	Judiciary Independence is complete?	IndepenCourts
14	State successfully solves Organized Crime?	OrgCrime
15	Irregular payments for institutions and bribes do not exist?	IrregularPay
16	The legal framework in resolving disputes is effective?	LegalFrame
17	Taxes and fees are not high?	Taxes
18	Elementary and secondary schools educate quality staff?	SecSchools
19	Higher education educates quality staff?	HighEducation
20	The law regulates the hiring and firing, employers adhere to legislation?	LawHiring
21	The latest and used technologies are available?	Technologies
22	The purchasing power of the population is insufficient?	PurchPower Populatio

The authors defined variables based on the questions used in the 12 pillars of the World Economic Forum (World Economic Forum, 2013) and questions of forum "Doing Business" (Doing Business, 2013). These variables (questions) are the basic requirements that should be fulfilled in order to company start working and successfully secure growth and development. It starts from the premise that (1) the entrepreneur should have the necessary knowledge and skills and provide a minimum start-up capital, and (2) that state institutions should provide conditions such as: legal, market, credit, infrastructure, educational and other conditions, favorable procedures for establishment and operation of companies, financial subventions (grants or favorable loans) and non-financial incentives measures (free courses, legal, financial or other advises, incubators, etc.).

Options will be considered those factors (questions) that receive positive estimates in the survey, and vice versa, the obstacles will be considered factors that receive negative evaluation.

In this paper were used methods: ANOVA (Single Factor - one-way), two-factor univariate analysis of variance), multivariate analysis of variance (MANOVA), Tukey "post hoc" test and factor analysis. Analysis of variance (ANOVA) was used as an analytical model for testing the significance of differences of variability, as well as analysis of their mutual influence, making it impossible to estimate otherwise. Multivariate analysis of variance (MANOVA) was applied to determine the inter-group differences. Tukey "post hoc" test is used for determining the critical differences with which were compared the absolute values of the differences between the average values. Greater difference than the critical difference means that the difference between these two average values is significant. Factor analysis, as "a set of mathematical and statistical methods that allow a greater number of variables, among which there is an association, establish a small number of fundamental variables factors that explain this interconnection," was used to: (1) identify and understand common characteristics of more variables, and (2) reduce the number of variables which "overlapping", as they have a similar meaning and behavior.

## **RESULTS AND DISCUSSION**

For processing surveying results, we used is SPSS software for statistical analysis of data. First was determined value of Cronbach Alpha coefficient in order to determine the level of internal consistency of the data. The result shows that the reliability of the research instrument was satisfactory, because the high value of Cronbach Alpha coefficient = 0.894 (Table 3), has the meaning of a high level of internal consistency of all columns.

*Table 3: Cronbach's Alpha coefficient*

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
,894	22

Then were determined the basic indicators of descriptive statistics. Figure 1 graphically shows some results of descriptive statistics through its quartiles. A Boxplot shows the five statistics (minimum, first quartile, median, third quartile, and maximum).

As can be seen, all variables except for the variable "Knowledge of entrepreneurs," "The infrastructure of fixed and mobile telephony" and "Higher Education" are evaluated with very poor ratings. The issue of "Purchasing power of population is very low?" is formulated so that the evaluation of 5 confirmed that the purchasing power of the population is insufficient. The question is formulated like this in order to examine whether respondents meet survey by default, that is, whether they read and understand the questions before completing the survey. Responses were also negative, because they confirmed bad real situation.

In Figure 2 were presented percentages of participants of the survey with score 1, scores 1 and 2 and scores 1,2,3. It is noted that less than 90% of questions respondents judged negatively: Score 1 or 2 from 45 to 80% of evaluation, or scores 1 to 3 about 70 to 95% of all evaluation!

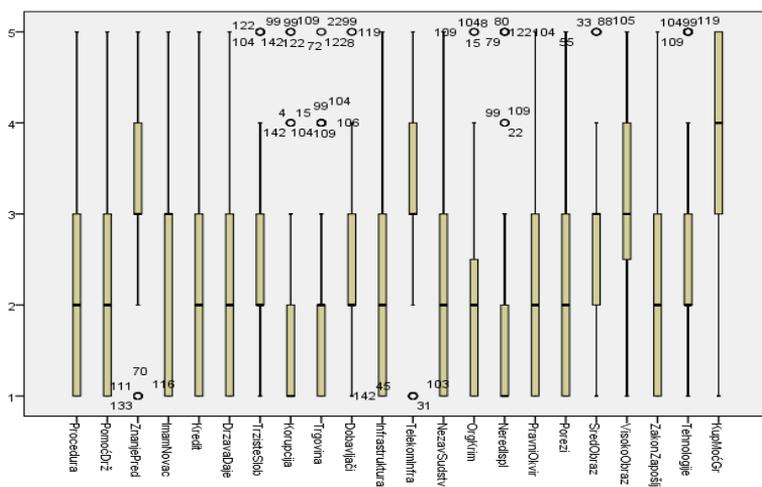


Figure 1: Results of descriptive statistics for the analyzed variables: A Boxplot shows the five statistics (minimum, first quartile, median, third quartile, and maximum).

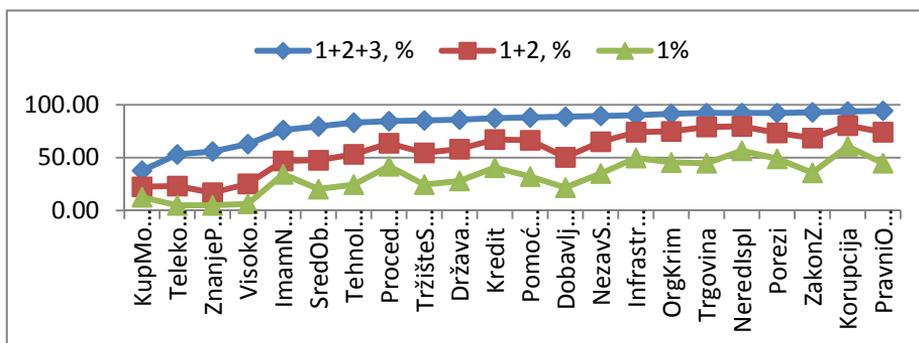


Figure 2: Percentages of evaluation of survey participants with score 1, scores 1 and 2 and scores 1, 2 and 3.

Data average values, standard deviations and the estimated values of mathematical expectation for 95% confidence interval for the total sample, were presented in Table 4.

*Table 4: The values of arithmetic means, standard deviations, and value evaluation of the mathematical expectation of 95% confidence interval for the total sample*

Procedures	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Procedure	143	2,17	1,256	,105	1,96	2,38
HelpState	143	2,17	1,096	,092	1,99	2,36
KnowledgeEntre	143	3,38	1,040	,087	3,21	3,55
HaveMoney	143	2,55	1,378	,115	2,32	2,77
Credit	143	2,08	1,120	,094	1,89	2,26
StateGives	143	2,37	1,203	,101	2,17	2,57
MarketFree	143	2,41	1,108	,093	2,22	2,59
Corruption	143	1,69	1,037	,087	1,51	1,86
Trading	143	1,85	,971	,081	1,69	2,01
Suppliers	143	2,41	,995	,083	2,25	2,58
Infrastructure	143	1,88	1,071	,090	1,70	2,06
TeleInfrastructure	143	3,35	1,102	,092	3,17	3,53
IndepenCourts	143	2,12	1,038	,087	1,95	2,29
OrgCrime	143	1,91	1,048	,088	1,74	2,08
IrregularPay	143	1,77	1,111	,093	1,59	1,95
LegalFrame	143	1,89	,987	,083	1,73	2,05
Taxes	143	1,89	1,075	,090	1,71	2,07
SecSchools	143	2,57	1,123	,094	2,39	2,76
HighEducation	143	3,20	1,104	,092	3,02	3,39
LawHiring	143	2,06	1,029	,086	1,89	2,23
Technologies	143	2,46	1,167	,098	2,27	2,65
PurchPowerPopulatio	143	3,75	1,451	,121	3,51	3,99

The method of one factorial analysis tested differences of variances within and between groups (between male and female population, or between groups according to place of residence, etc.). Testing was performed for all groups (influence factors): sex, city, year of study and age. Results of analyzes showed that the difference between the variances were not statistically significant.

**The method of "One-factor univariate ANOVA"** analyzes the influence of two factors, (SEX FM, and TOWN, for example), on one dependent variable. Research carried out so as for each dependent variable were altered combination of factors and discussed and analyzed obtained reports of the program.

Due to lack of space in this paper were presented only small parts of the analysis, because the tables are very bulky due to the large number of variables and influencing factors. As an example, below in tables 5 and 6 were shown some results of the analysis of the dependent variable "Procedure" in function of factors "SEXfm" (1 = females, 2 = males) and "TOWN" - (Beograd (11), Loznica (22) Ruma (33), Kanjiža (44), Vrbas (55) and Senta (66)). Table 5 shows the values of descriptive statistics: arithmetic means, standard deviations, sample size of the dependent variable "Procedure" for the combination of these two of factors, and overall value.

*Table 5: The values of arithmetic means and standard deviations for the dependent variable „Procedure“ for combination of factors „SEXfm“ and „TOWN“*

Descriptive Statistics				
Dependent Variable: Procedura				
SEXfm	TOWN	Mean	Std. Deviation	N
1	11	2,31	1,493	16
	22	2,26	1,347	27
	33	1,45	1,214	11
	44	2,57	1,089	14
	55	2,00	1,342	11
	66	2,33	2,309	3
	Total	2,18	1,353	82
2	11	1,88	,835	8
	22	1,75	1,215	12
	33	1,75	,957	4
	44	2,89	1,183	18
	55	2,20	,789	10
	66	1,56	,882	9
	Total	2,15	1,123	61
Total	11	2,17	1,308	24
	22	2,10	1,314	39
	33	1,53	1,125	15
	44	2,75	1,136	32
	55	2,10	1,091	21
	66	1,75	1,288	12
	Total	2,17	1,256	143

In one-way analysis of variance (ANOVA) F-test indicates whether there is a difference between groups, but not where that difference is. Tukey-test of inequality was applied in this paper to measure the differences between more than two arithmetic means at once. From the table, "Multiple Comparisons" can be seen where (between which variables) the biggest difference is. Messages at the end of table „The mean difference is significant at the .05 level show that the result is considered statistically significant, ie, there is a significant relationship between the variables. Due to lack of space a quite bulky tables of Tukey-tests are not shown.

Table 6 (Test of Between-Subjects Effects) shows the value of analysis of variance, the difference between the sexes:  $F = 0,388$ , at the level of 0,535 and the difference between towns  $F = 2.01$  with probability  $p = 0.081$ , and interaction "SEXfm" - "TOWN":  $F = 0.701$ , significant at  $p = 0.624$ .

Table 6: The values of analysis of variances

Tests of Between-Subjects Effects					
Dependent Variable: <b>Procedura</b>					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	25,052 <sup>a</sup>	11	2,277	1,500	,139
Intercept	441,160	1	441,160	290,528	,000
SEXfm	,589	1	,589	,388	,535
TOWN	15,258	5	3,052	2,010	,081
SEXfm * TOWN	5,320	5	1,064	,701	,624
Error	198,920	131	1,518		
Total	896,000	143			
Corrected Total	223,972	142			
a. R Squared = ,112 (Adjusted R Squared = ,037)					

Estimated mean differences between males and females are significant in cities Belgrade, Loznica and Senta, Figure 3.

In further research was used MANOVA method, which is seen as a test of significance of group differences in some m-dimensional space where each dimension is defined with a linear combination of the original set of dependent variables. Generally, there are several types of research questions that can be answered using MANOVA:

- 1) What are the main effects of the independent variables?
- 2) What are the interactions between independent variables?
- 3) What is the significance of the dependent variables?
- 4) What is the strength of the association between dependent variables?
- 5) What are the effects of covariance? How can they be utilized?

**In this paper, MANOVA method** was used to determine what are the main effects of independent variables (factors SEXfm, TOWN, AGEyear and STUDYyear) on the dependent variable (students' answers to questions), as illustrated in Figure 4. It

was conducted a "multivariate" analysis of variance. The difference between "univariate" and "multivariate" analysis is that the "univariate" analyzes the impact of factors on a single dependent variable, while the "multivariate" analysis is performed with multiple dependent variables. The aim of this analysis is to look for the simultaneous action of one or more independent factors on more dependent variables.

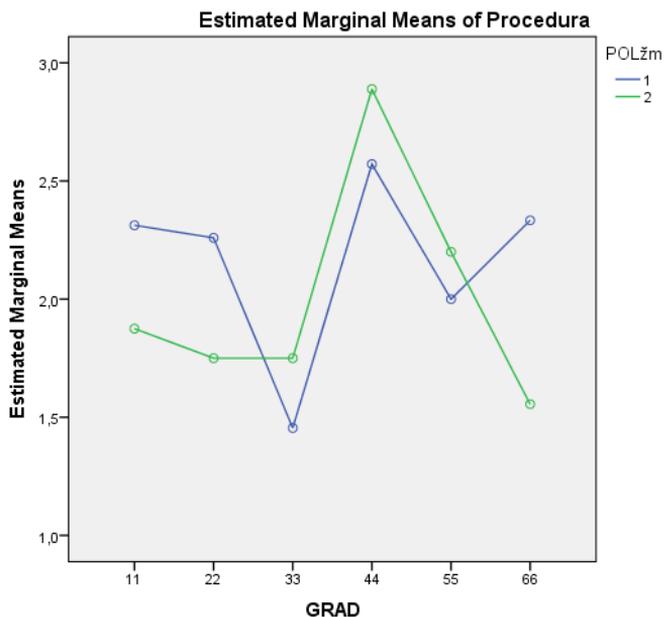


Figure 3: Arithmetic means in the function of factors "SEXfm" and "TOWN" for the variable Procedure"

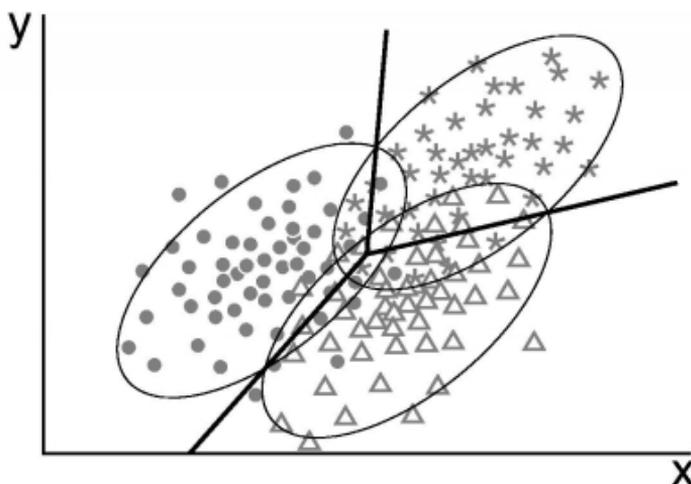


Figure 4: What are the main effects of independent variables? One of the research questions that can be answered using methods MANOVA

The study was carried out so for all variables were analyzed the effects of considered factors. The paper gives an example of analyzing the impact of factors SEXfm, TOWN and STUDYyear on variables „I have necessary knowledge and skills to start a business?“ (KnowledgeEntre) and „The state gives non refundable financial resources as an incentive?“ (StateGives). Only a part of the results was shown.

Results of **Box's Test of Equality of Covariance Matrices** show that it can accepted the null hypothesis that there is no difference between the covariance of analyzed factors "SEXfm", "TOWN" and "STUDYyear". The value of Sig. should be greater than 0.001. In the analyzed case, Sig. = 0.824, which means that this assumption is fulfilled. The results are shown in Table 7. The significance value of Sig.=0,824 indicates that the data *do not differ significantly* from multivariate normality. This means one can proceed with the analysis.

Table 7: Results of Box's Test of Equality of Covariance Matrices<sup>a</sup>

<b>Box's Test of Equality of Covariance Matrices<sup>a</sup></b>	
Box's M	47,908
F	,808
df1	48
df2	2391,520
Sig.	,824
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.	
a. Design: Intercept + SEXfm + TOWN + STUDYyear + SEXfm * TOWN + SEXfm * STUDYyear + TOWN * STUDYyear + SEXfm * TOWN * STUDYyear	

In table 8 (**Multivariate Tests**) were shown crossing of factors (independent variables) and the dependent variables in the design of different combinations (patterns).

Table 8: Results of Multivariate Tests<sup>a</sup>

		Multivariate Tests <sup>a</sup>				
Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	,891	491,273 <sup>b</sup>	2,000	120,000	,000
	Wilks' Lambda	,109	491,273 <sup>b</sup>	2,000	120,000	,000
	Hotelling's Trace	8,188	491,273 <sup>b</sup>	2,000	120,000	,000
	Roy's Largest Root	8,188	491,273 <sup>b</sup>	2,000	120,000	,000
SEXfm	Pillai's Trace	,016	,972 <sup>b</sup>	2,000	120,000	,381
	Wilks' Lambda	,984	,972 <sup>b</sup>	2,000	120,000	,381
	Hotelling's Trace	,016	,972 <sup>b</sup>	2,000	120,000	,381
	Roy's Largest Root	,016	,972 <sup>b</sup>	2,000	120,000	,381
TOWN	Pillai's Trace	,046	,568	10,000	242,000	,839
	Wilks' Lambda	,955	,564 <sup>b</sup>	10,000	240,000	,843
	Hotelling's Trace	,047	,559	10,000	238,000	,846
	Roy's Largest Root	,026	,637 <sup>c</sup>	5,000	121,000	,672
STUDYyear	Pillai's Trace	,087	1,835	6,000	242,000	,093
	Wilks' Lambda	,913	1,853 <sup>b</sup>	6,000	240,000	,090
	Hotelling's Trace	,094	1,870	6,000	238,000	,087
	Roy's Largest Root	,089	3,574 <sup>c</sup>	3,000	121,000	,016
SEXfm * TOWN	Pillai's Trace	,079	,995	10,000	242,000	,449
	Wilks' Lambda	,922	,999 <sup>b</sup>	10,000	240,000	,445
	Hotelling's Trace	,084	1,004	10,000	238,000	,441
	Roy's Largest Root	,076	1,830 <sup>c</sup>	5,000	121,000	,112
SEXfm * STUDYyear	Pillai's Trace	,031	,625	6,000	242,000	,710
	Wilks' Lambda	,970	,621 <sup>b</sup>	6,000	240,000	,713
	Hotelling's Trace	,031	,617	6,000	238,000	,716
	Roy's Largest Root	,023	,932 <sup>c</sup>	3,000	121,000	,427
TOWN * STUDYyear	Pillai's Trace	,058	1,198	6,000	242,000	,308
	Wilks' Lambda	,943	1,198 <sup>b</sup>	6,000	240,000	,308
	Hotelling's Trace	,060	1,198	6,000	238,000	,308
	Roy's Largest Root	,053	2,147 <sup>c</sup>	3,000	121,000	,098
SEXfm * TOWN * STUDYyear	Pillai's Trace	,010	,636 <sup>b</sup>	2,000	120,000	,531
	Wilks' Lambda	,990	,636 <sup>b</sup>	2,000	120,000	,531
	Hotelling's Trace	,011	,636 <sup>b</sup>	2,000	120,000	,531
	Roy's Largest Root	,011	,636 <sup>b</sup>	2,000	120,000	,531
a. Design: Intercept + SEXfm + TOWN + STUDYyear + SEXfm * TOWN + SEXfm * STUDYyear + TOWN * + STUDYyear + SEXfm * TOWN * + STUDYyear						
b. Exact statistic						
c. The statistic is an upper bound on F that yields a lower bound on the significance level.						

Table 9 (**Levene's Test of Equality of Error Variances**), shows degree of equality of variance error. If the errors of variance are equal among both dependent variables in mentioned factors, it can be concluded that the factors equally homogeneous respond to both subtests. Homogeneity of variances assume that dependent variables showed equal levels of variance across the range of predictor variables.

Table 9: Results of Levene's Test of Equality of Error Variances<sup>a</sup>

Levene's Test of Equality of Error Variances <sup>a</sup>				
	F	df1	df2	Sig.
KnowledgeEntre	,848	21	121	,656
	1,905	21	121	,016
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.				
a. Design: Intercept + SEXfm + TOWN + STUDYyear + SEXfm * TOWN + SEXfm * + STUDYyear + TOWN * + STUDYyear + SEXfm * TOWN * + STUDYyear				

Table 10 (Tests of Between-Subjects Effects) shows that the F-index is not significant, which means these subtest, each in its own, equally homogeneous pass at all examinee, but not together, showing the third row of the table, marked as Intercept.

Table 10: Results of Tests of Between-Subjects Effects

Tests of Between-Subjects Effects						
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	KnowledgeEntre	38,538 <sup>a</sup>	21	1,835	1,930	,014
	StateGives	26,994 <sup>b</sup>	21	1,285	,872	,626
Intercept	KnowledgeEntre	779,969	1	779,969	820,158	,000
	StateGives	398,654	1	398,654	270,445	,000
SEXfm	KnowledgeEntre	,943	1	,943	,991	,321
	StateGives	1,081	1	1,081	,733	,393
TOWN	KnowledgeEntre	2,989	5	,598	,629	,678
	StateGives	3,700	5	,740	,502	,774
STUDYyear	KnowledgeEntre	10,170	3	3,390	3,565	,016
	StateGives	1,461	3	,487	,330	,803
SEXfm * TOWN	KnowledgeEntre	3,343	5	,669	,703	,622
	StateGives	8,471	5	1,694	1,149	,338
SEXfm * STUDYyear	KnowledgeEntre	,953	3	,318	,334	,801
	StateGives	3,948	3	1,316	,893	,447

TOWN * STUDYyear	KnowledgeEntre	5,966	3	1,989	2,091	,105
	StateGives	1,984	3	,661	,449	,719
SEXfm * TOWN * STUDYyear	KnowledgeEntre	1,208	1	1,208	1,270	,262
	StateGives	,001	1	,001	,001	,981
Error	KnowledgeEntre	115,071	121	,951		
	StateGives	178,362	121	1,474		
Total	KnowledgeEntre	1785,000	143			
	StateGives	1009,000	143			
Corrected Total	KnowledgeEntre	153,608	142			
	StateGives	205,357	142			
a. R Squared = ,251 (Adjusted R Squared = ,121)						
b. R Squared = ,131 (Adjusted R Squared = -,019)						

Figure 5 shows the relationship of assessed environment variables "KnowledgeEntre" in function of factors "STUDYyear" and "SEXfm". Female population have assessed their knowledge in lower mark than men population on all years of study. Level of their knowledge best evaluate third-year students, and weakest second-year students of basic studies.

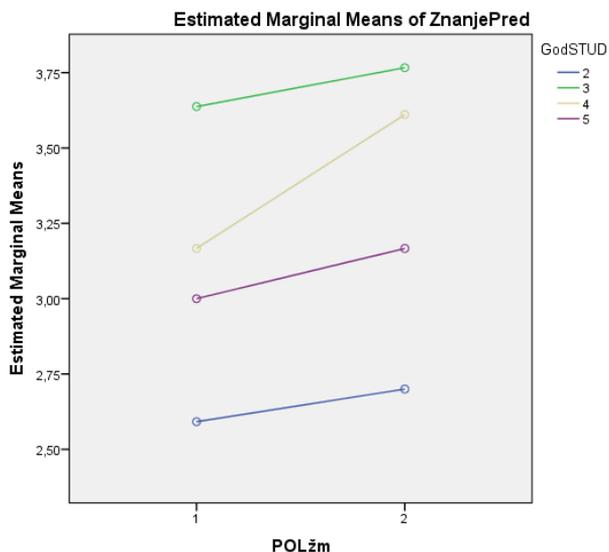


Figure 5: Evaluated arithmetic means of variable "KnowledgeEntre" in the function of factors "STUDYyear" and "SEXfm"

## CONCLUSION

The general conclusion is that all the participants in the survey assessed very negatively about 87% of variable conditions for starting and conducting business in Serbia. Test results confirmed the hypothesis H0: There are small features and large number of barriers to business start-up and successful growth and development of micro and small enterprises in Serbia. Results show that there are no significant differences, with probability of 95%, in such understanding of the null hypothesis between male and female population, students of different years of study, age and place of residence. From the above resulting attitude that there are practically only obstacles, and the real possibilities for successful launching and conduct of business are very difficult.

Studies with a large number of questions and factors causing numerous problems, at first in the process of analyzing and presenting results. Also, to the problem of selecting questions before the interview, should be paid special attention.

We suggest further research and analysing the problem of starting and running business in Serbia, on a larger sample and with other influential factor,s in order to find solutions to problems and create favorable conditions.

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# ***INNOVATIONS IN THE FUNCTION OF DEVELOPING COMPETITIVENESS AND EFFICIENCY IN THE REPUBLIC OF SERBIA***

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***Elena Baranenko***<sup>14</sup>  
***Stefan Prljic***<sup>15</sup>

**Abstract:** According to the Report on competitiveness made by World Economic Forum for the year 2012, Serbia takes the 95th place on the list that comprises 144 countries. The leading places at the list are taken by countries which are led by innovations and which invest in innovations, because they are extremely significant factor of competitiveness, both at the national and global markets. For every entrepreneurial activity, innovations are a challenge and it is also crucial to connect technical possibilities to the needs of a market. Since SMEs are potential generator of new ideas and innovations it is very important to create possibilities for development of innovative activities in this sector.

This paper shows the significance of innovations and the development of innovative activities in Serbia with the aim of improving the competitiveness and efficiency of the economic system of the Republic of Serbia<sup>16</sup>.

**Key words:** Innovation, Competitiveness, Competitive Advantage, Efficiency, Serbia

**JEL classification:** O31

**UDC** 005.591.6:338.1(497.11)(082); 338:339.137.2(497.11)(082)

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<sup>16</sup> *This paper is a part of research projects numbers 47009 (European integrations and social and economic changes in Serbian economy on the way to the EU) and 179015 (Challenges and prospects of structural changes in Serbia: Strategic directions for economic development and harmonization with EU requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia*

## ***INTRODUCTION***

Competitiveness of the country is area of economic theory, which analyzes the facts and policies that create the country's ability to shape and maintain an environment that creates more value for both sides, the enterprise and population. Serbian rating in Competitiveness Report shows that Serbia has very poor competitive advantage.

It is obvious that the present situation in the world market is characterized by fierce competition, ie. everything has turned into a competition. The global market has become a place of competition after the disappearance of many barriers in international relations.

Nowdays meaning that you're rich does not mean that you are competitive.

Perspective for Serbian economy in order to be competitive in today's conditions, is in economy growth based on inovation, in increasing productivity and promoting export.

Therefore it is very important to create conditions for the development of innovative activities in our country, because the creation of a favorable climate for the development of this activity can lead to innovation and thus better position Serbia on the world market.

## ***LITERATURE REVIEW***

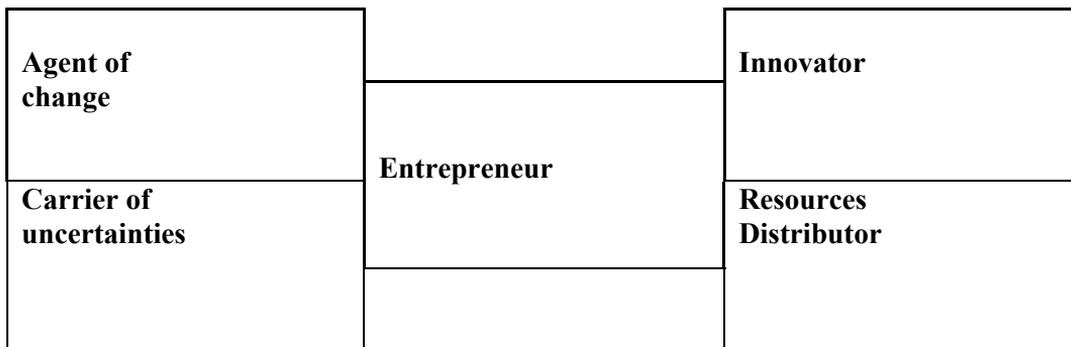
There has been a lot of talk today on competitiveness. The competitiveness has become a concept that can be said to be frequently analyzed whether the firm or national competitiveness is in question. The difference between country's competitiveness and firm's competitiveness is the place which occupies in the creation of economic value in a society. The assumption is that only companies create economic value, and the country can establish an environment that encourages or discourages activities of the companies.

Adam Smith, the first representative of the classical theory, attempted to explain the competitiveness and said that the country enjoys an absolute advantage in goods that produce more efficiently and therefore less expensively than other countries (1976). D Ricardo (1817) believes that a country should always produce what it does best, even if there are countries that are better. Comparative advantage measures the costs of producing products in a non-monetary way with reference to the lost opportunity to produce something else. Country should use those factors of production which have in abundance. According to J. Schumpeter (1942) innovations are very important factor for the development of competitiveness, in addition to entrepreneurship and technology. P. Drucker (1969) and A.P. Sloan (1963) developed the concept of management as a key factor of competitiveness. The creator of the theory of national competitiveness M. Porter (1990) argues that the theory of comparative advantage seems appealing but it is limited to the factors of production such as land, labor, natural resources and capital. In his opinion the country has a significant impact on the competitive advantage of an industry depending on four factors:

- 1) conditions and factors of production;
- 2) nature of domestic demand;
- 3) existence of supporting and related industries;
- 4) conditions for the formation and organization of corporations in the home market, their management and the nature of competition in the country.

His point of view does not bring into question the theory of comparative advantage but explains why particular industries have or don't have the competitive advantage in the world economy. His basic message is that a relatively long-term competitive advantage is created through the constant innovations.

According to many authors the basis of competitive advantage are innovations. Those include not only the use of new technologies, but also the implementation of new production processes, new organizational design, new methods in the resource management, etc. (Vujicic, Djuricic & Vukadinovic, 2013). Stevenson and Gumpert (1985) further indicate that innovation is the "heart of entrepreneurship". The entrepreneurship might be involved in an economic function, as bearer of uncertainty, as distributor of resources or as innovator. It might also refer to certain behaviour, inherent characteristics, creation of new organizations or the role of an owner or manager of a company (Karlsson, Fris & Paulsson 2004 (Figure 1).



*Figure 1: Characteristics of the entrepreneur*

*Source: Karlsson C., Friis C., Paulsson T (2004). Relating entrepreneurship to economic growth, September, [www.businessgrowthinitiative.org](http://www.businessgrowthinitiative.org).*

Different studies have examined various factors that could improve the chances of success for entrepreneurs (Elyas et al., 2012). Determining the type of ownership, purpose or goal, size of the organization and so on is necessary for an organization to establish its identity and illustrate its identity to the public (Milos, 2013). These days, people want to work for organizations that represent their values and ethics and respect their voices (McMillian, 2012). Today, innovations are one of the most important components of entrepreneurship and a basis of competitive advantage of organizations.

There is data to support this conclusion. There are many definitions of innovation and the main difference lies in the type of innovation which is being defined or which dimension has more importance according to its author (Vujicic, Djuricic & Vukadinovic, 2013). Mezas and Glynn (1993) define innovation as significant, non-routine and intermittent organizational changes that embody new ideas which are not consistent with the current concept of operations within an organization. Drucker (1996) points out that "innovations are everything that endows the existing resources with a new capacity to create wealth". Freeman (1997) defined innovation in relation to innovation activities and processes, highlighting that innovation includes the technical

design, production, management and commercial activities involved in the marketing of a new or enhanced product or the first commercial use of a new or enhanced process or equipment. Emphasizing the importance of innovations for a company, he formulated the famous thesis that made him well-known in the literature: "Not to innovate is to die".

„Innovation is the successful exploitation of new ideas”, (DTI, 2003). From the perspective of management the innovations are defined as "the process of application of new solutions that enhance processes, products and services" (Certo & Certo, 2006). Encyclopedia Wikipedia (2011) says that innovation is a change, introduction of something new or a process of making changes.

All the above definitions of innovation show that innovation is something new that brings a change that will improve the process, product or service (Vujicic, Djurcic & Vukadinovic, 2013).

Besides Drucker (1998), Levitt (1963), Pearson (1988) and Hamel and Prahalad (1994) wrote about the importance of innovation and competitive advantage. Schumpeter (1982) argued that economic development brings qualitative changes which are essential, and they are encouraged by innovations in different historical eras.

On the other hand, innovation by itself is a feature composed of three main factors: firstly, the creation of the new knowledge in science, technology and management (as basics for innovations), and secondly, the availability of a highly educated, self-programmed workforce that can use the new knowledge in order to enhance productivity (as a result of quality or quantity of the education system), and thirdly, the existence of entrepreneurs able and willing to take the risk of transforming innovation into business (Zjalic, 2007).

Organizations need more return on their investments; therefore, they accept any new ideas to make substantial changes in their businesses (Yousefirad et al.,2013). Organizations depend on interaction and coordination among individuals to accomplish their goals (Stojanovic et al.,2013).

Certo & Certo (2006) define innovation as "the process of applications of new solutions for the improvement of processes, products or services. The following figure illustrates innovation process according to Couger. This model includes the copyright protection as an important element of innovation.

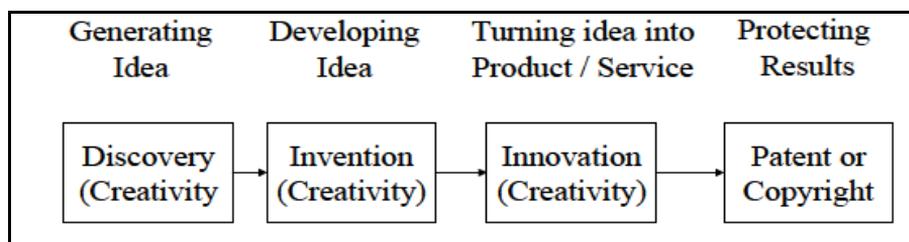


Figure 2: Innovation process

Source: Couger, J. D., 1995. *Creative Problem Solving and Opportunity Finding*. Boyd and Fraser Publishing Company, USA.

P. Drucker (1996) points out that there are seven sources of innovative possibilities (Figure 3). The first four sources can be found within the company and they are the indicators of the changes that have already taken place (internal sources), or can occur with little effort. Other sources come from the environment (external sources).

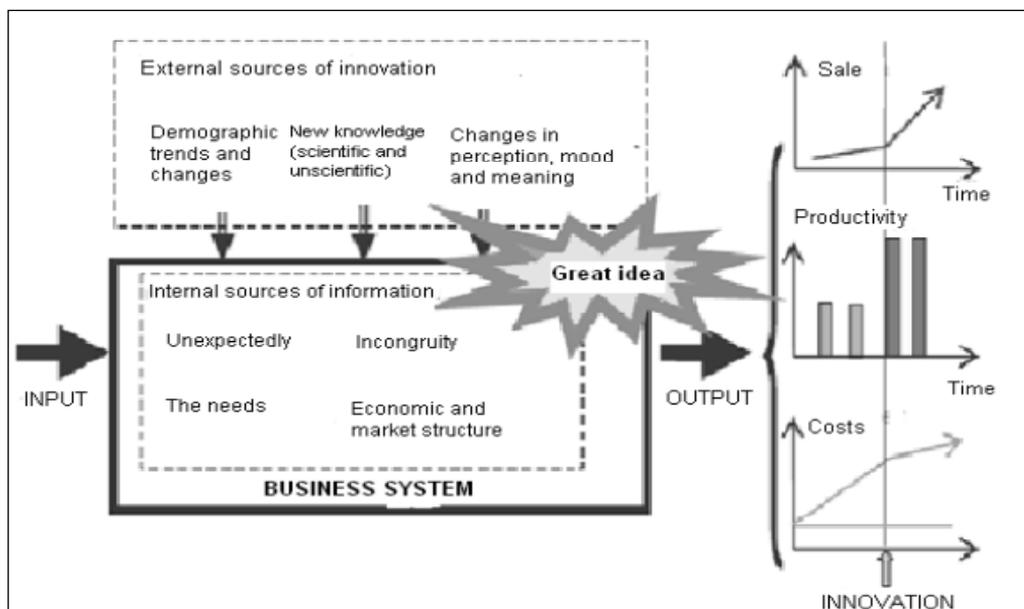
Those sources are (Krstic, 2012):

**Internal:**

1. unexpected
  - 1.1. unexpected success,
  - 1.2. unexpected failure,
  - 1.3. unexpected external event,
2. incongruity - between reality as it is now and what it should be,
3. innovation based on the need of a certain process,
4. changes in the structure of the economy or the markets that come as a surprise to everyone.

**External:**

5. demographic trends – changes,
6. changes in perception, mood and meaning,
7. new findings: scientific and non-scientific.



*Figure 3: Sources of innovative possibilities of the business system according to Drucker*

*Source: Krstić M. (2012), „Upravljanje inovacijama“, Visoka škola za poslovnu ekonomiju i preduzetništvo, Beograd*

Generally speaking, innovation is a solution successfully implemented in practice. High quality traditional entrepreneurship education can be used as a means to obtain new skills for entrepreneurs or necessary to foster alternative ways of education (Radovic Markovic et al.,2012).According to the Organization for Economic Cooperation and Development (OECD) and the Oslo manual for measuring innovation, there are four different types of innovation:

– **product innovation:** this is a new or improved product or service in terms of technical specifications, components, material, software, and user friendliness or other functional characteristics;

– **process innovation:** is implementation of a new or improved production method, in terms of technology, equipment or software.

– **marketing innovation:** is the implementation of a new marketing method involving changes in the product design or packaging, its launch, promotion or price.

– **organizational innovation:** refers to the new organizational methods in a firm's business practices, workplace organization or external relations.

Type of innovation selected by the company is essentially a function within the nature of innovation, impact of the actors in the value chain, competence and knowledge of the company in the field of innovation (Levi-Jaksic, 2001). Plans predetermine the course of action and this reflects on the organizational objective (Omolaja et al,2012).

## **COMPETITIVENESS**

Competitiveness is defined as a set of institutions, policies and factors that ensure the productivity of the country (Djukic & Crljić, 2011). The productivity level determines the rate of return, and if the rate of return is the key to economic growth, the economy that achieves faster medium-term and long-term growth is more competitive (Sala et. all, 2011).

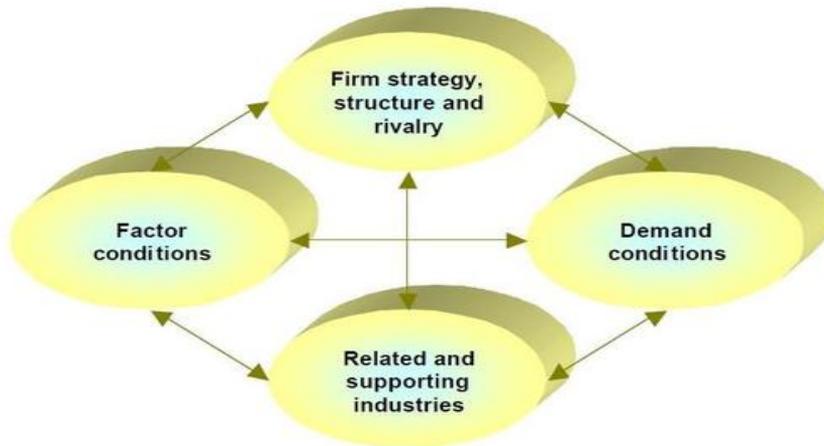
Competitiveness can be viewed from the macro and the micro perspective. The macro competitiveness refers to the competitiveness of the national economy among other national economies, while the term micro competitiveness refers to the business performance of a company in comparison with the business performance of foreign companies (Bjelic, 2008). Porter (1990, in his book "The competitive advantage of Nations" describes the determinants of national advantage of countries. According to Porter (1990), the presence or absence of particular attributes in individual countries influence the industry development, not only the ability of individual companies to create a core competency and competitive advantage. These attributes are:

**1. Factor conditions** - position of the country in terms of factors of production, such as labor or infrastructure, necessary for competition in a particular industry (activity).

**2. Demand conditions** - the nature of domestic demand for goods and services

**3. Related and supporting industries** - the presence or absence of inter-related industries that are competitive with each other, and

**4. Firm strategy, structure and rivalry** - conditions which guide the creation, organization and management of companies and the nature of local competition in the country (Figure 4).



.Figure 4 : The determinants of national competitive advantage

Source:Porter,1990

These attributes Porter calls the "diamond". The "Diamond" shapes the environment in which companies compete. Porter (1990) argues that country with the best "diamond" is one that can realize the advantages from these events and turn them into a competitive advantage.

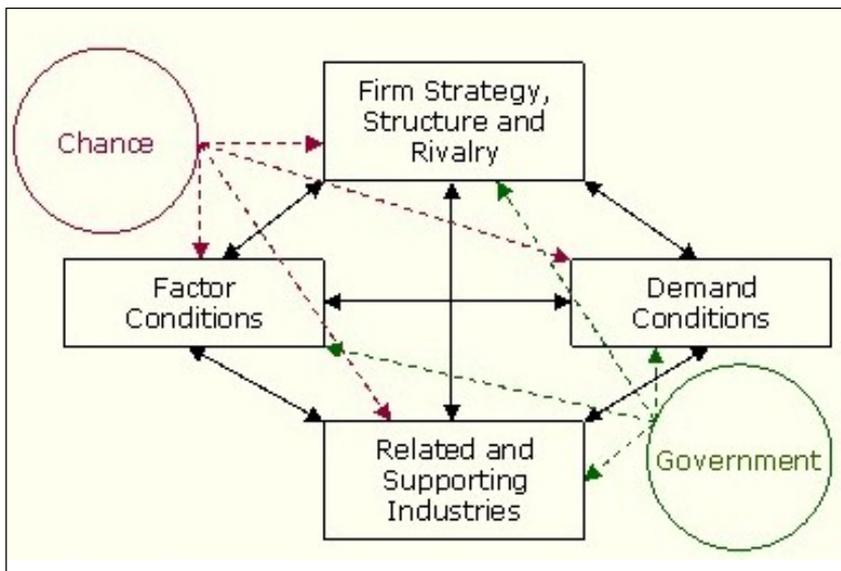


Figure 5 : The complete system of the determinants of national competitive advantage

Source: Porter, M.E. (1990, 1998) "The Competitive Advantage of Nations", Free Press, New York, 1990.

Determinants of national competitive advantage are an interactive system in which the activities in any of these four elements of "diamond" exercise influence on all other elements, and vice versa.

According to M. Porter, the competitiveness as a term is exclusively linked to the productivity and defines macro competitiveness as the ability of the national economy to generate high ongoing productivity (Bjelic, 2008). Macro competitiveness is increasingly more important so the first reports on competitiveness of the national economies have been created. In the beginning it was thought that the competition should be linked to the ability to achieve a positive trade balance. However, the US Council on Competitiveness (1985) states the following, "Competitiveness cannot be defined as the ability of the national economy to achieve positive foreign trade balance, as some very poor countries are able to achieve it" (Kovacevic, 2010). Defining competitiveness today encompasses the entire economic environment that should provide the basis for development of a successful business. According to Radojevic (2011) competitiveness often implies the ability of the national economy to ensure steady growth in production, employment and prosperity of the local population through competition with the foreign economies on the world market. International Institute for Management Development (IMD) defines the national economic competitiveness as "the ability of a nation to create an environment that sustains more value creation and more prosperity for its people." The World Economic Forum defines competitiveness as "the set of institutions, policies and factors that determine the level of productivity of a country" (WEO, 2012).

All definitions of competitiveness suggest that competitiveness is the main regulating force of the market today.

## ***COMPETITIVE ADVANTAGE OF SERBIA***

Serbia's economy in recent years has not been in a state that can be described as satisfactory. Numerous economic difficulties reflected in the situation of the whole society and conditioned political instability as well as the deterioration of the country's international position (Knezevic et al,2013).

As already mentioned, the World Economic Forum defines competitiveness as the set of institutions, regulations, and other factors that determine the productivity level of the country. Indicator of competitiveness level is called the Global Competitiveness Index and is considered the best and most comprehensive indicator of a country's competitiveness given that quantifies the macro and micro driving forces of competitiveness, which are separately evaluated on a scale from 1 to 7. All measuring indicators are grouped into twelve pillars, reflecting various aspects of the complex economic reality:

- I - Institutions
- II- Infrastructure
- III – Macroeconomic environment
- IV – Healthcare and primary education
- V – Higher education and training
- VI – Goods market efficiency

- VII – Labour market efficiency
- VIII – Financial market development
- IX – Technology readiness level
- X – Market size
- XI – Business sophistication
- XII – Innovations

*According to the World Economic Forum report for the year 2012 ranked 95th on the list of 144 countries with a Global Competitiveness Index (GCI) of 3.87.*

*Table 1: Global Competitiveness Index (2007-2012)*

	Slovakia	Albania	Croatia	Slovenia	<b>Serbia</b>	Greece	Romania	Montenegro	Hungary	F.Y.R. Macedonia	Bosnia and Herzegovina
2007	4,45	3,48	4,20	4,48	<b>3,78</b>	4,08	3,97	3,91	4,35	3,73	3,55
2008	4,40	3,55	4,22	4,50	<b>3,90</b>	4,11	4,10	4,11	4,22	3,87	3,56
2009	4,31	3,72	4,03	4,55	<b>3,77</b>	4,04	4,11	4,16	4,22	3,95	3,53
2010	4,25	3,94	4,04	4,42	<b>3,84</b>	3,99	4,16	4,36	4,33	4,02	3,70
2011	4,19	4,06	4,08	4,30	<b>3,88</b>	3,92	4,08	4,27	4,36	4,05	3,83
2012	4,14	3,91	4,04	4,34	<b>3,87</b>	3,86	4,07	4,14	4,30	4,04	3,93

*Source: WEF (2007,2008,2009,2010, 2011, 2012)*

In comparison with the year 2011 according to the Global Competitiveness Index, Serbia retained the same 95th position in the year 2012. Progress in the year 2012 was achieved by Bosnia and Herzegovina and Slovenia.

*Table 2: The ranking of countries according to the Global Competitiveness Index (2007-2012)*

	Slovakia	Albania	Croatia	Slovenia	<b>Serbia</b>	Greece	Romania	Montenegro	Hungary	F.Y.R. Macedonia	Bosnia and Herzegov.
2007	41	109	57	39	<b>91</b>	65	74	82	47	94	106
2008	46	108	61	42	<b>85</b>	67	68	65	62	89	108
2009	47	96	72	37	<b>93</b>	71	64	62	58	84	96
2010	60	88	77	45	<b>96</b>	83	67	49	52	79	88
2011	69	78	76	57	<b>95</b>	90	77	60	48	79	78
2012	71	89	81	56	<b>95</b>	96	78	72	60	80	89

*Source: WEF (2007,2008,2009,2010, 2011, 2012)*

If we take a look at the structure of the GCI in 2011 and 2012 \_ by the pillars of competitiveness , we can see that there haven't been any major changes.As for innovation in the year 2012 there was a drop in comparison with the year 2011 of 0.11.

Table 3: The value of the GCI by the pillars of competitiveness

	2011	2012
Institutions	3,15	3,16
Infrastructure	3,67	3,78
Macroeconomic environment	4,18	3,91
Health system and primary education	5,82	5,73
Higher education and training	3,98	3,97
Goods market efficiency	3,49	3,57
Labor market efficiency	3,94	4,04
Financial market sophistication	3,74	3,68
Technological capability	3,63	4,10
The market size	3,61	3,64
Business sophistication	3,08	3,11
<b>Innovations</b>	<b>2,90</b>	<b>2,81</b>

Source: WEF (2011, 2012)

Each of the marked pillars influences individually the competitiveness, but also through the interaction with the other pillars. Factors are measured using the so-called "hard data" (inflation rate, number of internet users, life expectancy, etc..) and so-called "soft data" (result of questionnaires done on executives, conducted each year by the World Economic Forum, where the current condition of important social and economic phenomenon such as corruption, trust in institutions, is quantified in values from 1 to 7) (Cvetanovic & Sredojevic, 2012).

Importance of competitiveness factors depends on the economic development of the country. The factors are divided into three groups that are key to the different ways of managing the economy, and have different weights when calculating the global competitiveness index.

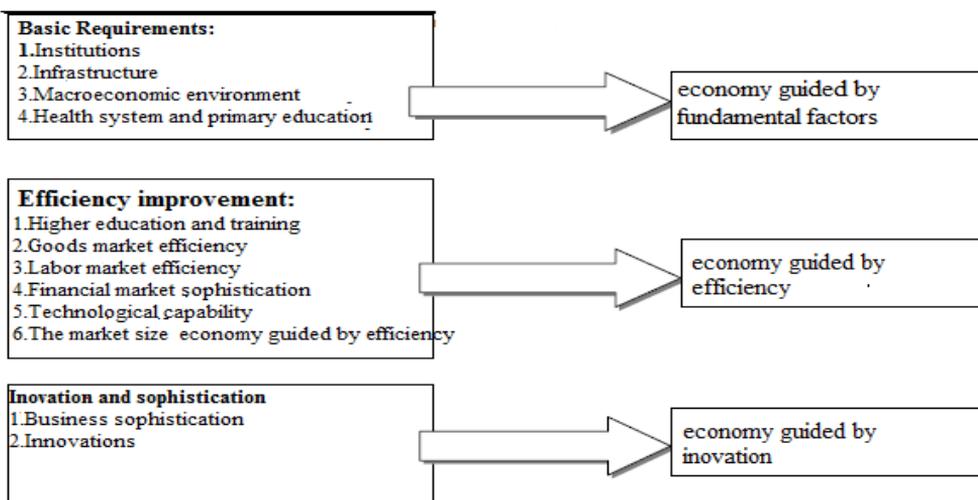


Figure 6: Pillars of GCI and stages of economic development

Table 4: The weights for the formulation of GCI

	Factor-driven economies	Efficiency-driven economies	Innovation-driven economies
Basic requirements	60%	40%	20%
Efficiency enhancers	35%	50%	50%
Innovation and sophistication factors	5%	10%	30%

Source: *Global Competitiveness, World Economic Forum, 2011.*

Stage of development of a country is determined by the level of GDP per capita (*Gross domestic product per capita (GDPpc)*). In the following figure we can see how GDPpc expressed in U.S. \$ determines the position of a country. Based on this figure, we can conclude that the economy of a country is in the first stage of development, if its annual GDPpc is less than USD 2000. Countries with the annual GDPpc between USD 2000 and USD 3000, are on the transition from the first to the second stage of development, while countries with annual GDPpc between USD 3000 and USD 9000 are in its second stage of development. Countries with GDPpc between USD 9000 and USD 17000 thousand are in the transition to the third stage, while the developed countries are the states with the annual GDPpc larger then USD \$ 17000.

Stage of development	GDP per capita (in US\$)
Stage 1: Factor driven	< 2,000
Transition from stage 1 to stage 2	2,000–3,000
Stage 2: Efficiency driven	3,000–9,000
Transition from stage 2 to stage 3	9,000–17,000
Stage 3: Innovation driven	> 17,000

Figure 7: Stage of economic development based on GDPpc

Source: *Global Competitiveness report 2010- 2011, World Economic Forum.*

Table no. 5 shows the ranking of the countries that are not EU members, by the Growth Competitiveness Index in 2010-2011 and the place occupied following the sub-indices. Serbia occupies the 88th place for innovation leaving behind the countries such as Bosnia, Macedonia and Albania.

*Table 5: Ranking of the Western Balkan countries (non-EU members) according to the Growth Competitiveness Index (GCI- shown in brackets) in 2010-2011*

	Serbia	Croatia	BIH	Montenegro	Macedonia	Albania
<b>Subindex : Basic conditions</b>	93	50	98	<b>45</b>	70	75
	(4,15)	(4,78)	(4,05)	<b>(4,90)</b>	(4,45)	(4,38)
- Institutions	120	86	126	<b>45</b>	80	63
	(3,19)	(3,65)	(3,13)	<b>(4,46)</b>	(3,75)	(3,96)
- Infrastructure	93	<b>41</b>	98	67	91	89
	(3,39)	<b>(4,63)</b>	(3,16)	(3,85)	(3,45)	(3,46)
- Macroeconomic stability	109	51	81	<b>37</b>	47	101
	(4,05)	(4,82)	(4,48)	<b>(5,09)</b>	(4,91)	(4,21)
- Health and primary education	50	48	89	<b>33</b>	69	56
	(5,95)	(6,02)	(5,43)	<b>(6,19)</b>	(5,67)	(5,87)
<b>Subindex: Ways to improve efficiency</b>	93	76	100	<b>64</b>	83	89
	(3,75)	(3,97)	(3,57)	<b>(4,08)</b>	(3,84)	(3,77)
- Education and training	74	56	88	<b>52</b>	72	84
	(4,01)	(4,35)	(3,80)	<b>(4,51)</b>	(4,04)	(3,86)
- Goods market efficiency	125	110	127	<b>44</b>	57	63
	(3,57)	(3,78)	(3,56)	<b>(4,39)</b>	(4,24)	(4,19)
- Labor market efficiency	102	113	94	<b>39</b>	71	63
	(4,06)	(3,90)	(4,17)	<b>(4,69)</b>	(4,38)	(4,46)
- Financial market sophistication	94	88	113	<b>28</b>	87	100
	(3,84)	(3,96)	(3,47)	<b>(4,68)</b>	(3,97)	(3,74)
- Technological capability	80	<b>39</b>	85	44	64	72
	(3,41)	<b>(4,23)</b>	(3,36)	(4,09)	(3,60)	(3,53)
- The market size	72	<b>70</b>	93	129	106	103
	(3,60)	<b>(3,62)</b>	(3,10)	(2,10)	(2,80)	(2,84)
<b>Subindex: Innovations and sophistication</b>	107	85	120	<b>56</b>	97	104
	(3,04)	(3,32)	(2,93)	<b>(3,67)</b>	(3,20)	(3,09)
-Business sophistication	125	92	115	<b>70</b>	96	87
	(3,15)	(3,56)	(3,27)	<b>(3,86)</b>	(3,52)	(3,61)
- Innovations	88	70	120	<b>45</b>	97	121
	(2,93)	(3,08)	(2,59)	<b>(3,48)</b>	(2,88)	(2,57)
Rank among 139 countries	96	77	102	<b>49</b>	79	88
	(3,84)	(4,04)	(3,70)	<b>(4,36)</b>	(4,02)	(3,94)

*Source: World Economic Forum, Global Competitiveness Report 2010-2011*

*We have already seen in the Table 3 that Serbia in 2012 had innovation subindex 2.81, which shows that the country needs to invest more in innovation in order to improve its position.*

## **INNOVATION IN SERBIA**

Recognizing the key role of innovation for the growth and development of each country, the Confederation of Indian industry (Confederation of Indian Industry) together with INSEAD (Business School for the World), and Canon India has developed the Global Innovation Index (Global Innovation Index - GII) (Radukić, Radovic 2011). This index aims to point out the growth of innovation in countries. Basic principles on which the Global Competitiveness Index is based on are as follows (Radukić, Radovic, 2011):

1. There is a difference between the input and the outcome when measuring innovations in the economy. Entries represent the factors that contribute to the enhancement of innovation, while outcomes show the results of innovativeness within the economy.

2. The Global Innovation Index observes five input factors: institutions and their business policies, human capital and research, general and information and communication (IT) infrastructure, market and business sophistication.

3. GII shows the two output factors that make up the results of the innovativeness of the economy based on the development of knowledge, competence and wealth creation, and they are: scientific results, which cover different aspects of knowledge (creation, dissemination and impact) and creative results (intangible assets, as well as goods and services).

Based on the values of the indicators of innovation and the analysis of innovative trends, countries are classified into one of four categories (Report on SMEs, 2011):

- Innovation Leaders (Innovation Leaders): Denmark, Finland, Germany, Sweden, whose performances are at least 20% above the EU-27 average;

- Innovation followers (Innovation followers): Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, the Netherlands, Slovenia and the United Kingdom, whose performances are around average, or less than 20% above and more than 10% below the EU average -27;

- Moderate innovators (Moderate innovators): Czech Republic, Greece, Hungary, Italy, Malta, Poland, Portugal, Slovakia and Spain, whose performances are below the EU-27 average, between 10% and 50% below the EU average and

- Modest innovators - the countries joining innovators (Modest innovators - Catchingup countries): Bulgaria, Latvia, Lithuania and Romania, whose performances range is far below the EU-27 average, more than 50%.

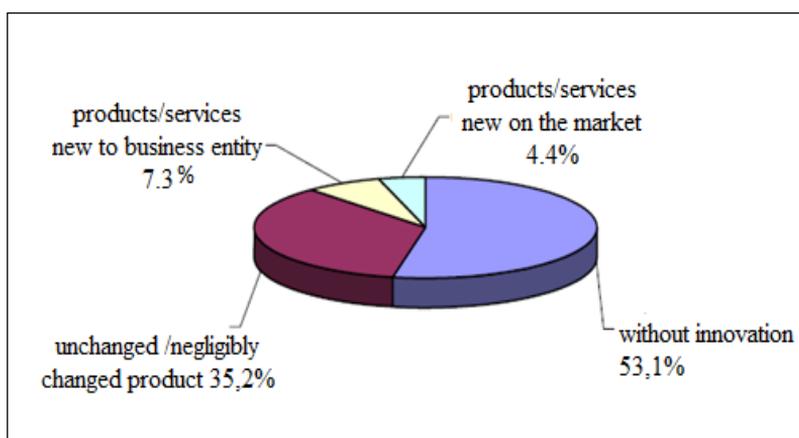
According to the Global Innovation Index for the year 2012 Serbia ranked 46th in the world out of 141 countries studied while by the index of innovative activity (IEI) Serbia occupied the high 7th place.

The research of the State Bureau of Statistics on the indicators of innovative activities in the Republic of Serbia in the period between the years 2008-2010, showed that 70% of large business entities are innovative, while 44% of small and 57% of medium business entities are.

Table 6: Business entities according to innovation, activity and size, 2008-2010

	Total	Innovators	Business entities that are not innovative	The rate of innovators
Total	12141	5812	6329	47.9
Small business entities	9347	4143	5204	44.3
Medium business entities	2237	1280	957	57.2
Large business entities	557	389	167	69.8
Manufacturing business entities	4141	2314	1827	55.9
Service business entities	8000	3498	4502	43.7

The same survey showed that the revenue structure of innovative business entities is dominated by the share of sales income of unmodified or slightly modified products, which is around 35%, while the share of sales of products / services that are new for the business entity is 7.3%.



Graph 1: The structure of the income of innovators

Source:

[http://webrzs.stat.gov.rs/WebSite/repository/documents/00/00/55/83/IA01\\_2010\\_srb.pdf](http://webrzs.stat.gov.rs/WebSite/repository/documents/00/00/55/83/IA01_2010_srb.pdf)

The following table shows the same research on the most important effects of introduced innovations (increasing the range of products and services, replacing outdated products and services, improving the quality of products and services, etc.).

*Table 7: The most important effects of introduced innovations*

EFFECTS	TECHNOLOGICAL INNOVATORS			
	TOTAL	SMALL	MEDIUM	LARGE
Increase in the range of products and services	24.0	21.8	29.7	29.6
Replacement of outdated products or processes	20.0	18.9	21.3	26.7
Access to new markets and increase in market shares	15.6	13.1	21.1	23.7
Improvement in the quality of products or services	29.7	28.2	30.9	42.4
Increase in the flexibility of products or services	17.7	17.6	15.9	24.2
Increase in production capacity/volume of services	18.4	16.3	23.8	22.9
Reduction of labor costs per unit of product	15.2	14.0	18.0	18.5
Reduction of the cost of materials and energy per unit of product	11.6	10.3	14.1	17.5
Reduction of the damaging impact on the environment	14.2	12.5	17.2	21.9
Improvement of the health of employees	17.0	15.4	20.7	22.1

Source: [http://webrzs.stat.gov.rs/WebSite/repository/documents/00/00/55/83/LA01\\_2010\\_srb.pdf](http://webrzs.stat.gov.rs/WebSite/repository/documents/00/00/55/83/LA01_2010_srb.pdf)

Serbia needs to develop a competitive economy based on knowledge, innovation and new technologies in order to achieve economic growth and development.

Introducing innovation in companies operating in Serbia is a prerequisite for its competitiveness. Innovations are the components that enable companies to create added value and to satisfy the needs of users and companies.

## ***CONCLUSION***

The economic progress of Serbia and other countries can be achieved with a constant technological progress or innovations. Innovations are the drivers of the new economy. In order to achieve competitive economy it is essential for the country to have a climate that encourages development of innovative enterprises. Why is it so? The answer is simple. The survival of small and medium enterprises in the less developed economies or those that operate on the small domestic market (such as Serbian market) is possible only if these enterprises focus on the international market. However, entry into foreign markets requires innovation and technological progress. Innovation policies in SMEs enable them to implement changes and innovations in business operations with the aim to improve the situation and achieve competitiveness. Directing the country's development towards innovation should be an indispensable basis for carrying out activities in the economy and society. Generally speaking, it can be said that the wealth of the people in one country depends on the country's ability to encourage and support the initiative for innovation in the first place, but also on the ability to transfer knowledge and introduce new technology.

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## ***COMPARATIVE ANALYSIS OF THE ECONOMIC STRUCTURE - FACTORS AND DISPROPORTIONS IN THE ECONOMIC DEVELOPMENT***

*Vera Karadjova*<sup>17</sup>

**Abstract:** The analysis of each national economy as an economic reality begins with the study of economic structure, because through that study are revealed not only basic features and functioning of the economy as a whole, but also the structure and volume of production of goods and services, i.e. information about what, how and in which industries or sectors everything is produced. In that sense paper provides an overview of the Macedonia economic structure, the factors that determine the economic structure in general and the dominant factors that determine the structure of the Macedonian economy. As a result of this analysis one very important problem in every economy is recognized, the interconnectedness and interdependence of activities and branches and disproportions in the economic structure as a limiting factor for development in order to propose directions to overcome discrepancies in the structure. In addition, this paper makes a comparative analysis with some surrounding countries and the EU member countries.

Using specific methods of economic structure analysis (input-output tables, material balances, etc.) can be determined whether and how a sector or branch is associated with other sector and branches, whether domestic production of some very important products is enough to satisfy the domestic needs or there is a need for import and so on. The structure as the percentage composition of the economy can be analyzed by: the share of individual sectors and activities in the creation of gross domestic product, percentage of employees or the active population in certain sectors, activities and branches (which means, in which sectors and industries the population is employed), the percentage of allocation, distribution of fixed assets in different sectors and branches (how and where, in which activities they are engaged). The paper also addresses the problem of unemployment.

**Key words:** Economic Structure, Factors, Disproportions, Comparative Analysis, Unemployment

**JEL classification:** O11, E24

**UDC** 338.1:330.44(082)

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## **INTRODUCTION**

Economic structure determines the scope and structure of production and supply as aggregate macroeconomic category, and the supply of certain goods and services also. In the same time through the economic structure we can recognize the role of individual sectors, sections, subsections, groups, classes and subclasses, i.e. what is their participation in the creation of production and services, which part of the labor force they employ, the scope of their contribution in the creation of gross domestic product, their contribution in exports and in foreign exchange inflow. In this sense, the economy of a country is consisting of sectors (activities and branches) with their mutual interactions in the production and trade, their means of production, employees and the results fulfilled in them.

Of special importance is to keep in mind that activities and branches, economic or sectors are not isolated, but on the contrary, they can exist only in their mutual connection and dependence. For example, almost any activity can no exist without traffic, and traffic is directly dependent on the industry of transport equipment, on the production of oil and oil derivatives, etc. Thus, defined economy or economics is not a simple set of activities and branches, but a whole composed of parts that are closely connected and dependent.

Using specific methods of economic structure analysis (input-output tables, material balances, etc.) can be determined whether and how a sector or branch is associated with other sector and branches, whether domestic production of some very important products is enough to satisfy the domestic needs or there is a need for import and so on. The analysis also defines the value and the quality of supply and demand in individual sectors and overall economy, how every sector, activity or branch performs its function in the labor division, or whether it produce as much as is necessary for production consumption, for other branches and activities functioning, but in the same time for the population personal consumption satisfaction, or there is a need for import, i.e. which part of same strategic important production can be imposed for export. Studying the structure of the economy of each country actually answers one of the fundamental economic questions: what, how much (many) and how is everything produced, that means can be defined the structure of aggregate supply. Macroeconomic policy, particularly the politics of economic structure give answers and take measures for the economic structure future development.

Structure as the percentage composition of the economy can be analyzed by: the share of individual sectors and activities in the creation of *gross domestic product*, percentage of *employees* or the active population in certain sectors, activities and branches (which means, in which sectors and industries the population is employed), the percentage of allocation, distribution of *fixed assets* in different sectors and branches (how and where, in which activities they are engaged).

## ***REASONS (FACTORS) FOR STRUCTURAL CHANGES***

Basic factor that changes the economic structure is scientific technological progress. Certainly this progress has not taken place in all sectors, i.e. in all activities and branches simultaneously and equally. In spheres where some scientific and technical discoveries are applicable, these activities and branches grow faster and thus increase its percentage or relative share in total economy. In circumstances where several sectors have absolute growth, those in which there was an application of scientific and technical inventions have faster growth. Technological progress has not only changed the structure of the economy as a whole, but also changes the structure of certain sectors or certain activities and branches.

Despite technological progress, structural changes are affected by other reasons:

—Economic structure shape, change and adapt under the influence of indigenous consumption growth and changes in demand. Steady rise in demand for new products affects the development of activities and branches that will respond to that demand, and sometimes production creates demand, which all together affects to spread the economic structure, i.e. faster or slower growth in some industries and branches, sometimes one kind of production is going to stop and start another, or to change the participation of separate individual parts of the economic activity in total production.

—International demonstration effect also influences the shaping and changing of the economic structure. Often several industrial products enter in the consumption thus are imported from more developed countries where such products are already in production and consumption. Initially these new products are imported from more developed countries, but gradually they begin to be produced which achieves the effect of changing of the economic structure.

—Social and economic changes cause changes in the structure of the economy. Urbanization and abandonment of agriculture lead to changes in needs, in lifestyle and demand, and thus in the production structure.

—Natural resources and forms of their use also affect shaping, and changing of the economic structure. Discovery of new or exhaustion of the potential of existing natural resources causing changes in economic structure and forcing certain activities or regions.

—Legislation and the current macroeconomic policy is a factor that can significantly change the structure of the economy in terms of favoring some industries and branches or limitation of some other economy sectors, activities or branches, by using the instruments of economic policy.

## ***STRUCTURE OF MACEDONIAN ECONOMY – COMPARATIVE ANALYSIS***

The structure of the Macedonian economy expressed according to the National Classification of Activities, which is based on international standard classification will be displayed according to the share of individual sectors in the creation of gross domestic product and through the percentage of employees or percentage of active population in certain sectors of the economy (so where, in which businesses and

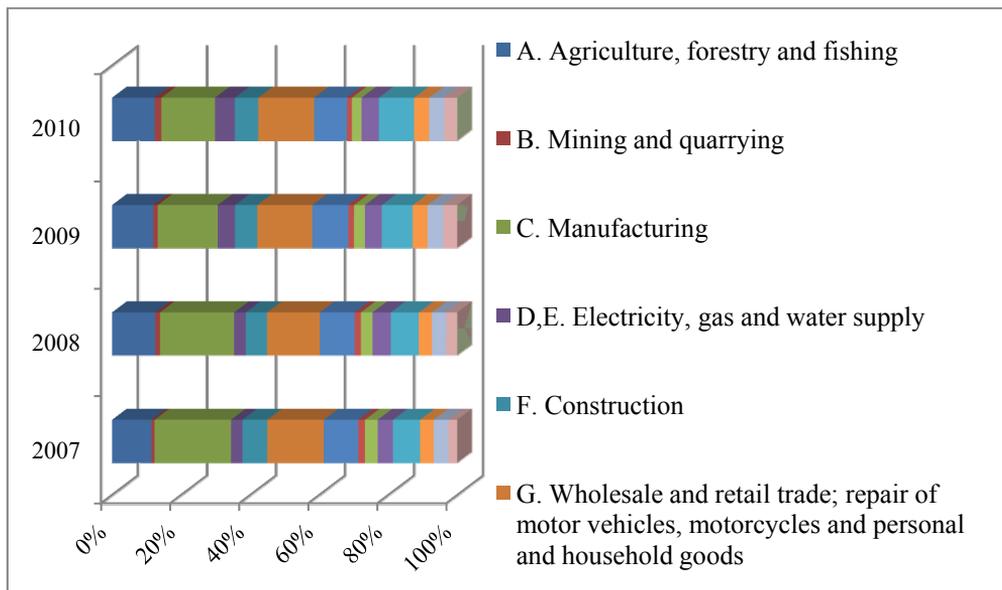
industries the population is employed). According to the said National Classification, overall economic activity is divided into sectors, divisions, groups, classes and subclasses and thus are separated 17 sectors with multiple departments, groups, classes and subclasses. The sequel follows the structure of the Macedonian economy in the period 2007-2010 according to the production method of GDP creation.

*Table 1: Gross Domestic Product (production method) 2007-2010  
at current prices, in million denars*

NACE Section – Description	2007	2008	2009	2010	2007	2008	2009	2010
					%			
A. Agriculture, forestry and fishing	33.109	41.341	39.825	43.739	9,1	10,0	9,7	10,1
B. Mining and quarrying	2.604	4.350	4.149	6.662	0,7	1,1	1,0	1,5
C. Manufacturing	64.083	70.634	57.628	54.756	17,6	17,2	14,0	12,6
D,E. Electricity, gas and water supply	9.516	11.159	16.577	20.384	2,6	2,7	4,0	4,7
F. Construction	20.835	20.258	21.361	23.902	5,7	4,9	5,2	5,5
G. Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	47.355	50.270	52.889	57.012	13,0	12,2	12,9	13,1
H,J. Transport, storage and communication	29.017	33.143	34.661	33.648	8,0	8,4	7,9	7,7
I. Accommodation and food service activities	5.565	5.952	5.426	4.940	1,5	1,4	1,3	1,1
K. Financial and insurance activities	10.619	11.090	10.541	9.838	2,9	2,7	2,6	2,3
L, M, N. Real estate activities, Professional, scientific and technical activities, Administrative and support service activities	12.806	17.449	16.083	17.678	3,5	4,2	4,0	4,0

O. Public administration and defense; compulsory social security	22.757	26.677	29.689	35.922	6,2	6,5	7,2	8,3
P. Education	11.329	12.467	14.250	15.315	3,1	3,0	3,5	3,5
Q. Human health and social work activities	12.304	13.577	15.233	15.526	3,4	3,3	3,7	3,6
R,S. Arts, entertainment and recreation; Other service activities	7.495	10.548	13.339	12.915	2,1	2,6	3,2	3,0
T. Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	/	/	/	347	/	/	/	0,1
Imputed rents	24.084	28.533	27.294	28.564	6,6	6,9	6,6	6,6
Other net taxes on production	/		/	/	/	/	/	/
<b>A. Value added</b>	<b>313.478</b>	<b>357.450</b>	<b>358.945</b>	<b>381.148</b>	<b>85,9</b>	<b>86,8</b>	<b>87,4</b>	<b>87,8</b>
<b>B. Tax on products</b>	<b>52.426</b>	<b>56.723</b>	<b>54.935</b>	<b>57.331</b>	<b>14,4</b>	<b>13,8</b>	<b>13,4</b>	<b>13,2</b>
Value added tax and excises	46.227	50.449	49.706	52.619	12,7	12,3	12,1	12,1
Import duties	6.199	6.275	5.229	4.712	1,7	1,5	1,3	1,1
<b>C. Minus: Subsidies on products</b>	<b>915</b>	<b>2.445</b>	<b>3.146</b>	<b>4.367</b>	<b>0,3</b>	<b>0,6</b>	<b>0,8</b>	<b>1,0</b>
<b>GROSS DOMESTIC PRODUCT (A+B-C)</b>	<b>364.989</b>	<b>411.728</b>	<b>410.734</b>	<b>434.112</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

*Source: calculations based on the data published in Statistical Yearbook of the Republic of Macedonia, 2011, pp.316 and Statistical Yearbook of the Republic of Macedonia 2012, pp.328*



*Figure 1: Structure of the Macedonian economy by sectors 2007-2010*

The structure shown on a previous manner shows the highest share of manufacturing (12.6%) and wholesale and retail trade 13.1% in the formation of GDP in 2010, and followed by agriculture with 10.1%. Proportion of staff structure follows the same order of participation (manufacturing, trade), but with significantly greater relative share of employees in industry (23.6%) versus 18.0% in trade and only 3.0% in agriculture. The experience of developed countries shows a tendency of staff reduction in the industry mainly because of technical and technological progress as a factor. The industry will still create the majority of production, but will increase the role of other activities such as financial and other services, and on that basis should be expected restructuring of the numerical representation of employees. In Macedonia also should be expected decrease the percentage of the population that work directly in production activities, i.e. in primary and secondary activities, and to grow the number of employees in tertiary activities. In highly developed countries, about one quarter of the population works in primary and secondary activities, and the other three quarters are engaged in tertiary activities i.e. in services activities that provide services and trade. In Macedonia, in the current structure of the employees about a quarter are engaged in the manufacturing industry.

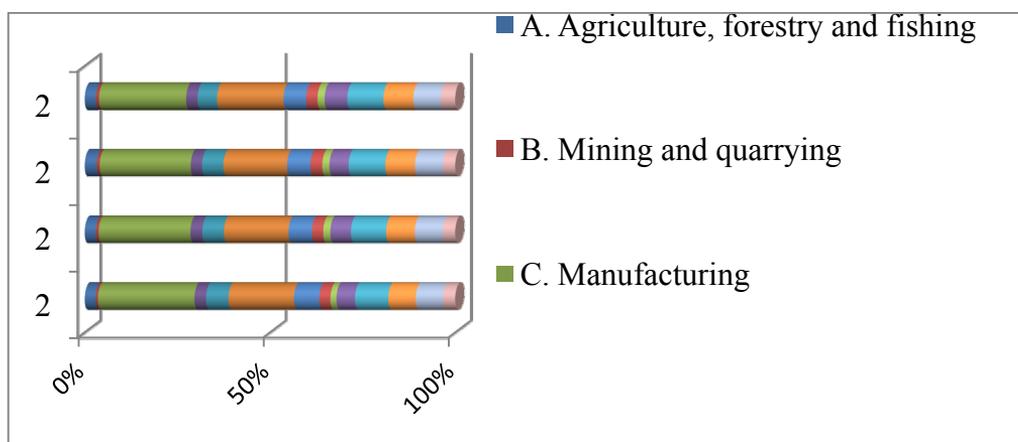


Figure 2: Structure of the Macedonian economy according to employment by sector 2007-2010

Calculations based on the data published in *Statistical Yearbook of the Republic of Macedonia, 2011, pp.248*

Below there is a comparative review of the participation of different sectors in the creation of gross added value in Macedonia compared to the euro area (EA-16) and the EU-27 towards which we strive, and compared to Bulgaria and Greece as neighboring countries and EU members, Slovenia and Croatia as countries emerging from identical state in which we shared the same economic development policy and Turkey as a candidate for EU membership.

Table 2: Gross added value (% of participation)

	Agriculture, hunting, forestry and fishing		Industry		Construction		Trade, Transport and Communications		Business activities and financial services		Other services	
	1999	2009	1999	2009	1999	2009	1999	2009	1999	2009	1999	2009
EU-27	2,5	1,7	22,5	17,9	5,6	6,3	21,6	20,9	25,7	29,2	22,3	24,0
Euro area (EA – 16)	2,6	1,6	22,3	17,8	5,7	6,3	21,1	20,7	25,9	29,3	22,4	24,2
Bulgaria	15,9	5,6	20,1	21,4	5,0	8,9	22,2	25,4	19,8	23,0	17,0	25,4
Greece*	6,6	3,2	13,9	13,3	7,0	4,6	30,1	33,1	20,6	20,1	21,7	25,7
Slovenia	3,4	2,4	29,0	23,2	7,2	7,9	20,6	22,0	20,0	23,3	19,8	21,2
Croatia**	9,1	6,4	23,1	20,2	5,3	8,3	22,9	25,2	18,2	22,9	21,4	16,9
Macedonia**	12,9	11,6	26,5	24,1	6,1	5,7	24,3	25,0	9,7	16,0	20,5	17,7
Turkey	10,7	9,1	25,4	20,9	5,6	4,2	26,8	29,4	20,6	23,9	10,9	12,4

\* 2000 instead 1999, \*\* 2008 instead 2009

Source: According to Eurostat (tec00003, tec00004, tec00005, tec00006, tec00007 and tec00008), *Europe in figures — Eurostat yearbook 2011, pp.48*

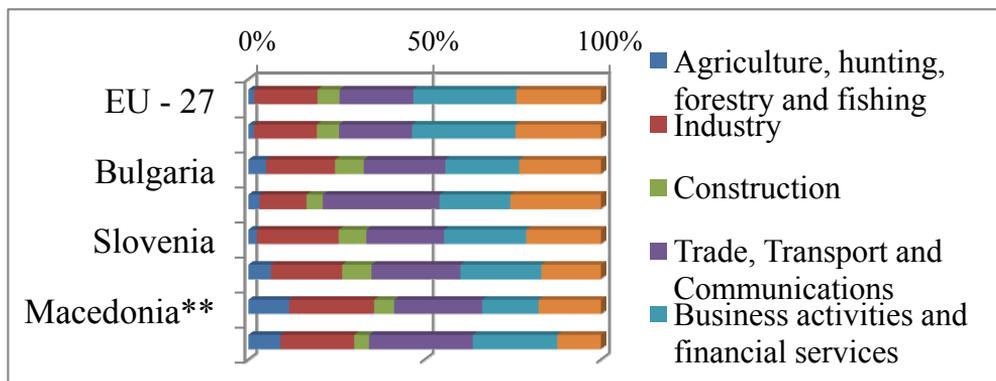


Figure 3: Comparative view of the participation of different sectors in the gross added value, 2009

The data show significantly higher share of agriculture in Macedonia and Turkey to the European Union and the lag in the participation of business activities and financial services, and in the participation of the other services. Although the above sectors tend to an absolute increase, their relative share in the structure of the economy lags behind the European average.

As for the participation of industry, its position moves slightly above the European average. Industrial production in March 2013 compared to the same month of the previous year grew by 4.2%. Analyzed by sectors, mining and quarrying grew by 8.2%, due to growth in branches Mining metal ores of 12.6% and Extraction of coal and lignite of 10.3%. Manufacturing sector grew by 0.9% while Electricity, gas, water supply and conditioning increased for 20.6%. Within the manufacturing industry positive annual growth is registered in 8 of 23 branches that make up 37.2% of the industrial production, whereas growth was observed in the production of clothing (20.5%) and production of food products (1.5%) as the carrier branches with double-digit share in the industrial production structure. Industrial production in March 2013 compared to February 2013 grew by 23.7%. On a cumulative basis, industrial production in January - March 2013 compared to the same period of 2012 registered growth of 2.7% (Ministry of finance of the Republic of Macedonia, *Bulletin March 2013*, pp. 3).

## THE UNEMPLOYMENT IN THE REPUBLIC OF MACEDONIA

The unemployment the Republic of Macedonia has to deal with has dynamic and structural characteristics, and distinguishes itself as a serious problem. The unemployment problem has been existed for a long period of time with a tendency of continued growth, but it has reached culmination in the period of the transition.

The unemployment in Macedonia is characterized by tendency of permanent growth in the past several decades. Starting from the 1970s, it moves around 1/5<sup>th</sup> of the entire workforce. This tendency continues in the 1980s, and more substantial changes occur during the transition process in 1990s. In the period between 1981 and 1989 the number of unemployed has risen for 23,755 persons, or 18.7% (Table 3).

*Table 3: Numbers and structure of the unemployment in R. Macedonia*

Year	Number:			Structure in %		Basic index of the total unemployment	Rate of unemployment		
	Total	Previously employed	First time employees	Previously employed	First time employed		Total	Men	Women
1981	126.645	27.594	99.051	21,8	78,2	100,0	22,3	15,8	33,6
1989	150.400	34.072	116.328	22,7	77,3	118,8	22,1	17,8	28,5
1990	156.323	26.910	129.413	17,2	82,8	123,4	23,0	18,8	29,4
1991	164.816	35.222	129.594	21,4	78,6	130,1	24,5	20,1	31,5
1992	172.089	36.189	135.900	21,0	79,0	135,9	26,2	22,1	32,5
1993	174.848	36.293	138.555	20,8	79,2	138,1	27,7	23,6	33,7
1994	185.906	39.060	146.846	21,0	79,0	146,8	30,0	25,8	36,4
1995	216.222	52.078	164.204	24,1	75,9	170,7	35,6	31,5	41,7
1996	237.573	61.938	175.635	26,1	73,9	187,6	38,8	35,0	44,5
1997	252.979	67.224	185.755	26,6	73,4	199,8	41,7	38,2	46,8

*Source: Calculated based on information from the Statistic Agency of R. Macedonia - SG RM/1982, 1988, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997 and 1998.*

In the period between 1990 and 1998, as a result of the transition process, the unemployment rate has a significant growth. The tendency of simultaneous growth of both employment and unemployment stops, and these two indicators start to move in opposite directions. The number of unemployed continues to rise. The number of unemployed from 156,323 persons in 1990 has risen to 252,979 in 1997, which is an increase of 61.8%. It is important to mention that the rise in absolute numbers is 96,656 persons, which makes it around 14.000 persons per year in this period. As a result of this, the percent of unemployment has significantly risen from 23.0% in 1990 to 41.7% in 1997. (In the calculation of the percent of unemployment in the total number of employed the self-employed people are also included). The cleansed evidence of the Employment Agency of the Republic of Macedonia shows that the number of unemployed persons in 1998, in the period of April-December has decreased from 275,232 to 258,928. In lack of appropriate data about the number of employed, as an illustration we can use the percent of unemployment which in April has reached 44.0% (the registered number of employed persons in April (315,525) is increased for 35,000 including the self-employed people.) Great differences can be noticed in the number and in the structure of the persons who are registered to seek work from aspect of their status - previously employed and persons who first time look for a job. Both categories have absolute growth, which is bigger in the first category compared to the second. In the first period the number of previously employed persons is increased for 23.5% and in the second period the increase is a stunning 149%. The increase of the number of the person

that looks for a job for a first time is 17.4% and 43.5% respectively. These movements have contributed for change of the relative participation of the analyzed percents in the total number of unemployed after which still the percent/number of the persons who look for a job for a first time is dominant. The percent of unemployment is a solid analytical indicator for the degree of the employment of the available workforce and in that context it's a good indicator for evaluation between the countries: For instance, countries with smallest unemployment rate in this period, from the group of developed countries are: Japan (2.5%), Austria (4.2%), Switzerland (4.5%), Sweden (8.2%), Germany (8.9%), Canada (11.2%) and France (11.7%).

As for the post-socialistic countries it should be mentioned that there are significant differences that come out not only from the method of calculation of the unemployment rate but from the stage of transition and the chances for employment also. For instance unemployment in the mentioned period ranges from 3.5% in The Czech Republic, 5.8% in Latvia, and is relatively higher in Hungary (12.1%), Slovakia (12.7) and Poland (16.4%). In Albania the unemployment rate was 19.5% and this number includes only the officially registered unemployed. From the ex Yugoslav republics in 1993 Slovenia has relatively lower rate of unemployment (9.1%).

In beginning of the 21<sup>st</sup> century the condition of the unemployment in Macedonia hasn't changed significantly. The absolute number of unemployed continues to rises and it was 261,711 persons in 2000; 256,196 in 2001 and 263,483 in 2002. It's a perturbing fact that, if unemployment is analyzed by its length, biggest part belongs to the group of people who wait for a job longest, those who are unable to find job for four years or more. Their number in 2000 was 154,982, that is 60.4% of all unemployed; in 2001 it was 170,570 persons, 64.8% and in 2002 165,365 persons or 62.8% (Table 4).

*Table 4: Unemployed in R. Macedonia by the length of the unemployment*

Length of unemployment	2000		2001		2002	
	total	%	total	%	total	%
Total:	261,711	100	263,196	100	263,483	100
Up to 1 month	12,451	4,8	8,960	3,4	5,991	2,3
2-5 months	12,336	4,7	11,592	4,4	15,373	5,8
6-11 months	18,834	7,2	14,042	5,3	19,431	7,4
12-17 months	12,108	4,6	15,490	5,9	10,837	4,1
18-23 months	20,407	7,8	13,844	5,3	15,681	5,9
2 years	3,195	1,2	2,473	0,9	3,064	1,2
3 years	24,399	9,3	26,225	10,0	27,740	10,5
4 years and more	157,982	60,4	170,570	64,8	165,365	62,8

*Source: The Statistic Agency of R. Macedonia - SG, R.M. 2003*

The figures presented so far show beyond doubt that the problem with unemployment in Macedonia by its character is structural and cyclic, and cannot be solved with flexibility of the wages because Macedonia is a typical example of a developing country. With the frame program for economic development and reforms

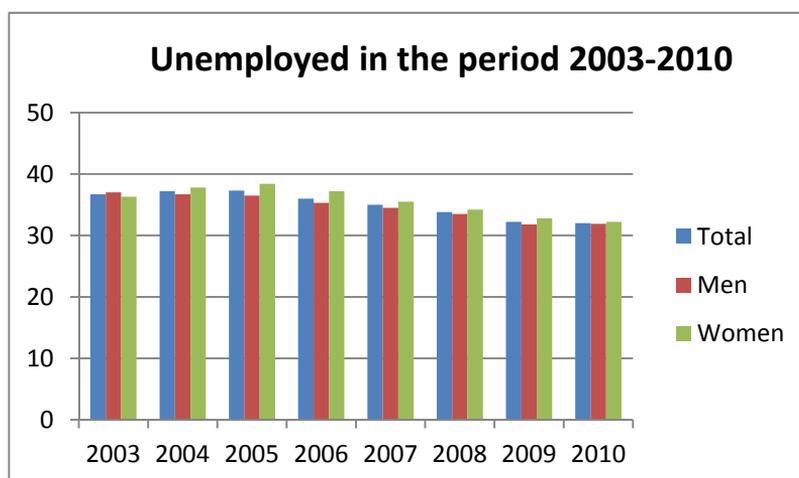
“Macedonia 2003” two types of measures were planned for overcoming of the unemployment: (1) continuing with the support of the enterprises that work with a loss; and (2) conducting an active policy on the workforce market.

The unemployment problem remains actual in the upcoming period too. As is apparent from the data listed in the following table and graph derived from it, although it has a slight decrease, unemployment is consistently above 30%. It indicates its structural character and the need for systemic measures for its mitigation.

*Table 5: Unemployed in the period 2003-2010*

	2003	2004	2005	2006	2007	2008	2009	2010
Labour Force								
Total	860 976	832 281	869 187	891 679	907 138	919 424	928 775	938 294
Men	519 133	506 863	523 275	543 830	548 141	561 705	570 698	575 349
Women	341 843	325 418	345 912	347 849	358 998	357 719	358 077	362 945
Unemployed								
Total	315 868	309 286	323 934	321 274	316 905	310 409	298 873	300 439
Men	191 850	186 223	191 096	191 856	189 306	188 222	181 366	183 426
Women	124 018	123 063	132 838	129 418	127 599	122 187	117 508	117 013
% Unemployed								
Total	36.7	37.2	37.3	36.0	35.0	33.8	32.2	32.0
Men	37.0	36.7	36.5	35.3	34.5	33.5	31.8	31.9
Women	36.3	37.8	38.4	37.2	35.5	34.2	32.8	32.2

*Calculations according to the data from the Statistical Year Book of the Republic of Macedonia, 2011, p. 254*



*Figure 4: Unemployed in the Republic of Macedonia in the period 2003-2010*

*Table 6: Unemployed persons by duration of unemployment, 2008-2010*

	2008	2009	2010	2008	2009	2010
Total	310 409	298 873	300439	100%	100%	100%
Up to 1 month	10 842	10 004	9968	3.5	3.3	3.3
2 - 5 months	19 722	23 806	20935	6.4	8.0	7.0
6 - 11 months	16 290	20 431	19238	5.2	6.4	6.4
12 - 17 months	16 470	17 714	19614	5.3	6.5	6.5
18 - 23 months	12 991	12 227	15465	4.2	5.1	5.1
2 years	2 562	2 000	2632	0.8	0.9	0.9
3 years	23 132	21 922	22841	7.5	7.3	7.6
4 years and more	208 401	190 768	189747	67.1	63.8	63.2

*Source: Adjusted according to the Statistical Year Book of the Republic of Macedonia, 2011, pp.262*

Particular concern about the conditions in the unemployment situation in Macedonia is the fact that most of the unemployed (60%) have been unemployed for more than 4 years. That refers to the structural nature of unemployment, as a form of unemployment. Structural unemployment is a form of unemployment resulting from a mismatch between demand in the labor market and the skills and locations of the workers seeking employment. Even though the number of vacancies may be equal to, or greater than the number of the unemployed, the unemployed workers may lack the skills needed for the jobs, or they may not live in the part of the country or world where the jobs are available. In the case of the Republic of Macedonia the mismatch is about the numbers in a supply and demand on the labor market. Structural unemployment usually is a result of the dynamics of the labor market, automation, modernization, technical progress etc., and means displacing unskilled workers or unneeded workers. Many of these displaced workers are "left behind" due to costs of training and moving, inefficiencies in the labor markets, such as discrimination or monopoly power, or because they are unsuited for work in growing sectors. Structural unemployment is hard to separate empirically from frictional unemployment, except to say that it lasts longer. Structural unemployment may also be encouraged to rise by persistent cyclical unemployment. The implication is that sustained high demand may lower structural unemployment. Structural unemployment is generally considered to be one of the "permanent" types of unemployment, where improvement is possible only in the long run. This again points to the conclusion of structural and systemic changes in order to overcome unemployment as significant macroeconomic problem.

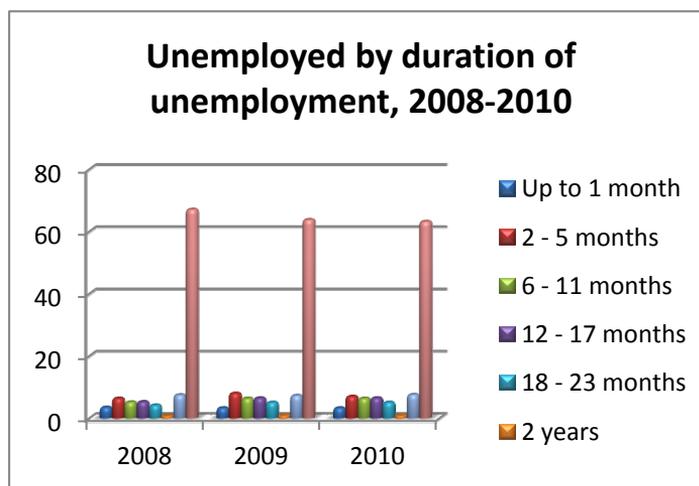


Figure 5: Unemployed by duration of unemployment 2008-2010

According to the Labour Force Survey, the number of employees in Q-1-2012 compared to the same quarter of the previous year decreased by 0.9%. As a result, the number of unemployed in Q-1-2012 compared to the same quarter of the previous year is higher by 0.9%. Active population in Q-1-2012 increased by 0.4% on a quarterly basis, i.e. decreased by 0.3% on an annual basis. The employment rate in Q-1-2012 is 38.6%, which is a slight increase compared to the previous quarter, when it was 38.5%. The unemployment rate in Q-1-2012 is 31.6%, and is lower by 0.2 percentage points compared with the previous quarter, and 0.4 percentage points higher compared to the same quarter last year. Active population in Q-1-2012 represents 56.4% of the total working population (Ministry of finance, Republic of Macedonia, *Quarterly Economic Report K-1-2012*, pp.4).

Table 7: Labour force and activity rates

	Total population	Labor Force			Activity rate	Employment rate	Unemployment rate
		Total	Employed	Unemployed			
2010	1 648 522	938 294	637 855	300 439	56.9	38.7	32.0
2011	1 656 215	940 048	645 085	294 963	56.8	38.9	31.4
2011/II	1 655 188	936 256	642 809	293 448	56.6	38.8	31.3
2012/I	1 667 862	941 019	643 668	297 351	56.4	38.6	31.6
2012/II	1 669 368	942 420	648 200	294 220	56.5	38.8	31.2

Source: According to NEWS RELEASE No: 2.1.12.28, State Statistical Office, Republic of Macedonia, 17.09.2012

## THE UNEMPLOYMENT IN EUROPE

As a consequence of a latest economic and financial crisis, Europe is faced with very high unemployment rates. In June 2012, an estimated 25.1 million people were unemployed in the EU, according to official figures released by Eurostat, the Luxembourg-based statistical office of the European Union. A whopping 17.8 million of the total unemployed are in the eurozone, the highest level since the 17-nation group was formed in 1999. The unemployment increases by month to month, so Eurostat estimates that 25.466 million people in the EU-27, of whom 18.196 million were in the euro area (EA-17), were unemployed in August 2012. Compared with July 2012, the number of persons unemployed increased by 49.000 in the EU-27 and by 34.000 in the euro area. Compared with August 2011, unemployment rose by 2.170.000 in the EU-27 and by 2.144.000 in the euro area. Therefore, poverty as a phenomenon that is closely related to unemployment is becoming a serious problem for Europe. Unemployment and the inability of existence despite economic, imposes numerous emotional and psychological trauma and even suicide cases.

The euro area seasonally-adjusted unemployment rate was 11.4 % in August 2012, stable compared with July; it was 10.2 % in August 2011. The EU-27 unemployment rate was 10.5 % in August 2012, also stable compared with July; it was 9.7 % in August 2011.

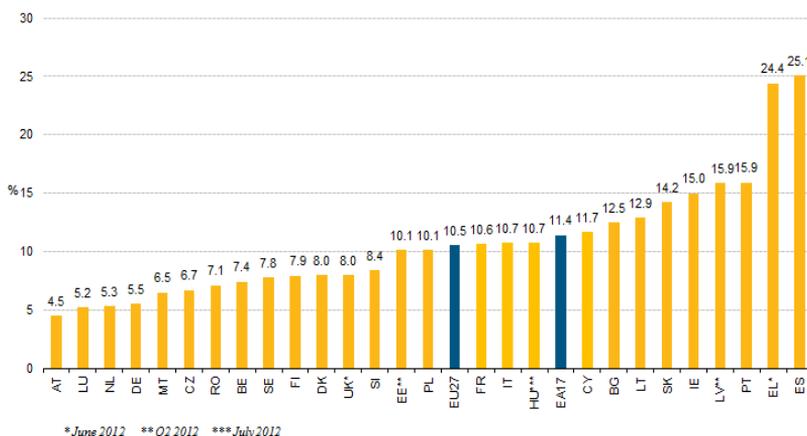


Figure 6: Unemployment rates, seasonally adjusted, August 2012

Source: According to Eurostat, European Commission,

[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php?title=File:Unemployment\\_rates,\\_seasonally\\_adjusted,\\_August\\_2012.png&filetimestamp=20121001121813](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Unemployment_rates,_seasonally_adjusted,_August_2012.png&filetimestamp=20121001121813)

Among the Member States, the lowest unemployment rates were recorded in Austria (4.5 %), Luxembourg (5.2 %), the Netherlands (5.3 %) and Germany (5.5 %), and the highest rates in Spain (25.1 %) and Greece (24.4 % in June 2012). In August 2012, the unemployment rate was 8.1 % in the USA and 4.1 % in Japan. Compared

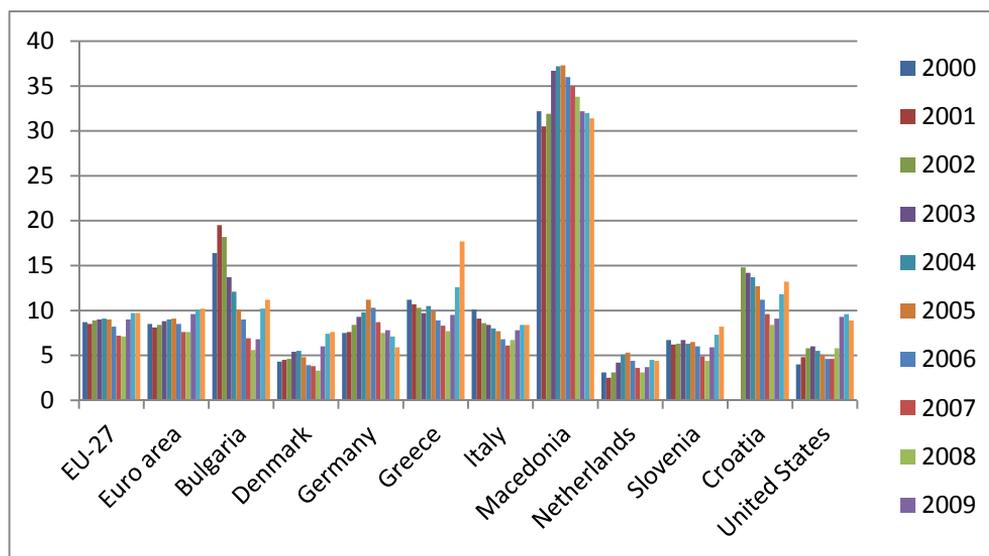
with a year ago the highest increases in an unemployment rate were registered in Greece (17.2 % to 24.4 % between June 2011 and June 2012), Cyprus (8.0 % to 11.7 %), Portugal (12.7 % to 15.9 %) and Spain (22.0 % to 25.1 %).

The following table provides an overview of the unemployment rates in the period 2000-2011 in the EU Member States, in the euro-zone countries, Macedonia, some of the countries to which it is targeted labor migration from Macedonia, some neighboring countries and the United States.

*Table 8: Unemployment rate, 2000-2011*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EU-27	8.7	8.5	8.9	9.0	9.1	9.0	8.2	7.2	7.1	9.0	9.7	9.7
Euro area	8.5	8.1	8.4	8.8	9.0	9.1	8.5	7.6	7.6	9.6	10.1	10.2
Bulgaria	16.4	19.5	18.2	13.7	12.1	10.1	9.0	6.9	5.6	6.8	10.2	11.2
Denmark	4.3	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.3	6.0	7.4	7.6
Germany	7.5	7.6	8.4	9.3	9.8	11.2	10.3	8.7	7.5	7.8	7.1	5.9
Greece	11.2	10.7	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5	12.6	17.7
Italy	10.1	9.1	8.6	8.4	8.0	7.7	6.8	6.1	6.7	7.8	8.4	8.4
<b>Macedonia</b>	<b>32.2</b>	<b>30.5</b>	<b>31.9</b>	<b>36.7</b>	<b>37.2</b>	<b>37.3</b>	<b>36.0</b>	<b>35.0</b>	<b>33.8</b>	<b>32.2</b>	<b>32.0</b>	<b>31.4</b>
Netherlands	3.1	2.5	3.1	4.2	5.1	5.3	4.4	3.6	3.1	3.7	4.5	4.4
Slovenia	6.7	6.2	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9	7.3	8.2
Croatia	/	/	14.8	14.2	13.7	12.7	11.2	9.6	8.4	9.1	11.8	13.2
USA	4.0	4.8	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3	9.6	8.9

*Source: Eurostat and State statistical office of RM*



*Figure 7: Unemployment rates*

As is evident, Macedonia has sweeping highest unemployment rates which, despite some fluctuations over the years, remained above 30% of the working population.

In 2000 slightly below 9% of the total labor force in the EU-27 were unemployed. That means 8.5% in early 2001 before rising back by the middle of 2002, through until the middle of 2005. From 2005 there was a period of several years of steadily declining unemployment within the EU-27. By the first quarter of 2008, EU-27 unemployment hit a low rate of 7.6 %, before rising sharply in the wake of the economic crisis. In 2010 and 2011 the average unemployment rate in the EU-27 was 9.7 %, the highest annual rates recorded since the start of the series in 2000. The unemployment rate in the euro area followed roughly the same trend as in the EU-27. However, between 2000 and the middle of 2004 the unemployment rate in the euro area was below that recorded in the EU-27. This pattern was subsequently reversed as unemployment declined more rapidly in the Member States which do not yet have the euro between 2005 and 2008. During the economic crisis, unemployment increased at a considerably pace, as in the EU-27. While in the EU-27 the growth in unemployment slowed down in 2011, the average unemployment rate for the EA hit 10.2%, the highest rate since 1999. In 2000, the unemployment rate in the United States was around 4%, considerably lower than in the EU. It remained much lower until early 2008, when unemployment started to increase rapidly. By the middle of 2009, the unemployment rate in the United States had reached the same level as in the EU, and the annual average rate in 2009 was higher in the US than in the EU-27. In 2010 and 2011, annual average unemployment rates in the US, while still comparatively high, dropped again below EU-27 levels (In accordance of Eurostat data).

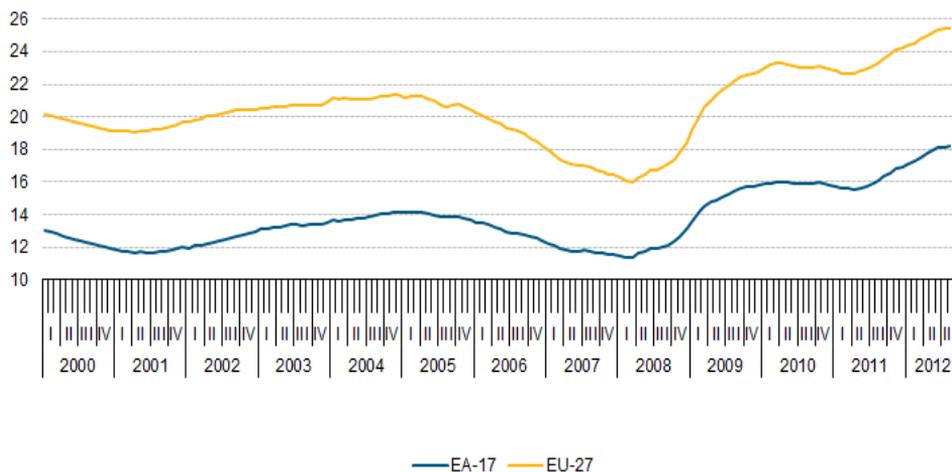


Figure 8: Unemployed persons, in millions, seasonally adjusted, EU-27 and EA-17, January 2000 – August 2012

Source: Eurostat, European Commission,  
[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php?title=File:Unemployed\\_persons,\\_in\\_millions,\\_seasonally\\_adjusted,\\_EU-27\\_and\\_EA-17,\\_January\\_2000\\_-\\_August\\_2012.PNG&filetimestamp=20121001121904](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Unemployed_persons,_in_millions,_seasonally_adjusted,_EU-27_and_EA-17,_January_2000_-_August_2012.PNG&filetimestamp=20121001121904)

## **MISMATCH OF SUPPLY AND DEMAND – DISPROPORTIONS IN STRUCTURE**

Disproportions mean lag of individual sectors regarding to the offer beyond the needs and imposing the need for imports to the extent that they can hinder the development of other sectors or to be bottlenecks of development. Within individual sectors (*general disproportions*) or certain types of production (*special disproportions*) as most important can be mentioned:

- \* *Lag of the Energy sector behind need*, as a general and most important disproportion;
- \* *Lag in the raw materials complex*;
- \* *Lag in food production*, especially livestock and production of animal feed;
- \* *Lag in traffic*, especially construction of roads and modernization of railways;
- \* *Lag in services sector*;
- \* *Forcing the manufacturing industry and finalization*, with existing and potential problems in their export.

Conditions of disproportions in the structure of the economy or noncompliance among the aggregate supply and demand have partly objective and partly subjective character.

## **CONCLUDING OBSERVATIONS – STRUCTURE HARMONIZATION**

In conditions of market economy, harmonization of the economy structure is conducted by market mechanism, while some indirect state influence is not excluded. *Measures to address* the mismatch of supply and demand of certain products and services may be:

(1) *Short-term and quick measures*, or problem to be addressed immediately in the short term, for example, *import and export* of products and services that are surplus or missing in the domestic market. However, this measure can be accepted as long-term solution if for those products and services the country has no comparative advantages and has high alternative costs for their production.

(2) or *long-term measures*, that problem is solved in the long run if we estimate that the country has comparative advantages, i.e. if the alternative costs are small, so it will be worthwhile to encourage and support the increase of domestic production capacities for some products and services which are lacking on domestic market or which can be easily exported.

When an export or import is selected as a solution, then the basic problem is the openness of the domestic market for import and export. When the "excess" on the supply side consists of products and services with high quality and low costs that can easily be exported and sold in other countries, and to import products and services for which the domestic market has a lower offer, then cannot talk about more or less production, i.e. for mismatch in supply and demand and for disproportions in the

structure of the economy. In terms of high productivity of domestic manufacturing, goods and services good quality and assortment, the country don't meets the problem of mismatch between the aggregate supply and aggregate demand, but only the need for harmonization of trade and payment balance.

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## ***ANALYSIS OF LEASING INDUSTRY IN SERBIA AND ITS IMPACT ON ECONOMIC DEVELOPMENT***

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**Abstract:** Business practice in market economies has shown that the realizing of various investment projects and the growing need for investments cannot be satisfied only by classic forms of financing. The goal of this paper is to represent leasing as a special form of business finance and to show the specific traits of leasing transactions which adapted to the specific needs and showed significant advantages comparing with other forms of finance. The methods used in this paper are a combination of descriptive and analytic research methods. The essence of financial leasing as a business, the real leasing, is the lack of personal funds, or some other reasons, and then the lessee obtains the equipment necessary for economic exploitation and generating of certain revenue. Transactions of financial leasing, in respect to classic loans, provides the production and by using new equipment, as a subject of leasing, the necessary industrialization. The investments realized by financial leasing have continuity. Placements are found in industry, agricultural mechanization, construction machines and transport. The production meant for export should be a strategic direction of our economic policy, and the financing by leasing is a significant instrument for achieving this goal. The development of leasing industry in Serbia significantly contributes to stability and economic development, influences the increase in employment and represents the possibility for introduction and application of new technologies.

**Key word:** Financial Leasing, Lessee, Lessor, Business Financing

**JEL classification:** O10, M21

**UDC** 339.187.6(497.11)(082)

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## **INTRODUCTION**

The essence of entrepreneurship is certainly the idea and innovation, but for that idea and innovation to be realized it is necessary to give an answer to the question of how to provide funds. Every developed business by its scope and expansion implies the need of giving the answer to the question of how to finance in the most acceptable way, e. i. the most profitable way. One of the ways of financing business is leasing method.

Leasing is a business, economic activity which basically implies the specific method of financing the investments. Leasing was created in business practice. Therefore, business practice implied the specific economic activity of financing the investments in relation to the already known classic ways. In the first leasing practices instead of selling his goods, the producer found an economic interest to give it to the consumer to use it and to charge appropriate fee. Very soon, other, more complex forms of leasing activities appeared which are conducted by the specialized companies as their primary activity. Leasing businesses started developing very quickly. By its scope and variety they have become very significant, so leasing activities are seen as leasing industry. In the modern sense, the leasing industry was developed in the 50s of the 20<sup>th</sup> century in the USA, on the territory of Serbia the law frame for development of this activity was created in 2003, by bringing the Law on Financial Leasing.

In the real sense of the word, leasing comprises financial leasing. Financial leasing is an activity in which the lessor, with the delivered subject of leasing, makes the contract about delivery and gains the right of ownership of the leasing subject, where the supplier and the subject of leasing are determined by the lessee most often, and the contract of financial leasing is made with the lessee, which transfers the authorizations of keeping and using the subject of leasing to the lessee for the agreed period of time. Lessee pays the agreed fee in installments to the leasing provider.

Leasing business unifies the interests of more participants: lessee, supplier of the leasing subject and the lessor. With its specific traits, leasing transactions have adjusted to the concrete needs and shown significant advantages comparing with classic forms of financing. Leasing activities are developing by its scope and variety not only in national economies but also in the international plan.

Leasing is a specific and complex business activity. From the right aspect, the leasing agreement has the elements of more familiar classic agreements, but by unifying of various rights and obligations of all participants in leasing activities, they became new and independent contract. From the economic point of view, leasing is a specific form of business financing.

Financial leasing, with its effects, gives the significant contribution to stabile production and decreases the possibility of prices' growth.

The advantages of financial leasing bring economic advantages to all participants in leasing transaction. Financing thorough the form of leasing, is increasingly popular form of investment in basic means and it is present as an alternative for personal means of an entrepreneur, bank loans and other sources of borrowed financial means.

The lessee realizes the investment by not entering in the classic loan relationship and without engaging the personal means. Economic exploitation of the leasing subject, the lessee provides incomes from which he settles the liabilities. The

availability of financial leasing enables an entrepreneur to invest his personal means in his business and to finance the cash flow, without which it is impossible to employ any business equipment, which will, in this case, be an advantage of leasing.

The one who supplies the subject of leasing realizes its product and its value are charged immediately from the lessor. So, the one who delivers the subject of leasing avoids all uncertainties of market and creates the conditions for continuous business.

By financing the leasing business, lessor becomes the owner of the subject of leasing. Capital, by which the leasing business is financed, is given back to the lessor in real value enlarged for the appropriate gains.

The most frequent founders, owners and the creditors of leasing companies are banks. Banks indirectly place, through a less complicated procedure, to lessees and of course they charge an appropriate price and generate certain revenue.

If a significant part of total investments are realized by leasing activities, the benefits from this form of business financing are great for every economy.

### ***SPECIFICITY OF FINANCIAL LEASING IN RELATION TO CLASSIC FORMS OF BUSINESS FINANCE***

Financial leasing represents the form of business finance of investment activity of a subject which does not have necessary funds. Actually, lessee can make a business decision to use his means that are eventually liquid in a different way and with a different purpose. (Kapor, 2007). It is justified to start with the assumption that the lessee brings economically rational decision getting into leasing business.

No matter what is the purpose of the subject of leasing, financial leasing is a form of business financing and represents the alternative, different way of financing of investments in basic means, investment in equipment of various purposes, durable goods. There are no reasons against economic logic to provide the real-estate by financial leasing business. Often, the only limitation is found in current legal regulations. Leasing, as a form of business financing is the alternative to some other different ways of financing. Different ways of financing are:

- a) investment of one's own funds
- b) bank loans
- c) issuing of debt securities.

In every serious business, economic entity thinks long-term and strategically, in accordance with his possibilities, about the way of using or providing the necessary funds. One's own funds have their price and in the final result they influence the effects of business activities. On the other hand, all forms of debt, when there are possibilities to realize them, are realized under certain conditions. We are talking about the price and the time of usage of loans.

Leasing user can decide to use financial leasing and when he has his own means. The only economic logic of such a decision lies in the fact that the lessee finds his own means to be more profitable if he invests them with a different purpose than that which he uses the financial leasing for. The free funds are simply always very significant assets. Also, by its scope, free funds are always limited.

The lack of funds necessary for the business activities, and especially for the serious investments, is traditionally solved by classic loans. The necessary funds are borrowed under certain circumstances, from the banks or financial institutions. (investment funds, or specialized institutions founded with a certain purpose)

The decision to use the financial leasing as a form of business financing in relation to the classic loans is undoubtedly supported by certain reasons. Firstly, is there a possibility of getting a loan and secondly, the terms under which the requested loan can be realized.

Financial leasing is usually compared with bank loans. The essence of financial leasing is that its user does not use the funds for a necessary investment. Under investment we mean the investing in certain equipment for economic usage. That is why the financial leasing and bank loans are compared and the similarities are looked for.

In some of its characteristics the financial leasing resembles the bank loan, e. i. loan of some financial institution. Similarities between the loan and financial leasing are the following:

- loan is paid in installments, but it is not the strict rule
- interest represents the price of the debt,
- the way of accounting records and
- some questions of procedure related to the way of doing business of providing the necessary funds.

However, financial leasing has significant characteristics by which it differs from the classic way of providing the necessary funds. They are the following specificities:

- 1) financing is approved always for the certain subject
- 2) the supply of leasing subject is done by the leasing provider and not the future lessee e.i. leasing receiver
- 3) lessor is the owner of a subject while the leasing contract lasts, e.i. until the lessee finally decides (Radomirović, 2012)
- 4) leasing subject always represents means of securing the payment so the lessors do not have to demand any other means of security
- 5) lessor has full protection while the leasing contract lasts; lessor is protected in case that the leasing fee is not paid, in case of bankruptcy or liquidation of lessee and in the case of destroying or damaging the leasing subject (Andrašić, 2008).

All of the mentioned specificities of leasing deserve certain commenting.

We should say that the loan, as a classic way of providing necessary means, has also to justify the purpose because of which it was requested. In all kinds of loans the bank demands to know what is financed by a requested loan. Still, the loan user eventually, manages the means provided, since the loan is put on the appropriate business account that belongs to the loan user. It is possible to do this in another way as well. By receiving the funds on his own account, the user can avoid the purpose of the requested loan. There is also the possibility of forced payment of funds from the business account of the loan user which is timely unexpected for him. In the financial leasing business, the investment is always put into a specific subject. Leasing is not in the situation to manage the funds.

Lessee makes appropriate business contacts with the provider of leasing subject. These arrangements are necessary. The lessee determines, accurately defines his needs and he learns the terms under which he can provide the equipment for further economic exploitation. However, the lessee does not sign the contract of delivery. The reason is

simple – the lessee does not employ his own means so he cannot have the role of a party in the supply contract. The lessor provides the leasing subject.

The lessor is the owner of the subject based upon the supply contract. This is a significant characteristic of a financial leasing business. Also the lessor is the owner of the leasing subject while the contract lasts. Actually the lessor is the owner of the subject until the final determination of the lessee. It is known that the lessee, after the contract expires, has an option to buy the leasing subject, to prolong the usage with another contract and finally, to give back the used leasing subject.

Ownership of the leasing subject should be the best way to secure the demand of the lessor. Lessor goes into business of finance with the intention to generate certain profit by doing business. The lessor gets his invested funds successively by receiving payments from leasing fee. The structure of leasing fee contains the part of expected revenue of the lessor. Ownership of the leasing subject is enough to secure the payments and successful realization of the entire business. This fact can be realized by the finding that with the classic loan relationship there are certain ways of security. Still, there are notable differences. In the loan relationship, the bank is not the owner of any subject which secures the deal. Bank does a selection of the offered possibilities for security. Lessor knows, beforehand, what the leasing subject is, which makes the decision about financing a lot easier. So, by investing certain financial means the lessor can check the market of that subject (goods) which he will own.

Lessor is protected from the most important risks. Not paying the leasing fee, jeopardizes the interests of the lessee more. The rule is that by entering into leasing business, the lessee already has expenses. Their further piling is completely unnecessary to lessee and can lead to damaging the normal business process. Lessee provides certain subject, equipment for further economic exploitation and expects adequate income and profit from the total business. Lessor, as an economically stronger party, in case of not paying the fee by the lessee has many options as he is the owner of the leasing subject. All those options, give the lessor higher security in relation to some other forms of security with classic loan relationship.

Lessee, because of various circumstances, can become bankrupt or liquidated. The lessor, as the owner of the leasing subject, is protected by the excluding right. With classic loan relationship some forms of security give the right of priority to payments from the insolvent-estate. However, this form of security is not secure like the return of the possession, e.i. using the excluding right. The leasing provider realizes his rights through obligatory leasing subject insurance, in case of destroying or damaging the leasing subject.

## ***THE ADVANTAGES OF FINANCIAL LEASING***

The significance of this way of financing determined its relatively fast development. Financial leasing business by its scope grows in almost all market economies. Scope and the importance of these business activities has the assumption of certain advantages when compared with other forms of business finance(Ivaniš, 2012).

The advantages of financial leasing are the following:

- 1) lessor is the owner of the leasing subject;
- 2) financing of 100% of supply price of business assets without additional guarantees;
- 3) lessee manages his financial flows more easily;
- 4) the possibility of equipment renewal;
- 5) lessee pays the whole time while the equipment lasts;
- 6) new founded, small and medium enterprises solve their needs for investments more easily;
- 7) simpler procedure in relation to other forms of finance;
- 8) lower transaction costs;
- 9) specialization of lessor.

In its essence, leasing is the form of business financing, so in order to realize its advantages we have to start with the financial reasons. When compared with other forms of business financing, the key advantage of financial leasing comes from the fact that the lessor, the financier, is the formal and legal owner of the leasing subject while the leasing contract is valid. Therefore, generally speaking, in circumstances when a business subject has the need to invest in certain equipment, and he does not have the possibility of using classic bank loans, ownership of the subject is a great security for the lessor. If we can expect the financial leasing to be realized under the similar terms as some form of classic finance, the business decision is proper for the lessee and provider. This fact brings forward some other positive characteristics that are specific for the act of leasing business.

Lessor, while doing a specific action the essence of which is to finance someone else's needs of investment, takes a certain risk. After all, every form of financing, classic way of loans as well, is a risk in some degree. However, the lessor invests the financial means and becomes the owner of the leasing subject. Ownership over the leasing subject enables the lessor to have greater freedom in taking the risk of success of the business. The worst thing that can happen to lessor is to not get paid the leasing fee by the lessee because of the failure of his entrepreneurial idea. In that case the lessor turns to protecting his rights. This form of protection is very efficient. As the owner of the leasing subject, which he is by the leasing contract, given to be used, the lessor takes the possession over the leasing subject. It seems that this puts the credit rating of the lessee in the second plan. It is clear that the credit rating here is not an important element for evaluating the business capability of the potential user. It is about the potential financial lessee and his probably, somewhat lower credit rating.

The ability to finance 100% of the purchase price of some business asset without the additional guarantees which brings additional expenses, is the direct benefit for the enterprise that needs business financing.

Lessee manages its financial flow simpler, because the obligation of paying the leasing fee is foreseen by the maturity and agreed amounts.

Lessee gets the possibility to renew the equipment and to provide the advantages of modern technologies in the safest possible way.

Financial leasing enables the user to economically exploit the obtained equipment prolonging the payment during the equipment is functional.

This is how the leasing satisfies the terms of „golden rule of finance“ in market economies, according to which the investment should be financed during the entire

time of its usage. Leasing does not require additional financing. Additional financing is followed by new expenses.

Newly founded enterprises mostly commence their business activities as small enterprises. By successful business making, and because of some other economic reasons, small enterprises become medium enterprises. Regardless of the size, with the newly founded enterprises it is difficult to speak about their credit rating. Their history of business is not representative enough and does not allow to draw real conclusions. Balance sheet and profit and loss report cannot be the right parameter for evaluating the credit rate in a short time period. Actually, thus determined credit rate is either unsatisfactory or insufficient for serious debt of these economic entities. For such enterprises, which have a high potential of growth, leasing can be the only way of financing of growth. Same economic destiny affects the entrepreneurs as well.

The problem becomes more complex by the fact that newly founded enterprises and entrepreneurs in balance sheet have little or relatively little assets. In other words, the assets which are managed by such business entities cannot provide enough security for classic bank loans. Moreover, because of the same reasons, one cannot expect obtaining bank guarantee from another bank. So, two dominant factors – credit rating and appropriate security of paying back the loan, as unsatisfactory, do not give the foundation for classic business financing by loans.

Lessor, economically justified, can make a decision to finance the equipment of potential user based upon a very important element – ownership over the leasing subject. Lessor has to conduct proper assessment of supply and demand of the leasing subject. We think of the possibility to sell the leasing subject on the market fast and for the real price. It is understandable that the decision is easier when the leasing subject has a good degree of tradability.

Reaching the decision to finance leasing business according to one's own procedure, from the point of view of time lasts shorter compared with other forms of business finance. In relation to the classic loans, the check of credit rate is faster and simpler. Furthermore, the lessors do not have the reason to demand additional funds that would, along with ownership, protect the invested funds. With classic loan relationship, banks have the set of different various instruments and they secure the loans mostly by putting mortgage on the asset of the debtor. The process of mortgage takes time.

As we said before many times, the lessor finances the supply of the leasing subject. Lessee mostly, knows the business partners, e.i. the market in which he can find the necessary object for the needs of his business. Lessor also often cooperates with the suppliers of lease. Knowledge of the market and business cooperation are a good foundation for lowering the transactional costs.

Lower transactional costs are important for the lessor because of his competitiveness. Lessee, on the other hand, will pay lower total price for the agreed job.

Specialization of lessor, and gained experience are and additional advantage of financial leasing. This advantage can be seen from various aspects. First of all, the conditions under which the lessor can sign a contract about supply. Then, the lessor can make arrangements with the lessee about various other services that are within the business's framework and which are necessary for the job.

Lessor, when he specializes in his job, has more options to get the leasing subject under very favorable conditions. The reason for that is the cooperation with the suppliers of the lease and the flow, in terms of value of the businesses, which the supplier realizes through the lessor.

## ***DISADVANTAGES OF FINANCIAL LEASING***

Leasing business as a form of financing also has its disadvantages. The most important disadvantage of leasing as a form of business financing is the price of this way of financing. Financial leasing can be in the final outcome more expensive in relation to other forms of borrowing. In short, the leasing business is done by the companies that do not have their own funds so the financing is done by the borrowed funds. Borrowed funds, no matter which source they come from, have their price. To the cost of borrowed funds the leasing company adds all the expenses connected to leasing transaction and their own profit.

The potential of domestic lessors comes mostly from foreign borrowed funds. Also the founding capital originates from foreign capital. Therefore, all the placements, e.i. all the contracts which define leasing businesses contain protective currency clause. Unstable national currency directly influences the price of leasing of finance.

One of the disadvantages, that finally affects; lessee is the inability to influence the buying value of the leasing subject. Buying value of the leasing subject is different not just with different suppliers, but also because of the conditions and terms by which the lessor and the supplier do business. Interests of the lessor and lessee in the conditions of the relatively weak competition are not the same. Lessee has an economic interest for the buying value to be as lower as possible. This makes his obligations towards lessor lower. Lessor, on the other hand, calculates various expenses starting with the buying value of the leasing subject. Effects that the expenses have on nominal interest rate reflect on effective rate of leasing fee. There is also the possibility that low interest rates lessor compensates by charging other high expenses.

In financial leasing we can hardly say that one of its disadvantages is the fact that the lessee after the contract expires does not become the owner of the leasing subject. Most often, the lessor gives the option of buying the subject by a symbolic fee, which is around one monthly installment, with is 1% of the buying price.

The level of development of Serbian economy, the value of GDP, employment, total debt and current and future payment obligations according to the debt impose inevitability of change in the state which is, mildly put, unsatisfactory. Investments in production and the following activities which enable the continuous growth of newly created value have to be the only strategy of our economy. The lack of financial funds, as one of the main characteristics of our economy, can and should be solved by various forms of financing. Along with the classic methods of providing the necessary investments, financial leasing is in the market economy an important part of total financial market. By connecting the producers – the suppliers of leasing subject and the users of such economic goods, lessor employs the funds and provides profit. It is not about the usual mediation which has the result of bringing profit, as is usual in business. The advantages of financial leasing are many.

Unstable Serbian economy is exposed to various dangers. One of the big problems is inflation as a general increase in prices. Insufficient domestic supply causes often disorders of relationships in the market. The solution is sought for in import. Insufficient export in relation to the total import influences the stability of national currency. Central Bank is forced to lead mostly restrictive monetary, credit policy. In such circumstances, bank potential uses, besides the direct one, other channels of placement as well. Financial leasing represents the safe way of efficient usage of current funds. Every financial arrangement is exposed to risk. The level of risk of transactions in financial leasing is lower in relation to the majority of different forms of employment of funds. The fact that the lessor is the financier of the business and the owner of the leasing subject until the final completion of obligations of lessee, significantly influences the security of placement. By its actions, the lessor protects the funds regardless of their source.

Real value of funds which is used in transactions of financial leasing is protected. The foreign capital protects its real value in relation to the domestic currency by currency clauses. The essential is the question of the price of such capital. The terms under which the financial leasing transactions happen directly depend on the source of funds. Placements of financial leasing are long-term. Funds that are used in leasing transaction are in the inventory. So, they cannot pressure the unproductive consumption. We are talking about the inventory of various equipments, construction machines, industrial plants, agricultural mechanization, carts and real-estate.

Entrepreneurial idea has to answer the question of how it will be financed. Leasing is the simpler form of financing investments in relation to classic ways. Successfully realized business idea makes its owner to accomplish greater and greater profit. It is hard to win over the market, so the lessee has to invest additional efforts. He continuously upgrades his business activity and expects the effects of his activities. Payment of liabilities which has to be done by the lessee, provides him various options. He can become the owner of the leasing subject, to return it and to replace it by the technologically better one, and, if that is right for the process of business, to make a new leasing contract.

The lessor makes the contract about the supply with the leasing subject's producer. The producer of leasing subject makes an agreement of production with the known buyer. By providing the cash flow of funds necessary for the needs of his own business, the supplier of the leasing subject has created important conditions for the stable production. Objectively, there are no justified reasons for an increase in prices.

Lessee, guided by the economic reasons, has to take care of efficiency of his own business, in the long run. By economic exploitation of leasing subject, the equipment, he provides the income from which he pays the fee as his primary liability taken over by the leasing contract. The investment pays for itself in the time during which the leasing subject is used. For keeping the market positions, stable prices are most often the key factor. Especially in the conditions of relatively good competition.

By investing the funds in the transactions of financial leasing the owner of the capital has the motive of generating profit. There are many reasons for the interest as the price of capital to be stable, and even lower in relation to classic forms of placement. First of all, such placements are long-term. Secondly, the degree of security, because of the keeping of ownership as a category, it is higher in relation to some other forms of placement. Finally, the part of the invested funds comes back with

the first installment of leasing fee. Since the banks are usually the founders and the creditors of lessors, the financial leasing transactions can significantly influence their credit multiplication. Deposits of lessors are brought back to the bank flows and they contribute to the bank's liquidity.

## ***LEASING INDUSTRY IN SERBIA***

In the world and European economy the business of financial leasing is spoken about, in the relatively developed form, from the fifties of the 20<sup>th</sup> century. Leasing business in Serbia, if we look at it from the point of view of the law, is relatively new. In May, in 2003 the legal framework is created for conducting leasing activities, the Law on Financial Leasing. Law on Financial Leasing suffered some additions and changes in 2005 and in 2011, and we can say that they are justified but not enough.

The level of development and the terms of business in the Serbian economy imposed the need for legal framework for the development of this economic activity and it is simply unclear why this field has not been legally arranged much sooner. Because if we start with the essence of leasing business and the fact that they represent the form of financing of supply of equipment and other goods, we cannot find any proper reason which would justify the neglecting of leasing business. The condition of Serbian economy e.i. the chronic lack of necessary funds, the condition of the current technology, the industrial and other equipment and the current capacities, abandoned capacities, unemployment etc. are the reasons for which this field should be regulated much sooner.

Serbian economy has a chronic lack of funds. Financial leasing as a form of business finance enables the realization of business projects and when an investor does not have the funds (Kastratovic et al., 2013).

The existing technology, the condition of industrial equipment and other production and non-production capacities, in almost all economic activities is such that one should really think about its replacement and modernization. For the necessary export of our economy, one of the first conditions is competitiveness. The precondition of competitiveness is modern production and providing services in an appropriate way. One of the ways of getting the modern equipment in the lack of own funds is leasing.

Finally there are many production and other business capacities whose employment is insufficient or even without any usage. Different business ventures, are not realized because of lack of capacities or the lack of funds for building and supply of equipment. Leasing can provide putting into use of the existing capacities and getting the necessary equipment.

Law on Financial Leasing of Serbia created legal options for the start and development of new and so far unapplied business in domestic economy. Very soon after the law was voted, ten specialized economic organizations were founded, in the status of the limited liability company whose business activities were financial leasing.

Ten years after the law regulation of this field, and since the first leasing companies are founded; the leasing industry market in Serbia has significantly progressed in every way. At the end of the first trimester of 2013, in the sector of financial leasing in the Republic of Serbia, 16 companies did business.

*Table 1: Leasing companies in the Republic of Serbia in 2013.*

1. CA Leasing Serbia d.o.o. Belgrade	9. Porsche Leasing SCG d.o.o. Belgrade
2. ERB Leasing a.d. Belgrade	10. Procredit Leasing d.o.o. Belgrade
3. Hypo Alpe-Adria-Leasing d.o.o. Belgrade	11. Raiffeisen Leasing d.o.o. Belgrade
4. Intesa Leasing d.o.o. Belgrade	12. S-Leasing d.o.o. Belgrade
5. LIPAKS d.o.o. Belgrade	13. Sogelease Serbia d.o.o. Belgrade
6. NBG Leasing d.o.o. Belgrade	14. UniCredit Leasing Serbia d.o.o. Belgrade
7. NLB Leasing d.o.o. Belgrade	15. VB Leasing d.o.o. Belgrade
8. Piraeus Leasing d.o.o. Belgrade	16. Zastava Istrabenz Leasing d.o.o. Belgrade

*Source: www.nbs.rs*

Founders of 13 leasing companies are banks, members of bank groups or other financial institutions, founders of two leasing companies (LIPAKS d.o.o. Belgrade and Zastava Istrabenz Leasing d.o.o. Belgrade) do not belong to the financial sector. To that group we can add Porsche Leasing SCG d.o.o. Belgrade, whose founder is the bank that does business as a part of Porsche group and which is specialized in the services of financing of the product form the selling program of this group.

10 lessors total have 100% or have a majority ownership of the foreign legal entities, 5 lessors total have 100% or have a majority ownership of domestic entities (four of them are in the ownership of domestic banks with the foreign capital) and in the ownership of domestic bank with the foreign capital and foreign legal entity, and there is one lessor with 50% of ownership in capital.

Table 2: Overview of the structure of ownership of the lessors.

Lessor	Ownership	% ownership
1. CA Leasing Serbia d.o.o. Belgrade	Credit Agricole Bank Serbia a.d. Novi Sad	100
2. ERB Leasing a.d. Belgrade	EFG New Europe Holding b.v, Amsterdam, Holland	48,63
	EFG Eurobank Ergasias s.a, Athens, Greece	25,81
	Eurobank a.d. Belgrade	25,56
3. Hypo Alpo-Adria-Leasing d.o.o. Belgrade	HETA Asset Resolution GmbH, Klagenfurt, Austria	100
4. Intesa Leasing d.o.o. Belgrade	Banca Intesa a.d. Belgrade	100
5. LIPAKS d.o.o. Belgrade	Mirko Žeželj	48,19
	Zoran Tanasić	48,19
	Sandra Džodić	3,11
	Milorad Milić	0,51
6. NBG Leasing d.o.o. Belgrade	National bank of Greece s.a. Athens, Greece	100
7. NLB Leasing d.o.o. Belgrade	Nova Ljubljanska bank d.d, Ljubljana, Slovenia	100
8. Piraeus Leasing d.o.o. Belgrade	Piraeus Bank s.a. Athens, Greece	51
	Piraeus Bank a.d. Belgrade	49
9. Porsche Leasing SCG d.o.o. Belgrade	Porsche Bank AG, Salzburg, Austria	100
10. Procredit Leasing d.o.o. Belgrade	ProCredit Bank a.d. Belgrade	100
11. Raiffeisen Leasing d.o.o. Belgrade	Raiffeisen bank a.d. Belgrade	50
	Raiffeisenbank – Leasing International GmbH, Wien, Austria	50
12. S-Leasing d.o.o. Belgrade	Steiermarkische Bank und SparkassenAktiengesellschaft, Grac, Austria	50
	Erste Group Immorent International Holding GmbH	50
13. Sogelease Serbia d.o.o. Beograd	Societe Generale Bank Serbia a.d. Belgrade	100
14. UniCredit Leasing Serbia d.o.o. Belgrade	UniCredit Leasing S.P.A, Bologna, Italy	100
15. VB Leasing d.o.o. Belgrade	VB-Leasing International Holding GmbH, Wien, Austria	100
16. Zastava Istrabenz Leasing d.o.o. Belgrade	Istrabenz D.D. Koper, Slovenia	95,2
	AD for holding, consulting and management of business Group Zastava vozila, Kragujevac – in restructuring	4,8

Source: [www.nbs.rs](http://www.nbs.rs)

Total number of employed in the sector of financial leasing has increased every year, and in 2009 it started decreasing, a trend which was continued in 2010 as well. In 2011 the number of employees varied from 471 to 485 and at the end of that year it was 482. During 2012 the number of employees decreased again and at the end of that year it was 426, just like at the end of the first trimester of 2013. The average number of employees per leasing company was 27. Overview of the number of employees in the sector of financial leasing by years and on the day of March 31<sup>st</sup> 2013 is shown in Table 3:

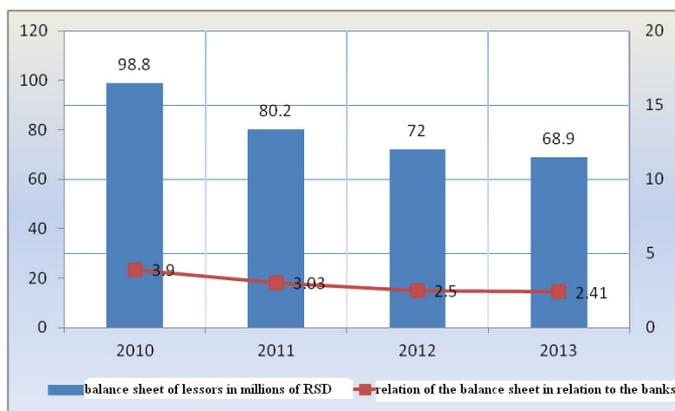
*Table 3: The number of employees in the sector of financial leasing*

Date	Number of employees
31. 12. 2005.	329
31. 12. 2006.	388
31. 12. 2007.	478
31. 12. 2008.	516
31. 12. 2009.	489
31. 12. 2010.	476
31. 12. 2011.	482
31. 12. 2012.	426
31.0 3. 2013.	426

*Source: www.nbs.rs*

In order to understand the potential of leasing industry in Serbia we have to bear in mind the movement of the total balance sheet of the lessor e.i. all of the sources of funds that are used for placements in the leasing business by the lessors. In the first business year, on the day of 31st December 2003, in the year of founding the leasing organizations balance sheet at the financial leasing market of Serbia was 54 million of Euros. In 2004, it was 323 million of Euros. In 2008 it was 1,384 million of Euros while in 2009 we saw a fall of balance sheet to 1,161 million of Euros. This happened because of the world economic crisis and its influence on all economic activities, and its influence on the financial leasing market. The falling trend of balance sheet was marked until this year when in May 2013 it was 615 million of Euros.

Balance sheet of the lessor compared to the one of the banks in 2003 was 1%, and in the following years until 2009 it was between 5% and 7%, and in the chart number 1 we can see that in the last years this percentage decreased significantly and that currently it is 2.41% total.



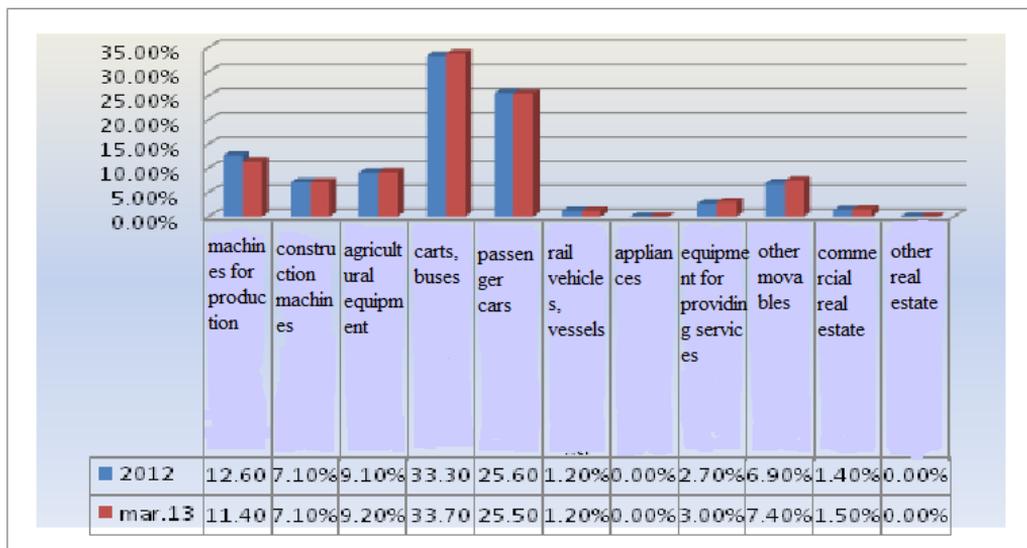
*Graph 1: Relation of balance sheet of banks and the lessors*

*Source: www.nbs.rs*

By analyzing the structure of balance sheet of leasing companies, the largest amount of placements based upon financial leasing is financed by foreign loans. Liabilities of the loans received from abroad on the day of 31st March 2013 comprised 80.2% of total balance liabilities, while the placements based upon financial leasing comprised 80.8% of total assets. Foreign creditors of the lessors are usually the founders or the legal entities that do business within the same bank group. At the end of the first trimester in 2013, the share of the long-term loans in the country enlarged in relation to the 2012 with 3.3% of total balance liabilities, as well as the share of the short-term loans in the country from 1.7% (at the end of 2012) to 3.1% of total liabilities.

At the end of the first trimester of 2013 there has not been great changes in the placements' structure according to the leasing subject (Chart 2) in relation to the previous year, so the greatest share, still has the financing of carts, minibuses and buses with 33.7% (33.3% in 2012).

According to the share next come passenger cars with 25.5% (25.6% in 2012). The share of financing the agricultural equipment increased from 9.1% to 9.2% at the end of the first trimester of 2013 in relation to the 2012, as well as the share of financing the equipment for providing services from 2.7% to 3.0% and the other movables from 6.9% to 7.4% while the share of financing the machines and equipment necessary for production decreased from 12.6% to 11.4%. The share of financing the construction machines and equipment stayed at the same level (7.1%).



Graph 2: The structure of placements according to the leasing subject

Source: [www.nbs.rs](http://www.nbs.rs)

For measuring the significance of leasing business one has to have in mind the financial leasing market structure and the level of competition of the lessors. The most significant leasing organizations according to the market share in Serbia in 2013 are:

- 1) Hipo-Alpe Adria leasing with 21,3%
- 2) UniCredit Leasing Serbia d.o.o. 9,9 %
- 3) Intesa leasing 9,0%
- 4) NLB leasing 7,6%
- 5) VB leasing 7,4 %
- 6) NBG leasing 7,1%
- 7) Sogelease Serbia 6,8%
- 8) Rajfajzen leasing 5,9%
- 9) S- leasing 4,3%
- 10) CA Leasing 4,2%

The most reliable indicator for measuring the share is Herfindahl-Hirshman's index (HHI). It is calculated as the sum of squared market shares of the participants (lessors) and it represents the indicator of the competition type. By its value this indicator gives a proportionally greater significance to the market share of the large companies. The index can have the value close to 0, when we speak about the perfectly competitive market, and it can go up to 10,000 when we speak about the monopoly.

The market is classified according to the values of HHI:

- $HHI < 1,000$  – competitive market
- $HHI < 1,800$  – market with moderate concentration and
- $HHI > 1,800$  – highly concentrated markets.

Financial leasing market is in the category of competitive market, which is shown by Herfindahl-Hirshman's index, which was 964.2 on the day of 31st March 2013.

## **CONCLUSION**

In the following period, the leasing industry should represent the support to development of entrepreneurship, small and medium enterprises, and thus to influence the general economic growth and development of Serbia. In the conditions of lack of own capital and favorable credit, leasing allows to small and medium enterprises to get the equipment in the fast and cheap way and to modernize their business.

The supply at the leasing industry market in Serbia is pretty equal, the reason for that a very harsh competition among the leasing organizations e.i. around ten leasing organizations have pretty similar market share in the total selling which results in favorable interest rates for the clients and overall better conditions. The leasing industry market was stabilized in 2012 and in the first quarter of 2013 it increases by 8.8% in relation to the same period last year.

In the following period the leasing companies should focus on financing of agriculture e.i. agricultural machines and equipment, to adjust their products to the seasonal character of agricultural production and to make the installments plan in accordance with the cycles of agricultural production. A great potential for leasing industry lies in the field of financing the energy production from renewable sources, because following the trends of the developed countries we can expect that our country will turn to significant usage of these resources.

An important aspect for the development of leasing is the recently introduced possibility of real estate financing. In the countries of the region, every fourth and somewhere even every second leasing contract is related to the real estate.

Legislators and the ministries should take into consideration the objections of the leasing companies, in order for leasing to be introduced as a subsidized financing of the state, and to liberate the leasing fees of the VAT, to include the supply via leasing into tax loans with the goal of making this form of financing cheaper and more available, because all of the mentioned make it clear that leasing has a significant influence on economic growth and the development of the overall economy.

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## ***IMPACT OF TOURISM ON REGIONAL ECONOMIC DEVELOPMENT***

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**Abstract:** The paper stresses the impact of tourism on the economic development, especially on the regional economic development. Using that aspect of development, the aim of this paper is to discover a part of potential factors for mutual regional development of the Balkan Peninsula states, especially in the sphere of tertiary activities and tourism in that frames. Further detailing will be direct on utilization of natural wealth as favorable climate conditions and natural beauties as comparative advantage of the Balkan region that fortunately remain almost untouched by the contemporary polluters present in the other parts of the world. This kind of analysis must stress not only the current situation, but especially have to determine future directions through different programs in order to achieve positive impact on development process.

Using natural benefices as a real development factor will be examine through a theoretical model for Republic of Macedonia, and then in a broader region with which Macedonia has natural relations. That is because Republic of Macedonia is a small country situated in the southern part of the Balkan Peninsula and it is a natural bridge between east and west, north and south. Priorities in Macedonian development perspectives are: to increase the economy efficiency and to achieve sustainable development; to increase employment and improve social conditions; to develop open economy and to ensure necessary domestic products protection; and export orientation of the economy. In order to accomplish those basic directions and development priorities, a number of limiting factors have to be overcome. One of the possible solutions may be creating tourism regional development strategy, using the possibilities for attracting visitors from large metropolises. That gives possibility for using tourism and especially its ecological aspects as one of the most important segments for realization of the regional development of Macedonia and a broader Balkan region.

**Key words:** Economic Development, Regional Aspect, Tourism, Factors for Economic Development

**JEL classification:** O18

**UDC** 338.48:332.1(082)

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## ***INTRODUCTION***

The concept of economic development with the incensement of material production and newly created value in a country and which is desired to be fulfilled from year to year, in modern conditions of globalization of this conceptual determination of the economic development surpasses the national borders. To take into consideration the theoretical and practical possibility for planning, organizing, accomplishing, and analyzing of the totality of such economic development except of branch (structural) and dynamic (temporal) aspect and also from territorial or rather spatial and regional aspect, we come to an approach of regional integration as a conscious activity of economic subjects, and which completely spontaneously attaches to the natural interactive dependency of things, objects and subjects independently on which side of the borders drawn by man they are. So, economic activities are simply located in a certain geographical space and on this geographical space filled with economic activities, and subject that accomplish them and mutual relations and influences between them, it turns into economic space. During this, every economic activity which as a real and social phenomenon happens on some point or such determined space, further it achieves effects which are concentrically spreading in closer and further economic surrounding. To start with the most basic economic theory, the regional aspect of the regional development puts compresses to minimization of expenses that come in surmounting the space meaning on concentrating on needed factors of production on one place and bringing products and services nearest of to the spenders. To accomplish all this, that is to say accomplishing the highest economic effects with the least expenses, numerous problems need to be solved, assignments and aims which together form the content of the spatial aspect of the development. Rational and efficient accomplishing of the economic activities from the aspect of space demands knowledge of economic laws and principles that regulate economic activities from spatial and territorial aspect, that is to say it is inevitably to involve knowledge and principles of spatial economics.

To use two-dimensional access to spatial economy and regional development in its frames, that is to say applying of the knowledge for the regional development in surpassing of inadequate development between separate regions in one national economy from one side and the need to bring into accord the development between regions that belong to different countries or rather with parts of different economic systems and to homogenate natural systems in the same time as a second and much more complicated aspect of this problematic, this work discusses some moments of the second aspect of the regional development. Taking into consideration the size and complexity of this problematic and the spatial limitation for the text of this kind, this work not even from far away aspire on holistic processing of the previously mentioned problematic, but it is only one simplified theoretical model for bringing into accord the inner state or regional development between states of a geographical region like the Balkan Peninsula and the countries that are embraced, to start with the Republic of Macedonia as a part of that region. The further specification refer to the try to analyze the place and the part of tourism in context of regional development, especially its ecological aspects and the maximum permitted abstraction from theoretical aspect of all other activities and branches on that geographic region.

## ***TRANSITION AND REGIONAL DEVELOPMENT OF THE BALKAN PENINSULA STATES***

Trying to analyze integrally any aspect of the economic activity of the Balkan Peninsula countries, the first connotation that is valid for most of them is that they are "countries in transition". This term only shows existence of some changes - but the kind of changes may be very different. The nomination as "countries in transition towards market economy" closely specifies the character of the changes that are activated in the economical practice of those countries, which are pure opposite, a 180° turning in relation to the ideology which cultivated on their scope for 50 years raised to a level of "general truth" and on which the total space for discussion and different thinking was closed when the ideological prejudices are almost completely surpassed, pluralism is introduced in all spheres of living (political pluralism, pluralism of ownership, markets pluralism and so on). In such conditions more brave names started to be used "contemporary market economy", "stock economy", "intrapreneuring economy" and similar, and in any case we talk about economies that are more or less successful and they need more or less time to accept the market imperatives. In the same time and most commonly those are small economies which have to be open economies firstly towards the closest surrounding and then towards the rest of the world. They can't be isolated from the process of globalization which is happening in every field of human living - from economy as essential for physical existence, to every sphere of social activity: education, science, culture, art, entertainment etc.). On that way we come to the necessity of development. The countries from South Eastern Europe are named as "countries in development". Taking the development into consideration as an imperative essentiality and as a common characteristic of the countries in the region, as a road which should be passed through for accomplishing higher economic values and getting closer to the more developed countries, naturally imposes the need for cooperation in order to merger their advantages and minimizing the weaknesses and expenses. The imperative for development of the countries from the above mentioned region impose as an absolute need, and there is a need for development not only for the countries which have to accelerate theirs development, but for the developed ones also. Political, non-political, financial and other different organizations and institutions in developed market economies are helping the development process through different forms of help: financial, technical-technological, organizational, staffing and similar kinds of help. Having that in mind, in order to explain the potentials of "sub-regional connection" probably the optimal solution for Balkan Peninsula States is to have their own development programs and to adjust them to the needs of every individual sub-region. Also, there is a need for encouragement of all local and non-government organizations and institutions in the sub-regional actions.

## ***ECONOMIC DEVELOPMENT FACTORS (REPUBLIC OF MACEDONIA CASE)***

The realization of the economic development has a multidimensional character and multiplicative effects. That marks two-sided interactive dependency of the factors of development and the effects of development of a country, area, region and so on, usually using natural conditions that is to say natural richness on which the development would be founded on, especially in the area of tourism. However, this non-professional understanding is negated with many comparative analyzes for the correlation of natural richness and the steps of development generally, or the development of tourism specifically. Simply, the natural conditions are almost unchangeable, and the degree of development of one area changes through historic periods. Factors that determine the economic development of every country, wider area or region are numerous. But they are not equally important, so there is a need for further discussion of their importance. The possibilities and the perspectives for the development of tourism in Republic of Macedonia will be discussed through a short analysis of the following groups of factors: (Mojsoski, Karadjova, 2002)

- Factors of socio-political nature;
- Scientific-technological progress;
- Capital (sources of investment funds);
- Labor;
- Natural resources;
- Infrastructure;
- Entrepreneurship and management, etc.

All these factors affect across countries and regions, in developed as well as underdeveloped countries, having in mind that in some cases they have a stronger effect, in others less. Hence, the importance of economic development policy is accomplished by a *combined and skillfully usage of the factors*. The need is to evaluate the *factors real power* in each case, and not to use them only because they are disposal. This means that always should be determined whether and how is economically justified the use of any factor or it can be substituted or replaced by another factor, e.g. capital with labor, capital with natural resources and so on. Practically it is impossible enumerate and categorize development factors according to their priority or importance, nonetheless can be said that natural resources don't have pretension to be on the first place. No matter of the order and intensity of the separate factors influence, the importance of the economic development policy is directed to combination and skillful using of factors. On the example of the Republic of Macedonia as a country in development it is completely evident that in conditions of limited power of the other factors for development, its comparative advantage in the development (especially in the development of tourism) should be located in natural resources with which Macedonia disposal in abundance and in appropriately qualified and specialized working force.

### *FACTORS THAT HAVE SOCIAL-POLITICAL NATURE*

The factors of socio-political nature can be regarded as very important, almost crucial. When they act negatively or when they stop economic development, other factors do not come to the fore and the country stagnated and even regresses. To the contrary, when the socio-political conditions are suitable, the beneficial effects of other factors come to full expression. But it should not be understood that social and political conditions are only important. For example, after economic or political reform, social and political conditions become suitable, but they cannot automatically make the country developed. The economic development after any socio-political reform will depend on many other factors.

It can be listed several factors of social-political nature among which the most important are: (Biljanoska, Karadjova, 2006, pp.258)

- The nature of the economic and political system;
- Economic policy and
- Economic system.
- *Socio-economic and political environment*

The factors of socio-political nature include many important conditions related to *socio-economic and political order of the country*. Specifically, among such conditions which are development factors of socio-political rather than material nature can be mentioned: the level of expression of citizen's *personal rights* and *freedoms*, freedom of political parties activity, the nature of ownership, free market operation, the role of public authorities in the regulation of economic life, etc. Indeed these and other such factors constitute the *political system*, *economic system* and *economic policy* of the country as factors of its economic development. When these factors are suitable, they are important drivers of the economic development.

The changes in 90s in the economic and political system of Macedonia as well as in other former socialist countries were made in order to provide *better conditions* for economic development.

The second part of this group of factors is related to the *general situation* in which economic development takes place in one country, area or region. Any period of *economic* and *political crisis* is followed by stagnation in economic growth. On the decline of manufacturing great influence have also *social turmoil* and *labor unrest* expressed through mass strikes, and related to the failure of firms, layoffs, unemployment, corruption and similar phenomena.

The situation in the *international political and economic environment* is also important for the speed of economic development. Amid the tension of relations with other countries and threats to the territorial integrity of the country, a greater amount of GDP should stand for strengthening the defense, army etc. These shrink funds for personal consumption and investment, and thus directly constrict opportunities for faster development. (Mojsoski, Karadjova, 2002, pp.407)

Having in mind previous mentioned, Macedonia seeks to establish and maintain good economic and political relations with all countries, and in particular with the countries of the former Yugoslavia and neighboring countries. In this function are agreements for *free trade* concluded with some countries, striving for integration into the European Union, joining the World Trade Organization etc.

Can be concluded that without good socio-political conditions and good economic and political environment, cannot effectively be used other factors of economic development, no matter how they are favorable. However, among the factors of socio-political nature of particular importance can be mentioned the character of the political and economic system, and the role of the economic policy which means skillful use of all other factors, in accordance with objective economic principles. The role played by the economic system for economic development of the country or region is higher as the system is more stimulative for the economic subjects.

Economic development in general and especially in tourism can be realized only in conditions of peace, safety, social harmony, economic and political stability. A simple quantification of the influence of those factors can be presented through the number of tourists that visited Republic of Macedonia from 1989 when Macedonia was still in the Yugoslav community and it was considered as a safe and stable area till the year 2011. It can be noticed that in the whole analyzed period Macedonia still cannot reach the number of tourists from the period before become an independent state. 2001 is considered to be worst tourist year in Macedonia, because in this year come to a significant decrease of domestic and foreign tourist turnover. The basic reason was the political instability in Republic of Macedonia in that year.

*Table 1: Volume, dynamics and pace of the increase in the number of tourists in Republic of Macedonia, in the period 1989-2011*

Year	Total number of tourists	Dynamics of movement	Pace of increase	Domestic tourists	Foreign tourists
1989	1.032.072	These data is calculated from '91 and on because the data for '89 and '90 are in the frame of SFRJ		441.842	590.230
1990	974.537			412.126	562.411
1991	710.278	100	/	415.955	294.323
1992	585.699	82,46	82,46	366.637	219.062
1993	647.728	91,19	110,59	439.537	208.191
1994	613.154	86,33	94,66	427.740	185.414
1995	503.837	70,94	82,17	356.830	147.007
1996	476.205	67,05	94,63	340.068	136.137
1997	451.871	63,62	94,89	330.534	121.337
1998	575.080	80,97	127,27	418.410	156.670
1999	549.630	77,38	95,57	368.842	180.788
2000	632.523	89,05	115,08	408.507	224.016
2001	333.308	46,93	52,70	234 362	98 946
2002	441 712	62,18	132,52	318 851	122 861
2003	483 151	68,02	109,38	325 459	157 692
2004	465 015	65,47	96,25	299 709	165 306
2005	509 706	71,76	109,61	312 490	197 216
2006	499 473	70,32	97,99	297 116	202 357
2007	536 212	75,49	107,36	306 132	230 080
2008	605 320	85,22	112,89	350 363	254 957
2009	587 770	82,75	97,10	328 566	259 204
2010	586 241	82,54	99,74	324 545	261 696
2011	647 568	91,17	110,46	320 097	327 471

*Source: Statistical yearbook of the RM for 1999; 2004; 2007; 2012 (personal calculations)*

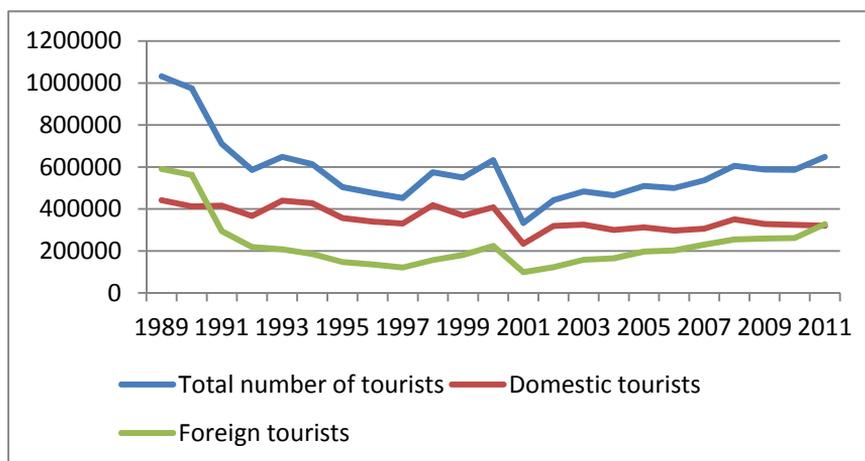


Figure 1: Total, domestic and foreign tourists in Republic of Macedonia (1989-2011)

### SCIENTIFIC-TECHNOLOGICAL PROGRESS

The scientific-technological progress as a factor for economic development is in close relation with investments, that is to say the capital as a factor for economic development. Scientific-technological progress is the most dynamic factor for economic development because using it we come to new and useful discoveries. The innovations are the essential moment in development and they have influence on the equipment, staff professionalism, products and services that are offered, enlarge productivity, and they improve working efficiency in generally. In relation with the use of scientific discoveries the possibility for transfer of scientific-technological progress shouldn't be neglected from one country in to another. That means not only the one's own but also the transmitted innovations are of a great importance and cannot be limited. Scientific and technological progress is a special and very important factor in economic development, both in developed and developing countries and regions.

The application of scientific and technological progress in tourism can be expressed by introducing: (Mojsoski, Karadjova, 2002)

- New products in production programs of tourist enterprises and enterprises that are complementary to tourism;
- New types of services;
- New materials for production and productive equipment;
- New types of energy;
- New effective ways of communication;
- New forms of organization of production and modern ways of managing the operations.

All these result with an increase in production efficiency. Innovations in technological processes, equipment, supported by professional staff leads to increased productivity and effectiveness, or to more efficient operation of tourist and other connected businesses. The difference in the application of technological progress between developed and less developed countries is that the developed countries are always concerned about scientific

discoveries and construction of new assets, as they already have in use discoveries previously found and constructed. In underdeveloped countries and regions however, the question is primarily to introduce in use assets already discovered, constructed and used in more developed countries. It should be mentioned the *transfer of scientific and technological progress* from one country to another or from one area of the country to another, which can be a very important factor for the economic development. Science is not an industrial product but intellectual creation and it must not be protected from foreign competition. Science can only be enriched in communications. It can always find its place in a wide range of fundamental, applicative and development researches.

In Macedonia's case, having in mind the level of development and other problems, accepting already known new productive technology solutions from developed countries is of great importance for the dynamics of development. Macedonia has significant scientific and professional personnel potential, with several research institutes, with development centers in many areas, which can *apply* technical, technological and other innovations that are found in industrialized countries. However unfavorable economic and political conditions and lack of funds prevent faster modernization of production processes.

### *AVAILABLE CAPITAL AND INVESTMENTS*

The shortage of investment capital is a big handicap for the countries in development. Investments directly affect economic growth, i.e. the growth of gross domestic product, so it is important in the investment policy to be taken care primarily for performance, despite attempts to provide the necessary scope and structure of investment required when there is so much sacrifice of current consumption.

The use of foreign funds is objective legality and not only as a transitional phase, but as a continuous phenomenon continues at the highest level of development, as the country emerges as both an importer and exporter of capital. It is important to follow the general indebtedness of the country. In the complete development of the Republic of Macedonia, there is a chronic shortage of capital, due to the low level of domestic savings (accumulation) and due to insufficient inflow of foreign capital.

In such conditions, but generally at the present stage of development of the Macedonia economy, there is an objective need for using *foreign funds* for investment. Foreign assets are in the form of *loans* and *credits* from international financial institutions and other countries, then as *joint ventures* of domestic and foreign companies and in the form of *donations* in various forms of technical assistance, etc. Especially significant funds are received from international financial institutions such as the World Bank and the International Monetary Fund, not only because of the scope of the funds, but much more because of the possibility for obtaining credits and loans from other sources.

At the end of 2012, gross external debt of the country reached level of 5.163,2 million Euros, or 68.6% of GDP. If we exclude repo transactions of the monetary authority, gross external debt amounted to 5.005,6 million Euros, or 66.6% of GDP which is relatively high participation (National Bank of Republic of Macedonia, Skopje, *Quarterly Report April, 2013*, pp.42).

Table 2: Gross external debt

<b>National Bank of the Republic of Macedonia</b>							
<b>Department of Statistics</b>							
(In millions Euros)							
	12/31/2006	31.12.2007	12/31/2008	12/31/2009	31.12.2010	12/31/2011	12/31/2012
<b>1.STATE DEPARTMENT</b>	<b>1,065.56</b>	<b>897.71</b>	<b>906.33</b>	<b>1,055.84</b>	<b>1,113.40</b>	<b>1,464.24</b>	<b>1,589.81</b>
<b>1.1 Short-term liabilities</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.21</b>	<b>0.41</b>	<b>10.88</b>	<b>3.64</b>
<b>1.2 Long-term liabilities</b>	<b>1,065.56</b>	<b>897.71</b>	<b>906.33</b>	<b>1,055.64</b>	<b>1,112.99</b>	<b>1,453.36</b>	<b>1,586.17</b>
<b>2. MONETARY AUTHORITY (Central bank)</b>	<b>51.99</b>	<b>9.01</b>	<b>9.15</b>	<b>71.74</b>	<b>76.42</b>	<b>310.82</b>	<b>234.24</b>
<b>2.1 Short-term liabilities</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>232.53</b>	<b>157.57</b>
<b>2.2 Long-term liabilities</b>	<b>51.99</b>	<b>9.01</b>	<b>9.15</b>	<b>71.74</b>	<b>76.42</b>	<b>78.29</b>	<b>76.67</b>
<b>3. BANKING SECTOR</b>	<b>269.88</b>	<b>387.85</b>	<b>384.07</b>	<b>468.22</b>	<b>578.78</b>	<b>564.75</b>	<b>618.82</b>
<b>3.1 Short-term liabilities</b>	<b>115.44</b>	<b>178.12</b>	<b>171.35</b>	<b>222.20</b>	<b>165.95</b>	<b>111.15</b>	<b>184.81</b>
<b>3.2 Long-term liabilities</b>	<b>154.44</b>	<b>209.73</b>	<b>212.72</b>	<b>246.02</b>	<b>412.83</b>	<b>453.61</b>	<b>434.00</b>
<b>4. OTHER SECTORS</b>	<b>786.69</b>	<b>1,115.71</b>	<b>1,321.91</b>	<b>1,346.99</b>	<b>1,398.48</b>	<b>1,622.68</b>	<b>1,682.18</b>
<b>4.1 Short-term liabilities</b>	<b>435.42</b>	<b>727.89</b>	<b>738.32</b>	<b>742.04</b>	<b>825.53</b>	<b>950.95</b>	<b>1,000.00</b>
<b>4.2 Long-term liabilities</b>	<b>351.27</b>	<b>387.81</b>	<b>583.59</b>	<b>604.95</b>	<b>572.95</b>	<b>671.72</b>	<b>682.18</b>
<b>5. DIRECT INVESTMENT S: Loans between related parties</b>	<b>329.30</b>	<b>430.77</b>	<b>682.70</b>	<b>837.56</b>	<b>938.64</b>	<b>884.12</b>	<b>1,038.11</b>
5.1. Liabilities to directly invested entities	13.16	6.11	7.40	7.49	11.97	14.75	17.29
<b>Short-term liabilities</b>	<b>12.16</b>	<b>5.61</b>	<b>6.54</b>	<b>6.57</b>	<b>10.91</b>	<b>14.75</b>	<b>17.29</b>
<b>Long-term liabilities</b>	<b>1.00</b>	<b>0.50</b>	<b>0.87</b>	<b>0.92</b>	<b>1.05</b>	<b>0.00</b>	<b>0.00</b>

5.2. Liabilities to direct investors	316.14	424.66	675.29	830.07	926.67	869.37	1,020.82
<b>Short-term liabilities</b>	162.51	219.65	246.37	271.24	310.19	267.56	361.24
<b>Long-term liabilities</b>	153.63	205.01	428.92	558.83	616.48	601.81	659.58
<b>GROSS EXTERNAL DEBT</b>	<b>2,503.42</b>	<b>2,841.05</b>	<b>3,304.16</b>	<b>3,780.36</b>	<b>4,105.71</b>	<b>4,846.61</b>	<b>5,163.15</b>
<b>GROSS EXTERNAL DEBT - without the commitment of the monetary authority in repo agreements</b>						<b>4,614.08</b>	<b>5,005.59</b>

*Since 2007 the source of data for commercial loans is questionnaire KIPO.*

*Since 2010 figure includes the accrued interest.*

*GDP data for 2012 are estimated.*

*Source: Adjusted in accordance to NBRM statistics*

*(<http://www.nbrm.mk/?ItemID=B9A274F7B2099341977F38557D6DDF83>)*

### *LABOR (WORKING FORCE)*

The working force is a factor of development that drives the means of work; it activates the capital and the natural resources. Although the number of the population is important, for the economic development especially is important it's structure which is expressed through several criteria: activity, education, qualification structure, age structure, structure from the aspect of agricultural and non-agricultural population, urban and rural population and similar. The structure of the population expressed through these criteria is one of the indicators that show the level of the country development. However we need to appreciate the real power of this factor. How important is this factor is reflected by the fact that most developed countries with lack of labor, tend to "imported" from developing countries, especially highly qualified and highly educated workforce. Indeed, the technical progress and the growth of labor productivity decreased demand for unskilled, but there is growing need for highly qualified labor.

The population as a factor of economic development occurs in two-fold role. On the one hand as a *source of labor* that performs economic activities, on the other hand, as a *consumer* of goods and services. Population with its size, structure and education level determines the production, and from the other side with purchasing power determines consumption. Having purchasing power in mind, Macedonia faces with the problem of poverty too. The first calculations of poverty rates dating from 1996, while the first policy documents (such as the National Strategy for Poverty Reduction, Ministry of Finance, 2002) are published in 2002. Trying to deal with this problem, in Macedonia has been

adopted and implemented *National strategy to reduce poverty and social exclusion in the Republic of Macedonia 2010-2020*. Based on this strategy, *the main strategic goal* for reducing poverty and social exclusion in the Republic of Macedonia is:

*Reduction of poverty and social exclusion in the Republic of Macedonia through better use of available human and material resources, improve living conditions, work conditions and social conditions for all citizens, systemic and institutional collaboration in a function of faster development, higher living standards and better living* (National strategy to reduce poverty and social exclusion in the Republic of Macedonia 2010-2020).

Tourism enables significant effect on employment as a macroeconomic category. Table 3 below compares the expansion of employment in the hotel and restaurants sector with expansion in the overall working population and shows steady growth in both the numbers and the percentage of the national workforce employed in the hotels and restaurants sector. It would also appear that employment in the tourism sector (hotels and restaurants) is in fact growing faster than in the economy as a whole, almost doubling between 2003 and 2007, compared with only 8 per cent growth for the wider economy as a whole in the same period. In period 2007-2010 the percentage of Hotel/Rest Employees in Total W/force remains about 3% (Karadjova, Diceska, 2011).

*Table 3: Hotel/Restaurant Employees in the Working Population 2007-2010*

	2007	2008	2009	2010
Total number of employed	434.041	434.858	426.252	435.524
Hotel/Rest Employees	13.040	13.265	13.668	13.371
Hotel/Rest Employees as % of Total W/force	3,00	3,05	3,21	3,07
% Growth of Labor force	1,01	1,01	1,01	1,01

*Source: Own calculations in accordance with Statistical Yearbook of the Republic of Macedonia 2011, 07.Labour Market, State Statistical Office*

Ever since the 1980's, Macedonia has suffered from a high rate of unemployment. At the time of independence the unemployment rate was close to 24 per cent. The restructuring of the economy has led to an overall decline in labor demand, and the overall low growth and lack of major investments have failed to create a sufficient number of job opportunities. Recent labor market reforms, including a new Labor Relations Law in 2005, are a step forward to improving the unemployment situation in Macedonia.

Currently, the rate of unemployment is 32 per cent. It should, however, be borne in mind that this figure does not take into account the large grey economy, as a result of which the actual number of unemployed may be significantly lower. Figure 2 below presents the contribution of hotels and restaurants to the total employment in Macedonia.

As the figure shows, while overall employment in Macedonia has fallen and then recovered to its earlier position in the period 2001 – 2007, the number employed in hotels

and restaurants in the same period has almost doubled, with particular growth evident from 2006. Employment in hotels and restaurants has grown from 1.6 per cent of the labor force in 2001 to 3.2 per cent in 2007 and 2009. This percentage in 2010 is 3.07. It is important to recognize that tourism is a specific sector where the introduction of technology does not significantly influence (i.e. reduce) the number of employees, as it is the case with other sectors. In other words, tourism services are more labor intensive than other services in the economy. According to data from the State Statistical Office, approximately 20,000 people in Macedonia are employed in tourism industry. However, there is a big gap between official government statistics and the situation in the field. Some estimates suggest that the number of undocumented workers is between 15,000 and 30,000. This should be the first area of intervention. In order to have relevant data and information a Tourism Industry Survey is absolutely necessary before taking any serious action. Regarding the structure, the Tourism Industry Workforce has a very favourable composition in almost all segments, in education, in ages and in terms of population growth (Government of the Republic of Macedonia, 2009, *National Tourism Development Strategy 2009 – 2013*, pp. 140).

In this respect we can conclude that in a situation characterized by high unemployment, development of tourism will contribute greatly to recruitment and the reduction of unemployment.

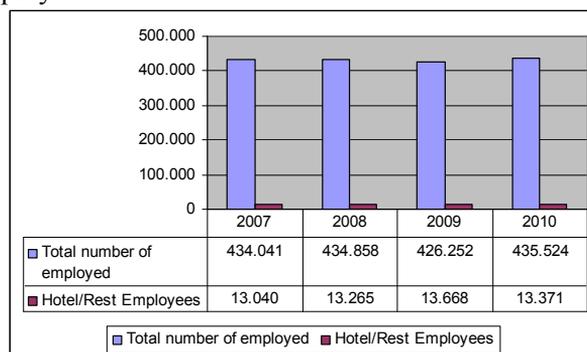


Figure 2: Share of hotels and restaurants in the total employment 2007-2010

Source: SSO, *Statistical Yearbook of the Republic of Macedonia 2011*, Skopje, 2011, and SSO web-site: [www.stat.gov.mk](http://www.stat.gov.mk)

## NATURAL RESOURCES

Natural resources are only one factor of economic development, which *in integration to other factors* (capital, skilled labor, etc.) can become *significant, but not always the most important* development factor (Mojsoski, Karadjova, 2002, pp.413). Talking about the factors of economic development of any country, it is good to dispose with all of them, because all of them are necessary. But no country may possess all natural resources that are needed by modern diversified economy. However, areas that have a *diversified natural resources* or *large reserves* from one source have more favorable conditions for development than the others. The natural resources should be managed rationally. This especially refers to resources that are not renewable, but also refers to the renewable resources (controlled volume of timber logging, rational use of agricultural land, etc.). Rational use of

natural resources has to be increasingly associated with *environmental protection* (Biljanoska, Karadjova, 2006, pp.264).

Although Macedonia has relatively small territory, it is characterized by *diverse, but not very rich natural resources*. Although natural resources are modest, they cannot be considered as limiting factor of development. However, it could not be set aside some particularly plentiful resource on which the economic development can be relied and which would have raised the development level of the country. Anyway, Macedonia has a lot of attractive factors for the development of lake tourism, river tourism, mountain tourism, spa tourism, hunting, fishing tourism, speleological tourism, urban and rural tourism, manifestation tourism, recreate tourism, cultural tourism, transit tourism etc. On the area of 25.713 km<sup>2</sup> Macedonia has available natural resources which are important factor for encouraging development. Generally speaking, though development cannot be based only on greater utilization of natural resources, certainly their greater exploitation in interaction with other development factors, primarily with investments and technological progress, they can form the basis for rapid economic development. A short overview of the attractive natural factors for the tourism development of Republic of Macedonia would include:

*Table 4: Attractive natural resources for tourism development in Republic of Macedonia*

Type		Nb.	Location
lakes	tectonic	3	Ohrid, Resen and Dojran
	artificial	25	Skopje, Mavrovo, Debar, Kavadarci, Kočani, Veles, Kumanovo, Strumica, Prilep, and other.
	glacial	28	Pelister
mountains		14	Šar Planina, Bistra, Stogovo, Korab, Jablanica, Galičica, Kožuv, Niče and other.
spas		11	Catlanovo Spa, Banjište, Kosovrasti, Negorci Spa, Bansko, Kežovica, Spa of Kumanovo, Spa of Kočani, Podlog, Istibanje, Smokvica
caves		164	Demirkapia gorge: Bela voda; Beauty of Bukovič; Alilica on Bistra; Makarovec in Pešti gorge; Jaorec near vilage Velmej and other.
fishing centers		11	Radika, Crn Drim, Crna Reka, Ohrid Lake, Kalimanci, Vardar, Matka, Mladost etc.
areas protected by law	national parks	3	Mavrovo, Pelister, Galičica
	special reservates	10	
	special areas with natural beauties	2	
	monuments of nature	55	
	memorial monuments of nature	3	

cultural monuments	Paleolithic period	2	Skopje, Skopsko Kale
	Neolithic period	12	
	Iron age	30	
	Pre-Roman period	29	Heraklea- Bitola; Isar-Valandovo; Marko Towers-Prilep; Stobi-Gradsko; St.Erazmo-Ohrid; Gorni Saraj-Ohrid etc.
	Roman towns	11	Štip, Prilep, Skopje, Ohrid, Gradsko, Bitola
	Early-Christian period	42	Gradsko, Ohrid, Struga, Oktisi, Resen, Štip, Bitola, Prilep, Demir Kapija, Vinica
	Churches and monasteries		St. Pantelejmon IX ct.; St. Naum IX ct.; St. Sophia XI ct; St. Kliment -Holy mother Perivleptis XIII ct.; St. Jovan Bogoslov Kaneo XIII ct; St. Konstantin and Elena XIV ct; St. Dimitrija XIV ct.; St. Mother of God Čelnica XIV ct; St. Erazmo XIV ct.; St. Stefan XIVct.; St. Mother of God Peštanska XIV ct.; Sv. Mother of God Zaumska XIVct.; St. Petka-Velgošti XV ct.; monastery Lešok XIVct.; monastery Kališta XIV ct.; monastery Matka Glumovo XV ct. etc.

*Source: Adjusted according to "Special base for the development of contemporary kinds of tourism in RM"- Prof. Naume Marinovski, Ph. D.Third International conference "Multiplicative factors for tourism development"- 2001*

The role of successfully conducted policy of economic development consists of rational choice of natural resources and their protection or their rational use. It is not a purely technical issue, but even more an economic issue. Namely, it is not enough to dispose of natural resources, but they need to properly evaluate them or rather, it is necessary to assess their value. Professional methods are used for the valorization of natural resources, specific calculations for different resources and even after so conducted evaluation can be calculated investment projects and elements required for their implementation. This is the only way to judge the economic feasibility of exploitation of natural resources. In that direction as an economical most profitable kind of tourism which offers a possibility for the development of tourism in Macedonia is rural tourism. The Strategy for Sustainable Development of the Republic of Macedonia, adopted by the Government in January 2011 among the six key areas directly composing sustainable development, on the fourth place is rural development including agriculture, forestry and tourism in rural areas. Such a place of rural tourism in the long term Strategy for Sustainable Development of Macedonia shows the strategic importance of rural tourism as a sector that needs to experience growth in the country and the position of Rural Tourism which is defined in the long-term development of the country (Ministry of Economy, Department of Tourism, 2012, *National strategy for rural tourism 2012-2017*, Skopje, pp.19). Starting in 2008, Republic of Macedonia in the international promotion of the country as a unique travel story make a serious step forward in the campaign "Macedonia Timeless". In the campaign were made 8 themed videos that cover all aspects of the best of Macedonian tourism offer. Especially important for rural tourism promotion was the promotion in

the most of the world's most influential media of natural, cultural, gastronomic and authentic tourist offer of Macedonia (Ministry of Economy, Department of Tourism, 2012, *National strategy for rural tourism 2012-2017*, Skopje).

### INFRASTRUCTURE

Infrastructural conditions are necessary condition for tourism development. No country or region can start or realize its economic development without the necessary infrastructure requirements, which means without "infrastructural opening of the area". In areas which do not have the needed infrastructure other developmental factors that exist in that area remain unused. In the case of RM it can be stated that great efforts are made for improvement of the infrastructural conditions.

Having in mind the general development level of the country can be concluded that Macedonia has *relatively good infrastructure conditions*. The country has a *solid road network* with modern line width that connects the cities, and with certain delay, but with major negative consequences Macedonia develops local road network between cities and villages. The total length of road network in Macedonia reached a 13,124 km of which 4,707 km are highways and regional roads, and 8,417 km are local roads of which only half are paved. About 80% of the total traffic takes place on highways and on some regional roads. Other regional roads have a low traffic with less than 2,000 cars of the day. The quality of the road network is fairly heterogeneous. While two-thirds of highways and regional roads have solid quality that is comparable to those in the surrounding countries, the quality of one-third of the regional roads and the all local roads network is pretty bad. According to some estimates, over 70% of local roads are of poor quality. This is primarily due to insufficient maintenance due to extremely low amount of funds allocated for that purpose decades ago (Ministry of Economy, Department of Tourism, 2012, *National strategy for rural tourism 2012-2017*, Skopje, pp.37). Disadvantages also can be noted in a poorly developed public transportation services to the most of the rural areas.

Almost all villages in the country are electrified, but in many villages and towns *lagging communal infrastructure*, particularly water supply and sanitation. Most of the territory is covered with the broadcast signal, and today more and with classical and mobile telephony. There are solid network of direct connections with international telephone, television and information systems (Internet). The high percentage of mobile phone users in relation to total population in Macedonia, together with the quality of mobile networks operators, which cover over 90% of the territory, offers the possibility for simple connection of the rural areas with the latest technological trends (Ministry of Economy, Department of Tourism, 2012, *National strategy for rural tourism 2012-2017*, Skopje, pp.38). In the first quarter of this year, 55% of households had access to the Internet, 58.9% of the total population aged 15 to 74 years use the computer while 56.7% have Internet. Internet access as one of the key factors for interactive communication with potential tourists can be used as a strategic advantage over other countries in the region.

## **CONCLUSION**

Macedonia adopted National Strategy for Tourism Development of the Republic of Macedonia 2009-2013" listing the priorities for the development of certain forms of tourism according to the characteristics of the region, as well as detailed National strategy for rural tourism 2012-2017. Republic of Macedonia as a tourist destination possesses affirmative tourist values which have meaningful tourist potential and which activation should represent one of the imperatives for the total development of a country in the next period. There is almost no country in the world which does not include tourism in its developing strategies, especially because of its multiplicative developing effects. Unfortunately, despite the comparative advantages that Macedonia has in the sphere of tourism, it has not have a big part in creating of the gross domestic product of a country. The participation of tourism is marginalized, which is a characteristic of undeveloped countries. The participation of tourism and hospitality industry in the creation of gross domestic product in RM in the period from 1991 to 2000 according to official data of the State statistical office moves from 1.7% to 2.1%. Further comparisons require some adjustment considering that in accordance to the National Classification of activities, overall economic activity is divided into sectors, divisions, groups, classes and subclasses and thus are separated 17 sectors with multiple departments, groups, classes and subclasses and there is no certain activity tourism in its frames. There is a sector *I. Accommodation and food service activities* and its participation in the creation of the GDP according to the production method of GDP creation in the period 2007-2010 ranged from 1.5 in 2007, 1.4 in 2008, 1.3 in 2009 to 1.1 in 2010. According to international standards this is exceptionally low level of participation, and tourism is in the group of activities which need special attention in long-term developing strategies in order to use its unused potentials, and its stimulative influence over the total economic development.

Macedonia is considered ac a country with a relatively high degree of environmental clean environment, and also as a country which is still not using its comparative advantages embodied in a favorable climate and beautiful nature. That offers great potential for development of tourism and especially for rural tourism development primarily for the large number of potential tourists from major urban centers that have surpassed the need to enjoy luxury accommodation and great facilities. In rural areas of Macedonia agriculture and livestock breeding are the main productive activity of providing subsistence minimum, but at the same time it can be used as an advantage in terms of promoting a healthy and natural lifestyle, direct participation of tourists in the preparation and consumption of some traditional dishes, participation of the tourists in some local customs (fairs, fancy party, religious holidays, etc.).

The use of the opportunities offered by tourism requires the implementation of international standards for the quality of the tourist product. In this sense, especially are important EUROGITES - standards of the European Federation for Rural Tourism. Because of the specificity and diversity of the European territory and inability to make detailed uniform standards for rural households EUROGITES define minimum (general) criteria which are identical for the entire rural area of Europe that have been implemented (or should be implemented) in national or regional standards.

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# ***ANALYSIS AND EVALUATION OF THE EFFICIENCY OF LOCAL ECONOMIC DEVELOPMENT AS DEFINED IN STRATEGIC DOCUMENTS OF LOCAL COMMUNITIES IN BOSNIA AND HERZEGOVINA***

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**Abstract:** The key objective of this research paper is to analyze the process of project implementation and monitoring, as well as to evaluate the strategic documents of local communities based on which the strategic goals of development are achieved. The municipalities have been divided into three groups, depending on the municipality area and population; and the sample consisted of 24.6% of the total number of the municipalities in B&H. The content analysis of the documents has included the analysis and the evaluation of the integrated development strategy, the budget analysis for fiscal year 2012, and other strategic documents.

After a detailed analysis of all the important features of the local governments, local communities, their capacities and financial resources, as well as the strategic foundations of local development, it has been concluded that the local governments do not fully exploit their potential. Only 18% of the local development strategies have integration with higher-level strategies. The budget analysis, has shown that 40% of the local governments are indebted long-term for the implementation of capital projects. It is interesting that those local governments belong to the group which does not have the biggest budget, especially the revenue side, which should primarily consist of their own revenues.

The local development in B&H can be much better, with up to a 50% increase in the number of implemented capital projects, if the local government establishes a continuous monitoring and evaluation of project implementation, and propose the budget of the local governments according to the real capabilities of the local communities. The research is also relevant to the comparison of the situation in the other countries of the Balkans; and the example of Bosnia and Herzegovina may serve as the initial basis for similar studies in other countries in the region.

**Key words:** Local Government, Local Communities, Local Development, Integrated Strategy

**JEL classification:** M38, O21

**UDC** 351.712.2.025:338.1(497.6)(082)

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## **INTRODUCTION**

The strategic approach to the local economic development requires complex long-term, medium-term and short-term planning. The plans, defined in accordance with the sector goals, are not separate units of a strategic document, but the three key indicators of the local management planning abilities and the first indicator of the citizens' involvement in the process of decision making. The economic development is a complex process of prosperity, improvement and progress. Local communities, especially for the last twenty years, have directed their resources, to a greater or lesser extent, to progressive processes of local economic development. The point of the whole process of local economic development is its integrity and multilateralism. The economic dimension is the backbone, but it is not the only sphere of interest and development. Therefore, the local economic development includes economic, social, political, legal, and any other dimension of life of an individual, an organization and local communities. European cities have become aware of this fact in the last few years, and that is the reason that the expansion of regional and local development, specialization of some regions and areas, increase in competitiveness and, above all, the rise in the standard of living at local level has become the main indicator of the development of modern European countries.

The evaluation of the local economic development requires the analysis of the strategic documents which local governments continuously adopt, the analysis of project areas, but also the analysis of the ratio between the budget and the strategy of the local development. The key element of the analysis in this paper is the study and the analysis of the process of project implementation and monitoring, and in particular the evaluation of strategic documents.

## **THEORETICAL BASE**

The emersion of new theoretical approaches, but also the demand from practitioners at the local level to dedicate themselves to strategic planning and development of local capacities through efficient model of local community, have laid the foundation of the theoretical base for local economic development. The active role of the local community and the planning of the economic development from the local level have allowed another perspective and approach to the basic strategic directions to the development of national economies in the developed countries. The countries, which transition started in the 1990s, have met this concept primarily through a theoretical model imposed by international organizations; but thanks to the changes that occurred in democratic processes as well as in the way of understanding of local government management, the awareness of the necessity for the development, monitoring and implementation of the concept of local economic growth has become a reality. (Rosenberg, 2003, p. 281) Theoretical and practical approach to defining of local economic development has a mutual determinant, and that is the comprehension of local economic development as *„a continuous, planned process in which, besides the local government, other parties (business sector, non-governmental organizations*

*and citizens) participate, too, in order to create favorable environment for economic growth, and improve the quality of life for citizens in certain local communities.* (Črnac, Rocco, Denoma, Bogović, 2011, p. 8). The local economic development works towards the establishment of connections and interaction between sectors, but at the same time it enables the development of a new valuation system of a local community in which basic values from the traditional and historical context are not neglected, and the development, especially in the spheres of local economy strengthening, is directed towards contemporary concepts. (Morphed, 2008, p. 9). The theory of urban development (Gibbs, 2002, p.13) is mainly based on real indicators of the capacities for the development of a local community. That is not a utopian concept, but a model based on the situation analysis. Therefore, this approach to local economic development has practical application and concrete results.

The most common definition of local economic development, which the UNDP also uses in all its publications, reads: *“Local economic development is a process by which local politicians in towns and municipalities - “our communities” - work together with the partners from public, business and non-governmental sector to create better environment for economic growth and creation of more jobs. Through this process they establish and maintain dynamic entrepreneurial culture and create new community and business environment which should ensure better quality of life for everyone in the community.”* (Uzelac S. Socholvoschi, 2005, p.2) Such process requires coordination between the sectors, as well as clearly defined strategy of the local economic policy, the accomplishment of the public goals and the public participation in decision making processes. Positive image is one of the important resources with which a local community enters the process of local economic development itself: *„To make a strong local economy, every community starts with a partnership approach (including the main interest groups and individuals) to act in accordance with its strengths, weaknesses, possibilities and threats. This is used to recognize the key or critical issues which the community faces.”* (Lukić, Pašalić, 2011, p. 304)

Local economic development, as a concept, enables local economy to switch to the principles of the free market, which reflects upon the mechanisms of the public participation in strategic decision making, as well as upon models by which connections between private and public sector are established. The key player in the local economic development is the local government, which according to the strategic approach to the local economy ensures its place in the global market. Competitiveness, authenticity, and positive perception are the basic characteristics of towns and local communities seen as products, or players in the world market. In this way decentralization of the state government is done, and, the competence over the resource provision, planning and implementation of strategic goals is transferred to the local government. The role of the local economic development is also evident in the increase of the degree of primarity and the increase in the economic independence of towns and local communities. (Logan, Swanstrom, 1991, p. 24).

The leading paradigm of the local economic development in Bosnia and Herzegovina has been taken from the *MIPRO Methodology*, and it is based on several important principles of the local economic development. Among the most important principles are social involvement and sustainable development. Social involvement is seen as a mechanism according to which marginal social groups, as well as all the other target public, in the local community have direct access to the resources and methods for solving

key problems in the community through participation in the processes of strategic decision making and the processes of the improvement of the local community's standard of living. The sustainable development is on the other hand based on the needs of today, without compromising future generations to fulfill their needs. This principle implies the solution to the concrete problems of the local community in the area of local economy, welfare, poverty reduction and the environment protection. (The UNDP editorial team, 2008, p.4) The sustainable development implies integrated approach to the three big sectors - social infrastructure, local economy and environmental protection. The integration is achieved through project approach to the strategic planning and the development of the project by the principle of communicating vessels. Therefore, the strategy of the integrated local development requires innovative approach and synchronization of all the spheres of the local community. According to this, *MiPRO methodology* represents a theoretical and practical framework for planning, implementation and evaluation of the local economic development.

„*Urbana regeneration*“ as advocated by *OECD* exactly confirms the aforementioned statements from *iPRO methodology* by which intersectoral planning ensures local communities steady and planned development in all the spheres of life; (OECD, 2004, p. 105-132) even though, OECD program primarily grounds the development of local communities on the implementation of the investment projects. It is interesting that experience, but also the official opinion of the World Bank and other international organizations confirm that “investment projects” do not have partial indicators of the efficacy in other sectors, apart from the sector of small and medium-sized business. Project planning of the development of the local community implies overlapping of strategic goals of individual sectors of development, but at the same time, each sector retains its focus and direction of development and implementation of basic strategic goals. The news in the *MiPRO methodology* compared to other former methodologies which implementation is evident in Bosnia and Herzegovina is the accent on two important elements - *standardization and participation*. “*Standardization implies that all the divisions of local government in Bosnia and Herzegovina follow the same principles and use the concepts and the minimum contents described in this, conceptual part of the standardized methodology for planning of local development.*” Whereas „*participation in the sphere of planning of integrated local development, along with devoted engagement of the public sector, implies active involvement of citizens, civic society, private sector and socially excluded and marginalized groups in all the phases of the process of local development management, in planning, as well as in implementation of the plans.*” (OECD, 2004, p. 105-132)

## **RESEARCH METHODOLOGY**

The essence of the regional approach, classification of local communities by the degree of the development and the strategic approach to the accomplishment of the country's development goals, is the concept which the European Union imposes on and applies to its member states, and even to the potential ones. Of course, developed countries of Europe which are not members of the Union also apply this methodology. Local communities in Bosnia and Herzegovina were classified by *NUTS classification* only in the year 2009 (Osmanković, Somun-Kapetanović, Domazet, et al. 2009, p. 41)

For the purpose of the research on the degree of the efficacy of the local development of the local communities in Bosnia and Herzegovina in this paper, the basis is made of the NUTS classification, elaborated by the Institute of Economics in Sarajevo, according to the generally accepted methodology of the regionalization in Europe. (Osmanković, Somun-Kapetanović, Domazet, et al, 2009, pp. 37-38) The main criteria for the classification of local communities similar in socio-economical characteristics into individual clusters are: *the area in square kilometers, GDP per capita in BAM, employment rate in percentages, structure of employment - primary sector (%), structure of employment - secondary sector (%), structure of employment - tertiary sector (%), total number of tourists, total number of overnight stay and the vitality coefficient.* (Osmanković, Somun-Kapetanović, Domazet, et al, 2009, p.41) The research in this paper has been conducted in 30 municipalities and one particular group - regional centers: Sarajevo, Banja Luka, Tuzla, Mostar, Zenica and Bijeljina. The municipalities have been classified under three clusters - groups according to the number of citizens. According to the population of local communities in Bosnia and Herzegovina, and the degree of the development, it is not pragmatic to apply classical methodology for regionalization of the EU, by NUTS classification. Hereafter, the list of the municipalities included into the research has been given.

*Table 1: Presentation of basic criteria for the analysis of the development of the local communities in Bosnia and Herzegovina*

<b>Group</b>	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>	<b>Regional centers</b>
<b>Municipalities</b>	10	10	10	5
<b>Population</b>	Up to 20 000	From 20 000 to 50 000	From 50 000 to 100 000	More than 100 000

*Source: the author*

Bosnia and Herzegovina officially has 142 local communities, of which 79 in the Federation of Bosnia and Herzegovina and 62 in the Republic of Srpska. The Brčko district is an administrative unit on its own. For the purpose of the research, the municipalities have been divided into three groups, depending on the number of citizens or the size of the municipality; and the sample on which the research has been conducted is 24.6% of the total number of all the municipalities in Bosnia and Herzegovina. The Group 2 includes more than 50% of the municipalities in Bosnia and Herzegovina, whereas there are only 4.22% of the local communities with the population of more than 100 000. According to the population criteria, medium developed local communities, which have between 50 000 and 100 000 citizens, make only 9.8% of the total number of all local communities in Bosnia and Herzegovina. If we accept the OECD's criterion for the development, according to which the highest growth rate is reached by local communities and regions with the population between 20 000 and 50 000, then we can conclude that Bosnia and Herzegovina should direct its development at local level at the development of local communities which population

is up to 50 000. At the same time, business capacities, natural resources and all the other essential elements are mainly geographically located in these local communities. The research has also included the analysis of the documents of strategic development with the accent on the strategy of integrated local development. The analysis of the content of the documents included the analysis and the evaluation of: the strategy of the integrated development, the budget analysis for the year 2012, and other strategic documents. As of the criteria for the budget analysis, the elements which directly affect the decisions on the implementation of projects from the strategy of the integrated development have been taken. Therefore, the ratio between income, expenditure, capital investments local governments' liabilities, etc. has been analyzed. In the aspect of research which relates to the analysis of strategic documents, the ratio between the number of projects, the value of projects, the way of financing, the time estimated for the implementation of the projects, the integration with other strategic documents (sector strategies, etc.) has been analyzed. At the same time the analysis of the aspect of communication and the dependence upon other elements has been performed.

## ***DISCUSSION AND THE PRESENTATION OF THE RESEARCH RESULTS***

For the last ten years, thanks to the transitional and reform processes, local governments have faced the need to make and define a big number of strategies related to individual aspects of life of the local community. The occurrence of a big number of methodologies and techniques for the drafting of strategic documents was absurd, especially for the fact that no organization or government institution was able to answer the question from the local governments: Why do we need strategies as documents? Adoption of the miPRO methodology for drafting the integrated strategy for local development at the level of Bosnia and Herzegovina, standards and possibilities for the assessment of the capacities of local communities according to made strategic documents have been made. Moreover, this methodology has enabled the other strategies to be defined, even though their integration has remained unfinished up until today. Getting closer to the European Union and opening of the European funds has concretized the need for defining important strategic documents for local community. In fact, not a single project which is not strictly developed in one of the strategies of local development can be in any way financed from the funds of the European Union. In this way, local governments are taught rationalization and pre-setup of plan and project documentation for which omission a big number of projects is not realized at all. If we look at the time difference in making the first strategic documents between local governments and the answer to the question when they made the first strategy for local development, it is seen that the year 2004/2005 was crucial for making the decision on the adoption of the strategy for the integrated local development.

Regional centers are the promptest and the most common parties in the processes of making the strategy of local economic development. What is specific about the regional centers is that in 2005 started the expansion of strategy making, which continued until 2009. For the last two years slow decrease in the number of made

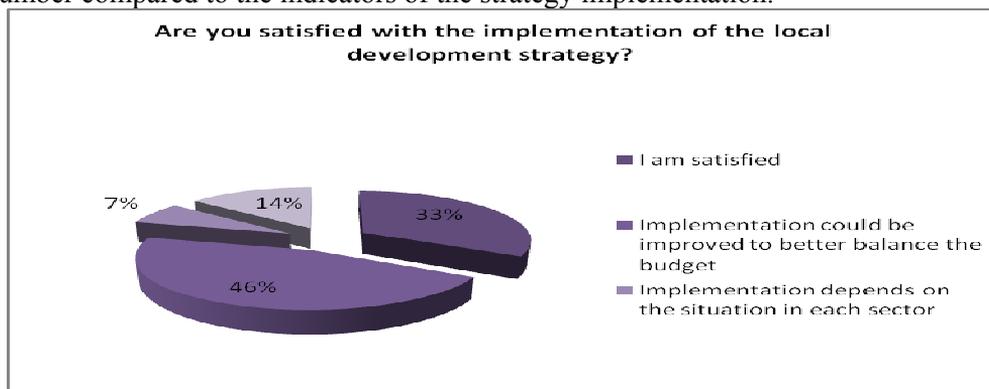
strategies has been evident. In the group 3, the municipalities with the population from 50 000 to 100 000, it has been noticed that from 2008 to 2010 almost 70% of the strategies were made. For the group 1, the municipalities with the population of up to 20 000, in 2010 45% of the strategies were made, in other words 45% of the local governments with the population of up to 20 000 were working on the defining of the first strategy of the local economic development.

When asked how much the municipal budget really followed the realization of the projects from the strategy, the local governments gave interesting answers. In group 1, it appears that the local governments often made the strategies just for the prestige, and in 90% of the cases the budget was inadequate to endure capital investments for the realization of the projects defined in the strategy. In group 2, the local communities with the population of up to 50 000, the strategies and the budget were more "compatible", in other words the strategy had objective list of projects which really could have been realized by their own means. Another question is how many projects were actually implemented. Only 12% of the local governments from this category admit that the number of implemented projects is 50% less in respect to the budget capacities at that time. In the regional centers for example, 50-70% of the defined strategic projects were realized from their own revenues, or real budget; but this is the information from the year 2010. For the last couple of years, for the time Bosnia and Herzegovina has been going through the recession period, the number of implemented projects financed by their own revenues has decreased for unbelievable 70%. The regional centers mainly count on finance by higher level government (approximately 60% of the projects were implemented in that way), whereas 17% of the projects were implemented though cooperation with private sector. Only 13% of the projects were financed through projects carried by international organizations. The research shows that 20% of the local communities in Bosnia and Herzegovina still do not have defined strategy of the integrated local development.

For the last two years, local governments have initiated making of other strategies which are not related to local economic development. For example, 70% of the local governments from groups 2 and 3 have human resource management strategy. As of the regional centers, 88% of the examined local governments have the human resource management strategy, whereas the situation in group 1 is somehow worse. In group 1, the municipalities with the population of up to 20 000, only 44% of the local governments have this strategy, too. As of local environmental action plan, only 33% of the local governments have this document defined. Again, the regional centers lead, but they are closely followed by group 3. 77% of the regional centers have made local environmental action plan, while 75% of the local communities in group 3 have this document (the local communities with the population between 50 000 and 100 000). Communication strategy is a more frequently acquired document, and every other local government has acquired the communication strategy. There are no big oscillations between the groups in this segment.

When talking about the degree of the integrity of the projects from other strategies with projects from the strategies of local economic development, it can be established that from the total number of the examined local governments 60% do not have project integrated strategies. Only 23% of the local governments entirely integrate their strategic documents with the strategic documents of the higher governments or with the sectors' strategies. On the other hand, more than 40% of the local governments are

aware of the necessity of the harmonization of their strategic documents with the strategic documents at higher levels of government, whereas 11% of the local governments have strategic documents which are in no way related to the entities' or state's strategies. For the purpose of this research, a survey has been conducted on the sample of 100 people in each local community included in this research. Although, it is a partial indicator, the results show that the citizens are realistic about their expectation of the implementation of individual projects. The citizens' opinion on the implementation of the local development strategy does not differ drastically according to the groups. 14% of the asked citizens are not satisfied at all, which is relatively small number compared to the indicators of the strategy implementation.



*Graph 1*

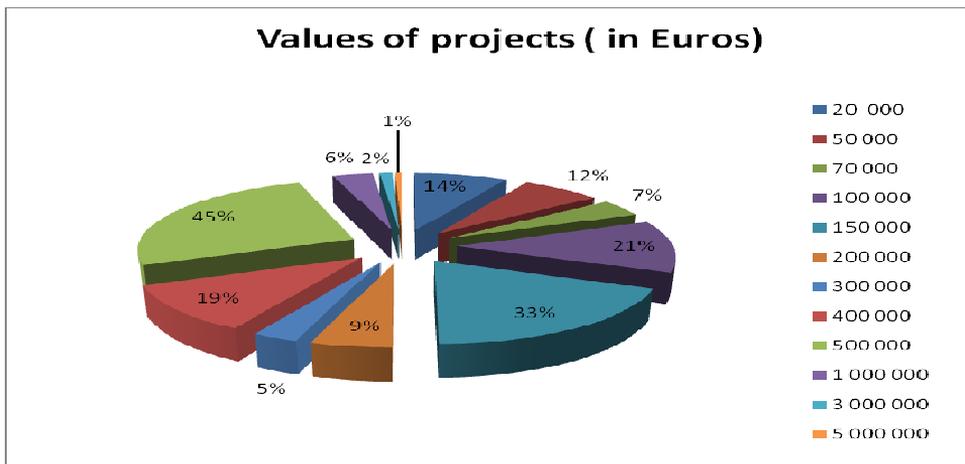
*Source: the author's research*

As many as 33% of the asked people are satisfied with the rate of the project implementation, whereas 46% of them have more realistic understanding and think that the budget situation has an impact on the rate of the implementation of the projects from the integrated local development strategy.

### ***THE LOCAL ECONOMIC DEVELOPMENT ANALYZED THROUGH PROJECT AREAS IN THE STRATEGY OF INTEGRATED DEVELOPMENT OF LOCAL COMMUNITIES***

Project areas in the strategy of integrated local development enable strategic approach to the implementation and realization of the set goals. The analysis of this aspect of research has been conducted in order to get the answers in what way the local governments set priorities through defined project areas, which area dominates, and to what extent the degree of priority and forcing of one project area affect the strategic development of a local community in general. During the document analysis, the following, already set elements, were considered: the total number of planned projects, total estimated value of the project implementation, projects of plan documents, infrastructural projects (economic development plan), land policies projects, tourism related projects, environmental protection projects (plan for the environmental

protection), and projects of social infrastructure (social development plan). The research shows that the project priority has been placed on the infrastructure. Therefore, most of the strategies devised from the year 2000 to the year 2008 had 80% of the infrastructure related projects. Strategies devised after 2008, according to the miPRO methodology, have different array of projects per areas.



*Graph 2: Value range of projects defined in the strategise of integrated local development*

*Source: The author’s research*

According to the results shown in Chart 2 it is evident that the local communities give the priority to the construction of local road infrastructure, issues of waste transport and disposal, but also purchase of private land as a precondition for further development. In this sense, the land which belongs to the local government enables realization of projects related to small and medium-sized businesses, but also the regulation of some other issues. To have the necessary plan documents made, which is required for further development of local community, only 4% of the total project cost has been planned. The plan documents, in this case, include town-planning and regulatory plans.

As of the project value, it depends on the project area. So if it is a youth project, a 100% of the projects cost less than 10 000 Euros, whereas the value of infrastructural projects goes as high as 5.000.000 Euros. The most expensive projects are the ones related to the construction of a waste dump, sewage system, water supply or building and maintenance of road infrastructure. The regional centers have 25% more projects worth more than € 1.000.000 compared to the other groups of municipalities. About 70% of the projects cost up to € 1.000.000. Another interesting information is that the projects related to the development of entrepreneurial infrastructure or projects related to the development of local economy usually cost around € 500 000. As of the values of the projects related to the promotion of culture or sport, their values do not exceed 100 000 Euros in 87% of the municipalities, whereas the remaining 13% invest more into the improvement of these areas.

As of the preference for financing the strategic projects, local governments, in 75% of the cases, preferably choose a model of co-financing or partnership with higher levels of government or other donors, financiers or sponsors. Local governments try to independently finance the projects which value does not exceed 300 000 Euros in only 15% of the cases. In 67% of the cases, local governments prefer co-financing of the projects from the strategy by higher levels of government, whereas only 5% of the local governments prefer to individually finance the realization of the projects. It is interesting that local governments see IPA funds as a possibility to find a donor, not a partner for the implementation of the strategic projects. The way to find a financier, in other words to close the project financial construction also depends on how much the local government understands the importance of the sector strategic definition. Unfortunately, local governments in Bosnia and Herzegovina do not utilize the possibility to design the development through detailed analysis of the possibilities and sector planning in specific strategic documents. Therefore, in 23% of the cases the sector strategies do not follow the strategy of the local economic development, whereas 34% of the examined local governments have sector strategies as well as defined projects (in social infrastructure, projects related to environmental protection, etc.) in the strategy of local economic development which relate to the same issues. However, 33% of those projects are not compatible with the projects from sector strategies. If we analyze the status of the local economic development defined in the project areas of the strategic documents per groups of local communities, we can see that in Group I, where the least developed and the poorest local communities have been taken into sample, the areas such as “plan documents” or “land policy” have not been defined through projects at all.

*Table 2: Presentation in percentages of the ratio between the number of projects in the strategies of integrated local development - Groups I, II and III*

MUNICIPALITY	Number of projects in % (less Konjic)	Infrastructure in % (of total)	Environmental protection in % (of total)	Social infrastructure in % (of total)	Plan documents	Tourism	Infrastructure in % (less Konjic)	Environmental protection in % (less Konjic)	Social infrastructure in % (less Konjic)	Plan documents
Konjic		83.22%	2.57%	12.67%	1.54%					
Jablani ca	69.86 %	56.25%	9.09%	29.55%	5,11%		80%	-7%	30%	0,0
Ilijaš	91.44 %	52.00%	6.00%	28.00%		14%	95%	80%	81%	

MUNICIPALITY	Number of projects in % (less Sanski Most)	Infrastructure in % (of total)	Tourism in % (of total)	Environmental protection in % (of total)	Social Infrastructure in % (of total)	Infrastructure in % (less Sanski Most)	Tourism in % (less Sanski Most)	Environmental protection in % (less Sanski Most)	Social infrastructure in % (less Sanski Most)
Sanski Most		46.88%	16.67%	12.50%	23.96%				
Tešanj	48.96%	40.82%	6.12%	6.12%	46.94%	55.56%	81.25%	75.00%	0.00%
Gradačac	58.33%	45.00%	17.50%	5.00%	32.50%	60.00%	56.25%	83.33%	43.48%

MUNICIPALITY	Number of projects in % (less)	Plan documents in %	Infrastructure in % (of total)	Tourism in % (of total)	Environmental protection in % (of total)	Social infrastructure % (of total)	Plan documents % (less)	Infrastructure in % (less)	Tourism in % (less)	Environmental protection in % (less)	Social infrastructure in % (less)
Gračanica		2.25%	49.10%	0.45%	24.32%	23.87%					
Bihać	56.08%	13.85%	31.79%	5.64%		46.67%	-62.96%	71.56%	-81.82%		14.15%
Travnik	76.35%		59.05%		13.33%	27.62%		71.56%		87.04%	72.64%
Lukavac	80.18%		37.50%	5.68%	9.09%	47.73%		84.86%	-60.00%	92.59%	60.38%
Cazin	87.84%		18.52%	7.41%	37.04%	37.04%		95.41%	-50.00%	81.48%	81.13%

Source: The author's research

According to the presented research results, it can be concluded that the local governments emphasize the development of infrastructure in the local communities in Bosnia and Herzegovina. The second sector by the number of projects is social infrastructure, whereas only 10% of the planned projects in the strategy of the integrated local development fall into the group of plan documents, environment, etc. It is interesting that the same principles and priorities manifest in the local communities in the Group 1, as well as in the regional centers. It has also been noticed that there are no big oscillations in the values of the projects in the regional centers and local communities in other groups. Tourism, as a potential industry, has not been emphasized in almost 45% of the local communities. In almost half of the examined and analyzed local communities the number of projects related to the development of tourism is less than 15% of the total number of projects planned in the strategy.

## ***LOCAL ECONOMIC DEVELOPMENT-VERTICAL AND HORIZONTAL INTEGRATION WITH OTHER STRATEGIC DOCUMENTS***

Understanding and success of the local development is a complex process which also depends on the element of the integration of the local development strategy, as the basic and comprehensive strategic document, with sector strategies, strategic documents at higher levels, but also with documents which hierarchically do not fall into the national developmental documents.

If one sees and compares the analyses of the strategic documents, which have been precisely elaborated by the European Council in 2010, then it is evident that the strategies of the local development are only 18% integrated and harmonized with the strategic documents on higher levels. Above all, it needs to be said that there are over 170 strategies on higher levels, from regional, cantonal, entity, and state, all the way to the European Union strategies, which Bosnia and Herzegovina has adopted. Adjustment of the strategies of local development to the strategies on higher levels is mainly based on two important elements: financial harmonization, and adaptation of local programs to specific conditions of potential financial resources. In the segment of defining the way of project financing, local governments have made project proposals in accordance with already defined strategies on higher levels. In this way a “chain” and “domino effect” is made for financial opportunities and closures of financial constructions of local projects. According to the analysis conducted for the purpose of this work, the strategies of local development have been the best harmonized with the strategies related to the economic context and development, whereas the integration of strategic goals from the strategies related to the political context and human rights have been the least integrated into the strategies of local development. Primarily of the economic strategic goals and attaching more importance to the strategies of economic development from the higher levels is not unusual, but this integration does not allow full implementation of the strategic goals from the other sectors.

In the Federation of Bosnia and Herzegovina, local governments used to give priority to the strategies related to the growth of agriculture, whereas in the Republic of Srpska, the integration with sector strategies starts from the integration with the strategy of the industrial development in the Republic of Srpska. In the Regional centers it is evident that local governments try to attach their strategic goals and focus to the goals of the strategy for small and middle-sized business development, whereas local governments in other groups give more priority to the strategies of rural development and the strategies of agricultural growth. According to the analyzed strategies of the local development, local governments in Bosnia and Herzegovina are aware of the need for more efficient small and middle-sized businesses at local level, therefore, the strategy for the development of small and middle-sized businesses is the most common sector strategy with which strategies of the integrated local development have been harmonized. Moreover, it is not insignificant that 29% of the local governments see their possibilities for development in agriculture, therefore, the strategy for the development of agriculture as a sector strategy is also represented through harmonized strategic and sector goals. This indicator is logical because in Bosnia and Herzegovina there are

almost 50% of rural local communities which development is based on agriculture and local resources which are directly related to this sector.

Horizontal integration of the development policy and strategy of a local community with sector strategies is based on the intersectoral approach to the organization of a strategic platform, and the use of the platform for defining and formulating development plans for a sector. In this way, local governments have specified sector focus through a prism of local capacities, and have also defined the priority sectors of development. Although, the management in local governments is mainly aware of the need for the harmonization of strategic documents of a local community with sector strategies, it is evident that 22% of the local governments have not found ways of elaboration and initiation to have some sector strategies adopted by higher levels of government. As much as 18% of the local governments have not even tried to initiate adoption of a sector strategy for certain area, whereas 49% of the local governments have used their representatives in the representative and legislative bodies in cantons or entities to adopt certain strategies.

### ***MONITORING, EVALUATION AND UPDATING - ANALYSIS OF THE DYNAMICS OF THE IMPLEMENTATION AND ADAPTATION OF THE STRATEGY OF LOCAL DEVELOPMENT***

Monitoring and evaluation of the accomplishment rate and the dynamics of the implementation of the projects from the strategy of integrated development represent the final phase of strategic planning as well as concretization of project programs. However, there is a question of whether and to what extent local governments monitor and evaluate the implementation of the strategy. Only 8% of the local governments confirmed that they monitor the realization of the strategic development. More than 70% of the local governments which do the monitoring belong to Group 3 and Regional centers, which leads to a conclusion that undeveloped local governments more neglect this aspect of strategic planning.

Monitoring is done on an annual base, according to the defined project and program indicators, as well as the implementation plan. According to the theoretical concept of miPRO methodology, organizationally, the Development office or the municipal department for local government should do the continuous monitoring; however, only 56% of the local governments which have acquired the strategy of the integrated local development have a specific body, department or office which should perform this job.

*Table 3: The defined aspects of monitoring*

<b>Monitoring analysis</b>	<b>Implementation monitoring</b>	<b>Monitoring Aspect</b>	<b>Evaluation indicators</b>	<b>Sanction aspect</b>
Defined	3	3	1	0
Non defined	0	0	2	3
Defined in %	100.00%	100.00%	33.33%	0.00%
Non defined in %	0.00%	0.00%	66.66%	100.00%

*Source: The author's research*

From twenty analyzed local governments 95% of the municipalities have, in the document of the strategic development, defined implementation monitoring as a part of the strategic development process. 5% of the analyzed strategies do not have the same aspect defined. 95% of local governments have mentioned the aspects of monitoring, evaluation and updating; whereas in 5% of the documents such aspects have not been mentioned. The indicators for the evaluation of the development strategy have been defined in 55% of the analyzed documents; whereas in 45% of the documents the indicators for the evaluation have not been defined. The sanction aspect has not been mentioned in any analyzed document of the development strategy. According to the analysis of the Regulations on the internal organization, and the job description of a concrete development department or office, it is evident that only 33% of the local governments have clearly specified tasks of monitoring, evaluation and work on the adaptation and updating of the strategy. When municipal mayors have been asked if they were happy with the efficacy of the implementation of the strategy of integrated local development, almost 88% gave positive answer. This had been expected.

The most bizarre answer by the municipal mayors was given to the question "Are you happy with the way of the monitoring and evaluation of the implemented projects?" All the municipal mayors from the sample group answered this question. So, the question was also raised to the mayors who in their Regulations on internal organization do not have the defined tasks of monitoring and evaluation. It is obvious that the municipal mayors do not see themselves as project managers in the process of the implementation of the strategy of the integrated local development. Diplomatic and political answer to this question is the consequence of contemporary political situation, indifference, but also ignorance of the importance of this segment of planning process by the municipal mayors. On the other side, content of the local government management by the efficacy of the implementation is also conditioned by the political reality and openness. In fact, 44% of the municipal mayors have said that they were happy with the efficacy of the implementation of the development strategy, whereas only 6% of the municipal mayors considered non-fulfillment of the strategic goals as their failure, too. However, 28% of the examined local governments do not implement monitoring

and evaluation in an adequate way, which means that they do not use miPRO methodology, but do the monitoring partially and according to their internal indicators. Introduction of the mechanisms of sanctions in situations when strategic goals have not been accomplished is an image of responsible conduct, but also responsible leadership of the local government. In such situations municipal mayors have competence to apply sanctions; however, only 3% of the local governments have applied some form of sanctions on the basis of the evaluation of the strategy implementation where actual plans have not been met. The imposed sanctions have been reduced to a word of caution, and there has been only one case where a monthly salary of a coordinator of a development office was cut by 5%. So, it has been concluded that non-implementation of the strategy does not cause business or legal consequences for the employees in local governments. Therefore, small interest in monitoring and evaluation is not an unexpected outcome of the situation.

Indicators of the analysis of the municipal assembly meeting agendas are also interesting. They confirm that only 10% of the local governments have gone through the process of the revision of the local development strategy, after it had expired. Only 4% of the local governments revise other strategic documents, whereas 11% of the analyzed local governments reject the projects which were unrealistically planned after the revision. Revision mainly implies “copying” of the existing project suggestions. Partial indicators of the monitoring in electronic and print media show that only 7% of the news on local communities and local governments talk about the implementation of the integrated development strategy. Not a single topic related to monitoring, evaluation or revision and updating has been reported.

## ***BUDGETS OF LOCAL GOVERNMENTS-POTENTIAL FOR LOCAL DEVELOPMENT***

From the given table it is seen that nine municipalities from the sample group taken for the analysis have some kind of financial obligation or debt from the previous year. In Bosnia and Herzegovina, 40% of the municipalities are currently indebted, of which only 18% have long-term purpose-specific loans, which have been taken for the purpose of financing capital investments. As of the structure of the projects, the loan funds finance infrastructural projects (This was expected, as these are the most expensive projects). However, the worrying fact is that the item intended for capital investments does not exceed 20% on average. The development budget, as the only option for efficient implementation of the strategy of local development should have been distributed at least 60:40 in favor of the capital investments. The problem of illiquidity, poor politics of direct tax collection, but also destructive state politics - by which only 8% of the public income returns to local government, have contributed to such budget situation. A positive observation is the fact that local governments are not insolvent, and that this segment, through credit financing of the projects, offers one option for finding financial possibilities of development.

Table 4: Tabular presentation of the relation between the examined variables

Municipality		Balance (budget reserve)	Running costs	Capital investments	Total budget	Other
Group I for the Federation of Bosnia and Herzegovina	Breza	40.000	2.720.091	1.250.909	4.011.000	
	Ilijaš	44.400	4.466.000	5.129.000	9.639.400	
	Maglaj	50.000	5.935.846,72	999.500	6.985.346,72	
	Konjic	100.000	7.977.743	7.602.000	15.679.743	
	Jablanica	70.000	6.245.800	5.258.400	11.574.200	
Group II for the Federation of Bosnia and Herzegovina	Kakanj	10.000	11.444.728	1.451.540	12.906.268,07	
	Tešanj	197.000	7.991.000	3.605.000	11.793.000	
	Gradačac	23.160	8.356.160	3.694.250	12.073.570	
	Livno	0,00	8.016.000	5.040.000	13.056.000	
	Sanski Most	0,00	11.216.800	205.000	11.421.800	
Group III for the Federation of Bosnia and Herzegovina	Travnik	-	9.411.400	300.000	11.940.000	2.228.600
	Gračanica	70.000	7.349.000	7.679.000	15.473.000	375.000
	Cazin	0,00	13.320.134	4.752.550	18.072.684	
	Lukavac	-	11.462.000	2.695.000	19.491.346	5.334.346
	Bihać	150.000	17.161.820	9.093.286	29.585.530	3.180.424
Group I for the Republic of Srpska	Modriča	0,00	8.268.500	931.500,00	9.200.000	
	Višegrad	131.000	5.808.480	2.369.370,00	8.648.850	340.000
Group II for the Republic of Srpska	Derventa	225.200	9.149.664	2.527.136,00	11.902.000	
	Laktaši	50.000	13.205.190	741.150,00	18.000.000	4.003.660
Group III for the Republic of Srpska	Doboj	720.000	20.462.000	12.868.000	34.050.000	
	Prijedor	600.000	28.394.608	4.983.522	33.978.130	
Regional Centers	Sarajevo	100.000	15.601.900	2.580.480	18.282.380	
	Tuzla	130.000	34.751.191,90	6.192.000	41,073,191.90	
	Banja Luka	376.000	101.676.560	29.057.440	139.670.000	8.560.000
	Zenica	300.000	37.089.000	3.291.000	40.930.000	250.000
	Mostar	-	39.446.068	22.682.277	82.451.245	20.322.900

Source: The author's research

## ***POSSIBILITIES AND RESTRICTIONS OF THE EVALUATION OF LOCAL DEVELOPMENT ACCORDING TO SWOT ANALYSIS OF THE CHARACTERISTICS OF LOCAL DEVELOPMENT***

After a detailed analysis of all the important characteristics of local governments, local communities, the capacities and financial potentials, as well as the strategic foundation for local development, it can be concluded that local governments do not exploit their capacities to the full. In fact, only 18% of the local development strategies have integration with strategies on higher levels. Here it is not only meant the strategies at national level, but also the strategies which the European Union has made in its institutions. The specific quality of those strategies is that they have funds for the project implementation, especially in cooperation with local participants and partners. The IPA funds, the funds from the pre-access funds in general, may solve a big part of the local governments' problems regarding the financial construction for the implementation of the projects. Another big determinant of the local development in Bosnia and Herzegovina is that strategies of local development rely and attach to a relatively small number of sector strategies. It has been noticed that certain local communities have integration with sector plan related to agriculture, but local potentials can not be recruited in the development of the agricultural sector. Therefore, the interaction with sector strategies should be realistic and objective to help the implementation of projects.

The analyses of the budget, as primary instrument of local development, have shown that 40% of the local governments are long-term indebted. The most interesting fact is that those are local governments which belong to the group which does not have the biggest budgets, especially not the revenue side, which should mostly consist of their own earnings. Therefore, it can be established that the possibilities of local governments for long-term indebtedness under favorable conditions given by the Development bank or other institutions have not been used and that this could be one of the stimulating mechanisms of local development, especially for financing of priority capital projects.

In the sector of public finance, VAT, as a form of public distribution of assets, should play a more important role in the local governments' revenues. The more important role should be based on the fact that the rate of 8%, which is currently given back to the local governments in the Federation of Bosnia and Herzegovina, needs to be increased. The earnings in the budget, as much VAT would be, must not be based on the distribution of public revenue, but on their own income. However, this principle of self-sustainability of the local communities can not be applied in local communities in which the running material cost is more than 1/3 of the budget, in other words in local communities which do not have adequate amount of their own income. The reasons for such situation are not only the local governments and poor conduct, but also a lack of potentials in a local community, which enable collection of direct taxes. If a local community does not have enough state-owned land or the number of small or medium-sized businesses has decreased, therefore, we can not expect that, for example, the number of positively resolved town-planning or master plan permits be

dramatically increased compared to previous years. Of course, this is a complex problem.

The investment rate has a direct correlation to potentials of local communities, but also to strategic development politics of Bosnia and Herzegovina. Initiation and acceptance of the strategic documents which enable international financial institutions, but also potential investors, to start investment processes in local communities is the key element. The political, social, economic, and legislative structure of Bosnia and Herzegovina only complicate the situation in local communities, which development has been stopped. Moreover, the bases of the actual process of implementation in 90% of the projects make plan documents, town-planning and regulatory plans. The situation in that area is chaotic. Barely 50 % of the municipalities in Bosnia and Herzegovina have defined town-planning and regulatory plans. Plan documents are also a foundation for applications for projects when looking for financial partners. One of the key problems noticed is the lack of monitoring, evaluation and regular update of the strategy of local development. There are no mechanisms of sanctions, nor have any responsibility models been developed according to which it would be clear who is responsible for the implementation of a project.

## ***CONCLUSION***

Implementation of the strategy for integrated local development has an impact on the creation of criteria for the perception of a local community and creation of an image of the local community; however, good projects, project budget and market economy oriented leadership of the local government are not enough for the perception of the local community as attractive and competitive. As the research in this paper shows, Bosnia and Herzegovina is not an exception. Its development is based on the development of the local communities. Bond and geographical dependence of the countries in the Balkans, but also the context in which local communities function in the Southeast Europe show that local communities are the engines of national economies and indicators of a national development.

In the end, it can be said that it very difficult to make a general evaluation of the current situation in the local development in Bosnia and Herzegovina. The macro environment of the local communities, the complexity of the situation in the country, but also the lack of a more serious approach, are the key determinants according to which it can be said that the local development in Bosnia and Herzegovina can be considerably better, for up to 50% by the increase in the number of implemented capital projects, if the local government internally introduces monitoring and continuous evaluation of the projects implementation; and all the other levels in Bosnia and Herzegovina direct strategic action towards the accomplishment of important preconditions for development in general.

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## ***DECISION MAKING MODEL IN STRATEGIC MULTIVARIATE PLANNING UNDER UNCERTAINTY***

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**Abstract:** Starting from the end of the 20<sup>th</sup> and in the beginning of the 21<sup>st</sup> century, external organizational environment has seen fast, frequent and radical changes, due to which it has become increasingly turbulent. Within such an environment, the speed at which organizations perform necessary adjustments to the changes in external environment has become imperative for the survival of any organization. Practical application of strategic planning has thus been limited to a considerable extent, along with the implementation of this entire concept. The issue of duality in the time horizon of the organizational goals in the long and short term additionally highlights the problem of establishing, adjustment and implementation of the long-term organizational goals. Complexities and high rate of environmental changes have forced the managers to focus on the key drivers of changes in external environment. In order to perform management functions within the environment overflowing with such complex changes, new models have been introduced. By simplifying the actual phenomena, models have been created with their specific implementation procedures that are intended to facilitate and speed up the decision making process for strategic decisions. Analysis and abstraction of actual phenomena applied through simplification provides a new tool that is practical to use. Simplification of actual phenomena, by using the models, reduces the complexity of the management decision making system and, in turn, improves its application in practice. The purpose of this paper is to present the decision making model in strategic multivariate planning and to highlight the problems with its practical application. Applied methods of research are as follows: analysis, abstraction and modelling.

**Key words:** Strategic Planning

**JEL classification:** O21

**UDC** 005.51(082)

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## **INTRODUCTION**

The basic goal of strategic management is to adjust organizational operations to the changes in the environment from the long-term perspective and to improve the organizational performances. In practical application of this concept, which emerged in 1960s and which was in its prime in 1980s, huge problems were encountered within the turbulent environment from the beginning of the twenty first century.

According to the traditional theoretical approach in strategic management, strategy is the way in which the intended, long-term goals are realized. Balance between the opportunities in the external environment and own organizational potentials (the internal environment) should define the long-term strategic goals of the organization and the manner in which these are realized. The long-term goals come as the result of predictions of the market opportunities and development of own (material and non-material) resources, which are necessary to provide for sustainable competitive edge. The specified long-term strategic organizational goals are then translated and dissolved into a system of operational short-term objectives, and it is through the realization of these objectives that the defined strategic long-term goals are realized. However, the problem arises with the attempt to establish the long-term organizational goals within the turbulent external environment, in which it is very difficult to clearly anticipate the future of the external environment.

According to (Courtney, Kirkland, & Viruerie, 1997), the traditional theory of strategic planning is based on laying out a vision of future events precise enough to be captured in a discounted-cash-flow analysis. Under conditions of turbulent environmental changes, there can be no clear vision or prediction. Inability to foresee the uncertainty leads to the strategies that either fail to prepare adequate defence against threats or take full advantage of the opportunities that the future higher levels of environmental uncertainty can offer at any given moment. The planners' role is to provide a certain set of possible scenarios that can realistically take place, as well as to prepare the organizational responses to such scenarios in general. No approach can cover for all the challenges brought by the uncertainty, but there are certain guidelines that, if used, can lead to better strategic decisions.

The entire procedure of traditional planning is in fact based on one future scenario prediction with certain variations. In cases where there is huge uncertainty in planning, there is a large number of completely different scenarios in which an organization can find itself in the future. This type of prediction can thus lead an organization to a very difficult situation where it has the answer to only one situation in the future.

This traditional approach is acceptable under conditions where the changes in environment are predictable. Under conditions where it is difficult to predict changes and external environment of the future, there is a problem of defining the long-term goals of an organization. Even with the defined long-term goals of the organization, there is a discrepancy between the intended goals and the things that the organization achieves in the short-term. Due to all the above said, any intended strategy can become a dead letter. A formal document with no practical value whatsoever.

(Mintzberg, Olstrand, & Lampel, 2004) pointed out that the contemporary organizations under conditions of turbulent changes in environment make long-term strategic plans by laying out their intended goals and long-term developmental

directions, but that their realization often lead them to search for and realize the short-term market opportunities. Strategy formulation is not a continuous process as it may have appeared at first. It seems that the organizations tend follow one strategy as long as it works fine for them. By following the market logic, through the realization of short-term market opportunities a set of short-term business decisions is made, in which a certain pattern emerges gradually over time. The identified emerging pattern of the short-term decision making, which is repeated over time, points out to the existence of a newly assembled strategy. The strategy that is being realized consists, in the majority of cases, of a combination of the planned (intended) strategy and of the accidental, (newly)-emerging strategy. It is only rarely that we can come across an implemented strategy that was the result of either the intended strategy or of the emerging strategy only. Almost all the strategies implemented are one or another kind of combination of the intended and of the emerging strategy.

Long-term goals are necessary for the organizations since these enable them to develop competitive advantages by acquiring resources and by generating new organizational knowledge, which certainly requires time and considerable amount of resources. By doing that, requirements for investments are practically specified in an organization in the long term. On the other hand, the recognizable market opportunities are, in most of the cases, short-term. Owing to the rapid and unpredictable changes in the market, long-term assessment or interpretation of such opportunities is hardly achievable under conditions of uncertainty.

An auspicious series of such signals and business moves, which will inevitably follow, providing that sufficient time is available, will define certain vector trajectory of business model development from which an emerging strategy can be recognized (Stefanovic & Milosevic, 2012).

External environment can be defined as a set of elements that are external to the enterprise and that directly or indirectly influence its operations (Group of authors, 2006).

According to (Wheelen & Hunger, 2012) the external organizational environment is characterized by the forces that are external to the organization and that are predominantly not under any short-term control of the top management. The uncertain character of the environment is a combination of a number of factors that characterize environmental changes, such as the following ones: the degree of complexity and degree of (or instability) of opportunities, which take place in the external environment of the organization.

Such high complexity comes as the result of a large number of changes and the relations among them. Degree of changes (or instability) in the external environment is measured by the changes that are generated or that emerge within it. A high level of environmental changes is indicative of changes with high frequency and intensity. Changes in external environment in the beginning of the 20<sup>th</sup> century pointed out to the high level of complexity and to the highly dynamic changes because such environment is characterized as turbulent. Due to the turbulent environmental changes towards the end of the 20<sup>th</sup> and in the beginning of the 21<sup>st</sup> century, prediction of changes and environmental conditions is becoming more and more difficult. Under such conditions, new solutions and approaches are sought and the existing theoretical concepts are being examined and brought into question.

Such uncertainty in prediction of future prompts the management to resort to their gut instincts and intuitive planning that is inextricably linked to the managers' personal characteristics, such as their personal perception of the future environment, market gain that they wish to achieve, and their personal attitude towards uncertainty.

According to (Courtney, Kirkland, & Viruerie, 1997), there are different executives' reactions to the uncertainty of environmental prediction. Some executives consider the environmental uncertainty to be their true challenge, an opportunity for them to shape the market with their innovations and to try to capture as large a market share as possible. This strategy, which under certain circumstances produces excellent results, implies huge risks of failure. Other risk-averse executives tend to content themselves with much lower gains. They will thus choose to hedge their bets and opt for the less attractive projects that require smaller investments but also imply lower implementation risks, thus playing on the card of balanced risk in the investments' portfolio. By doing this, executives seek to bring the long-term strategic goals in line with the short-term market opportunities. The third group of executives favour the challenges that the market can offer in the short term. Thus, through flexible adjustments to the evolving market trends, their offer becomes innovative and the enterprise becomes competitive in its market. Over time, from this series of decisions, and providing that the pattern is discerned, a new strategy can emerge. This will make the strategy much more realistic, but at the same time, this leaves only a little time for development of comparative advantages, based on which the organization is expected to build its sustainable competitive market position. This narrows the potential of the organization to use its market opportunities or to defend itself against threats, in cases where the situation is inauspicious for the organization.

At one point, when the majority of the individual pieces of important information is available to the planner, most of them will be of no relevance for the strategic decision making system. Two basic characteristics that we come across in the case of strategic decision making process under conditions of environmental uncertainty are: the lack of information on current situation in the external environment and the impossibility to predict the external environment. The first problem of the lack of information about the current condition of the organization and its external environment can be resolved by relying on a quality management information system and on a qualified analyst that are able to discern the environmental changes; the second problem is, however, much more difficult to resolve. It is only after some time has passed and after having summed up the events and evaluated the decisions reached, that it can be decided whether an important market opportunity was missed or the caution in risk assessment was justified.

A number of planners engaged in traditional long-term planning create their alternatives by assessing and categorizing the future events as black or white ones, preferring at that the projection that leads to the potentially optimum values for the targeted market gains. By doing so, the planner projects his or her own desired future, which in turn reduces the organizational flexibility necessary to perceive and implement the changes that it originally failed to predict or plan. The planners that interpret the future in different shades of the grey colour, ranging from the extremes of white to black, will be much better at assessing both the changes under conditions of environmental uncertainty, and the potential benefits for the organization, if it should choose to adjust to these changes. Depending on the planners' perspectives, but also on

the organizations' abilities to benefit from different developments in the market, individual events will be categorized as opportunities or threats. Each individual problem is at the same time an opportunity for the organizations that are capable of devising adequate responses to such problems.

Regardless of the selected approach to planning, there is always a certain level of risk involved that the strategist consciously undertakes, since it is never possible to achieve an absolutely unambiguous interpretation of any future situation in the turbulent market that is a part of the external organizational environment. If the organization chooses to wait for the things in the market to become clear, for the planners to identify the key trends and to adequately assess the long-term options, in most of the cases it will be too late to act or realize its goals then. In addition to this, if some events are interpreted as harbingers or indications of the forthcoming market changes, erroneous predictions of the future market state can be made, which will lead to taking of the wrong decision as well. Assessments of the validity of available information for quality predictions of market changes depend on analysis and appraisal. In any case, time needed to collect information and make decisions keeps getting shorter.

Prediction is a projection of a possible condition of the external organizational environment in the future. Organizations rely on planning to specify ways and means for the realization of its intended goals based on the future projections of its external environment. Planning is a sort of answer to the future projections of the external environment and targeted goals. Inadequate predictions lead to erroneous planning. In the turbulent environment, it is difficult to make any projection of the external environment that is sufficiently reliable, so that the organization could proceed with planning based on it.

In an uncertain environment, it is necessary to provide for a number of alternative plans that can be implemented depending on the actual condition of the environment in the future and also to have a number of parameters of the organization's condition describing it as a business system. Owing to the very fact that the environment is uncertain and unpredictable, the number of potential viable scenarios as a combination of discrete key variables is, in theory, extremely high. In each combination of environmental variables or scenarios, theoretically there is an infinite number of alternative solutions, answers or options that an organization can opt for or undertake, depending on its capabilities and potentials.

## ***TYPES OF CHANGES AND POSSIBILITY TO PREDICT EXTERNAL ORGANIZATIONAL ENVIRONMENT***

According to (Robbins & Coulter, 2005), if we look at two variables, the level of complexity and degree of changes in the external environment, we can discern four basic categories of environments. The four basic environmental categories are as follows:

1. **Safe and predictable environment.** This type of environment is characterized by a small number of key factors that tend to remain constant over time. The key factors of environmental change are characterized by the low level of

complexity and their mutual relations tend not to be complex. This type of environment can hardly be found in any field of business activities in the modern-day environment of the twenty first century;

2. **Stable and predictable environment.** This type of environment is characterized by a large number of key factors with high levels of complexity and/or forming complex mutual relations. The key factors of external environment tend to remain fairly constant over time;
3. **Dynamic and simple unpredictable environment.** This type of environment is characterized by a small number of key factors of the external environment that are not complex and/or not forming any complex mutual relations. The key factors in this type of environment tend to change over time;
4. **Dynamic and complex unpredictable environment.** This type of environment is characterized by the key factors of external environment that are complex and/or that form complex mutual relations, which, in addition to that, tend to change over time. This is a realistic general understanding of the changes in external environment in the beginning of the twenty first century. Such external environment is described as extremely turbulent.

From the theoretical point of view, external environment of any organization can be described as a specific point on a scale. The values on the scale range from a completely safe and predictable environment, to the dynamic and complex, unpredictable (turbulent) environment at the other end of the scale, which is defined as uncertainty or instability.

As for predictions, (Stoner, Freeman, & Gilbert, 2002) define three possible situations in decision making process for the manager, from the aspect of the manager's knowledge of the outcome of each alternative (option) and potential to predict whether a result (outcome) can or will be achieved.

**Safety** – it is understood here that we are in a situation in which we are fully aware of our task, we have accurate, measurable, reliable information on the outcomes at our disposal, that is, we are aware of the possible consequences of all the available options (alternatives) that we consider in this process. "If we know precisely all the characteristics of the environment in which a chosen action is to be implemented, we may say that we make decisions under the conditions of certainty". (Pavličić, 2007);

**Risk** is a situation where we cannot be completely certain in our prediction of the outcomes (consequences) of an alternative option, but where we have a sufficient body of information at our disposal to be able to predict the level of realization probability for desired results or condition.

**Probability** is the statistical measure of chances for a certain event or outcome to materialize (realize);

**Insecurity or uncertainty** is a situation where only a little is known about the available alternatives and their possible outcomes. It is a situation where the managers are faced with unpredictable external circumstances or where they lack some pieces of information based on which they could determine the probability of individual events. The managers here practically cannot tell what can happen, or what the probability levels for individual environmental conditions to materialize are. There are two reasons for the emergence of uncertainty: the first one is that managers are faced with environmental factors that they cannot predict or exert any influence on; the second reason is that the key information is not available to managers.

There are many unpredictable market drivers, but experienced analysts are nevertheless able to identify forces that influenced or brought about the changes in external environment over the past period. The above mentioned key drivers are defined as the key factors in environmental changes. They may be dependent on other independent variables and they may establish simple or complex mutual relations with other key drivers. The key drivers of environmental changes can change over time, or alternatively they can remain relatively constant.

According to (Courtney, Kirkland, & Viruerie, 1997), a certain amount of information necessary for strategic decision making can be obtained even within the extremely turbulent environments, which are characterized by high levels of uncertainty in predictions of changes in external environment. Quality of possible conclusions that a planner can draw based on such pieces of information is an altogether different question. Are such pieces of information sufficiently reliable to use them as a basis for predictions or for plans for future actions? In a large number of cases, it is possible to define the lines of a trend, based on which predictions of the future market demand can be defined. Technological development and products' life spans can be predicted to a certain degree as well, providing that there are no significant breakthroughs or scientific accomplishments or discoveries. This all corroborates the fact that we can assess certain possible trends in a larger part of the key forces from the external environment.

Another formative factor of uncertainty is the residual uncertainty that represents the remaining portion of variables that we have not assessed, interpreted or included in our analysis regardless of the reasons for such failures. Major portion of the residual uncertainty can be described through one of the four types of external environment and potential for environmental predictions. The potential for environmental prediction depends on the characteristics of the external environment drivers. Here follows a description of four types or simplified representation (model) of external environmental uncertainty and potentials for future environmental predictions. The presented types that follow here are categorized according to the levels of uncertainty they imply, from the less uncertain external environment to the extremely uncertain external environment.

**Type 1 – A Clear-Enough Future** (Figure 1). Managers can predict safely and precisely enough the external environment and based on such predictions they can develop a strategy. Based on their predictions, the strategic developmental direction becomes clearly discernible, and thus the residual uncertainty is of no relevance for the choice of strategy in this case. There is almost no residual uncertainty at all here. This can be called the traditional theoretical approach to strategic management, which is today applicable only to the business activities that are changing very slowly over time.

This is the case of the roughest approximation of the uncertain future. Each following case here describes the relevant environment type involving a higher level of residual uncertainty, but also the decreasing potential for practical application at that. The rougher the presentation of residual uncertainty, the greater the potential for mistake that the prediction involves; the model involving greater potential for mistake is nevertheless more applicable in the everyday managerial practice.

**Type 2 – Alternative Futures** (Figure 2). In this variant, future can be described through a few discrete scenarios that can be played out. By doing that, we obtain a set of discrete alternative scenarios that are used to describe the future. The analysis

cannot precisely identify the individual scenario that will take place in the future, but each of them can be assigned certain probability level, based on subjective assessment. Depending on the expected situations, several strategies can be designed, which are specified for the individual scenario in question.

The residual uncertainty encompasses the strategies that will be implemented by the competitors' organizations in the market as well. Thus, the success of any intended strategy depends on scenario, selected scenario version, and also on the competitors' moves in the market.

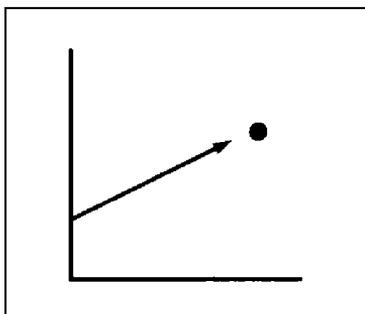


Figure 1: Clear-Enough Future

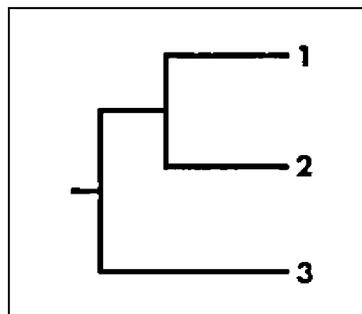


Figure 2: Alternate Futures

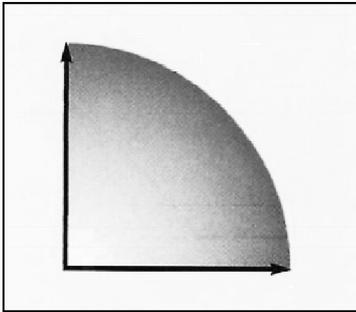
Source: (Courtney, Kirkland, & Viruerie, 1997)

**Type 3 - A Range of Futures** (Figure 3). In this situation, the range of possible future states of external environment can be defined. The range is defined by the domain that a certain number of key variables can take. Future is defined by a number of key variables, the values of which can be within the domain, but we cannot precisely tell their specific positions. This situation is characteristic of cases where relevant information is lacking. As a step towards the solution for this situation, attempt should be made to identify the pieces of information of relevance for the planner. By providing additional pieces of information, this case can evolve into an altogether different case. The domain can be defined by establishing its boundaries. A set of scenarios that are all sufficiently clear and not mutually excluding is impossible to create here. It is about a whole set of overlapping scenarios.

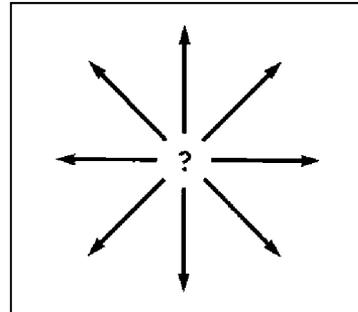
In order to resolve the issue inherent with this model type, it is necessary to establish a set of mutually exclusive scenarios, and that will cover the major part of probability of individual scenarios. Just like in the Type 2, each individual scenario is assigned an estimated realization probability value. Attention should be paid here to avoid repetition in individual scenarios.

**Type 4 - True Ambiguity** (Figure 4). In cases where relations and interdependence among different external environmental drivers cannot be identified, there is multi-dimensional uncertainty. Multi-dimensional uncertainty consists of a large number of unknown interactions among the key variables, which additionally multiply the uncertainty. If the environmental uncertainty can be defined as a case that is described here, from the today's perspective, it is impossible to predict such kind of uncertain

future. This kind of future is very rare in practice. By acquiring relevant information, this situation is gradually translated into one of the preceding three variants. The strategic planner is in an extremely difficult position in this situation, since it is very difficult to plan anything in the long-term. The higher the degree of environmental uncertainty, the larger number of different approaches and tools needs to be applied, in order to get an assessment from a number of different perspectives of data scanning and analysis.



*Figure 3: A Range of Futures*



*Figure 4: True Ambiguity*

*Source: (Courtney, Kirkland, & Viruerie, 1997)*

The experiences of the authors (Courtney, Kirkland, & Viruerie, 1997) showed that the majority of organizations operate in an environment in which changes and predictions can be categorized among the first three environment types. Frequent managers' mistakes, which they make while performing the roles of strategic planners, show that when they lack relevant information and ability to perform quality analyses, the analysts tend to assess things in the categories of white or black only. If managers say that their respective field of business operations belongs to this category, this is indicative of the lack of relevant information and efforts to properly analyse environmental trends and to define the key drivers of environmental changes. Insufficient analytical skills can lead to erroneous conclusions about excessive complexity of the drivers present in their organizational environment, due to which the entire planning process will rely on the planner's personal gut instincts. Potentially, this may not be the right way to make an entire system of inter-related decisions. If the available options in alternative strategic organizational choices are explored at the time when the plan is being implemented, this leaves only a little time to analyse available options and plan the implementation, which may lead the organization into a chaotic state during the strategy implementation process.

The planner's role under conditions of uncertainty is to attempt to collect additional pieces of information and to additionally analyse collected information on key drivers in organizational external environment, in order to reduce the uncertainty to the first two presented environment types.

## ***THE ROLE OF DIFFERENT ECONOMIC MODELS IN MANAGERIAL DECISION MAKING***

Simplifications of the real systems, or models, are nowadays increasingly used in describing environmental changes and organizations themselves in the contemporary management practice. Perhaps the most important purpose of modelling in the practice of management is its role in the contemporary decision making process.

According to (Pearce, 2005), models provide formal or informal framework for analysis of phenomena in economics, and they are used to separate the inherent characteristics of an economic system from the complex actual phenomena that are critical for thorough understanding of the basic elements of the system.

According to another source, (Turban, McLean, & Wetherbe, 2003), models are simplified representations of the real world that are too complex to be accurately reproduced. A substantial portion of the complexity of these representations is of no relevance for a given issue or phenomenon. According to the same, there are several types of models: proportional models, analogue models, mathematical (quantitative) models and mental (personal or subjective) models.

Models are simplified representation of a phenomenon. Modelling serves to highlight the key elements of relations and the essence of changes that take place, without any details. The advantages of working with models become evident in assessment of the key elements of a phenomenon and its changes under the influence of certain drivers. Models analyse factors affecting the model and the interactions among these factors. By analysing the factors, their nature, characteristics and interactions with other factors, we obtain variables of different models and the relations among them. Thus, starting from a complex phenomenon, a relatively simplified representation is obtained, in which variables inducing the changes and possible results are presented. The speed at which the decision making process is performed and organizational agility in adjusting to environmental changes are becoming imperative for organizational survival.

Reduced number of variables, simplified interactions among variables and adequate data presentation are principal reasons for the use of economic models in contemporary decision making process in business. There are several reasons for this: facilitated focus on a limited number of variables, which eliminates the need for substantial volumes of data; facilitated analysis of variables' interactions and shorter time needed to obtain results of the experiments performed. The importance of the models in the organizational decision-making process and in organizational management grows with the decrease in environmental certainty and predictions.

By using the computer technology in model application, digital simulations are obtained; the results of digital simulations can be presented in a number of different ways, as outputs and these are suitable for further analyses. Different modes of obtained data presentation and modes of visual presentation of results significantly facilitate handling and operations involving data.

According to (Kostić, 2001), business models for decision making process can be categorized as follows:

- Simulation models that are used to analyse changes in organizational behaviour that occurs due to the changes in certain variables. The decision

making models analyse the effects of changes in the output (dependent) variables in relation to the changes in input (independent) variables;

- Optimization models. Model that is being analysed in this paper is an optimization model, since its purpose is to help find the best solution, based on a given set of criteria. The set of criteria for the selection of the best option has been specified by defining the goal criterion.

As of lately, there are also some hybrid models, the simulation and optimization models, which define the discrete function of the system based on a number of results obtained from the simulation of a set of input variables, and additionally seek to identify its local optimum. By doing that, optimum approximation of a complex function is obtained, such as, for example, the profit function that is dependent on a large number of variables.

According to (Turban, McLean, & Wetherbe, 2003), arguments in favour of the use of modelling are as follows:

- Considerably lower costs of virtual experimenting when compared to the experimenting in the real system;
- The models provide for the simultaneous time compression. A longer period of time can be simulated in a couple of seconds only. The simulation in the reverse direction is possible and applicable as well: where an actual event can take only a very short time, its virtual simulation may last much longer, depending on the actual analysts' needs;
- Handling and work with models' variables are much easier than with an actual system. In addition to this, work with models do not interfere with the operations of the real system at all;
- When using the virtual models and by applying the trial and error system that are inherent to the work with models, costs are several times lower than when working with the actual systems;
- The present-day environment is characterized with high levels of uncertainty. Work with models can draw the manager's attention to certain risks and thus facilitate the decision making system (process);
- By applying mathematics, and with the aid of computer technology, managers can obtain a large number of alternative solutions;
- Models improve, reinforce and support the learning process. They are of great assistance in the training process.

Application of economic models is the basis for computer-supported Management Information Systems (MIS) and Decision Support System (DSS). DSS is used for a wide range of primarily non-structured decisions that are critically affecting the organization. Decisions that are unstructured and at the same time, if taken individually, of great importance for operations of an organization, are the strategic decisions reached by the top management.

According to (Simon, 1977), a business decision is a choice between a number of alternative possibilities (options) made by the decision-maker, with the intention to achieve an objective in a given situation. Decision-making is a managerial activity that involves decision making and looking for the way to achieve target objective under given circumstances. All the managerial decisions are categorized in the following manner, according to the effect that these will produce on the organization as a system:

- Strategic decisions, which will exert significant influence on the major part or on the entire organization. These contribute to achieving the shared, long-term goals of the entire organization. Top management is in charge of reaching the strategic decisions;
- Tactical decisions are the decisions that support the realization of the strategic decisions. Tactical decisions are reached on the middle management level;
- Operational decisions are the day-to-day business decisions, reached by the low management. Operational decisions are reached for the daily or short-term business activities and are, as a rule, made repeatedly, in cycles.

Hierarchical sequencing is a characteristic of the organizational decision making system. That is to say that each strategic decision reached within an organization requires a series of other decisions (from the tactical to the operational ones) necessary for its proper implementation. The process and the structure of the decision making process additionally reflect the personal characteristics of the participants in the decision making process.

Repetitive structured decisions are programmed to match the strategy of the enterprise and are produced in the form of policies, procedures or rules. These are used by all the employees, regardless of their specific position on different levels of management hierarchy, for reaching operational decisions that must be in compliance with the organizational strategy. Decisions that are not repeated and that additionally can considerably vary one from another are called the non-structured decisions. Decisions reached by strategic planners, due to the environmental changes over time, are categorized as the non-structured decisions.

## ***STRATEGIC DECISION MAKING MODEL UNDER CONDITIONS OF ENVIRONMENTAL UNCERTAINTY***

According to (Gruning & Kuhn, 2005), decision-making models consist of several sets of variables (Figure 5).

**The Uncontrollable Situation Variables of external environment**, which consist of the drivers from the organizational environment. Management is in no position to exert any effective control or influence over these variables. Scenario planning should create a certain discrete set of the most probable combinations of key variables from a large volume of data and environmental variables, which are individually called “scenarios”. Diverse discrete combinations of values of these variables make up the domain, or scenario field.

**Decision Variables** that are within management control. Different values of these variables define the domain or field of options.

**Goals** define the criteria for selection of a solution. Strategic goals are criteria for selection of options. Choice variables are defined depending on the strategic goals.

**Consequences of the decisions reached** can be described as variables of results achieved, that is, the variables of the consequences of each individual decision reached for the system. These consequences are the dependent variables that depend on the relations between the input variables and the environmental variables. Each decision,

its result and effects that it makes on the business system can be viewed from two time perspectives: that of the short and of the long term. Certain business decisions, such as the considerable reductions in prices of the seasonal goods (or products approaching the end of their life cycle), due to the relinquishing of a portion of the profit, may be assessed as a poor decision in the short term. If the same decision is assessed from the long-term perspective of the strategic decisions, such as the inception of a new innovative production program and provision of readily available finances, this short-term decision may be assessed as a good decision. Depending on the time perspective (short- and long-term), different values of consequential costs or different values of alternative options that have been deliberately relinquished, can be assigned to the same decision.

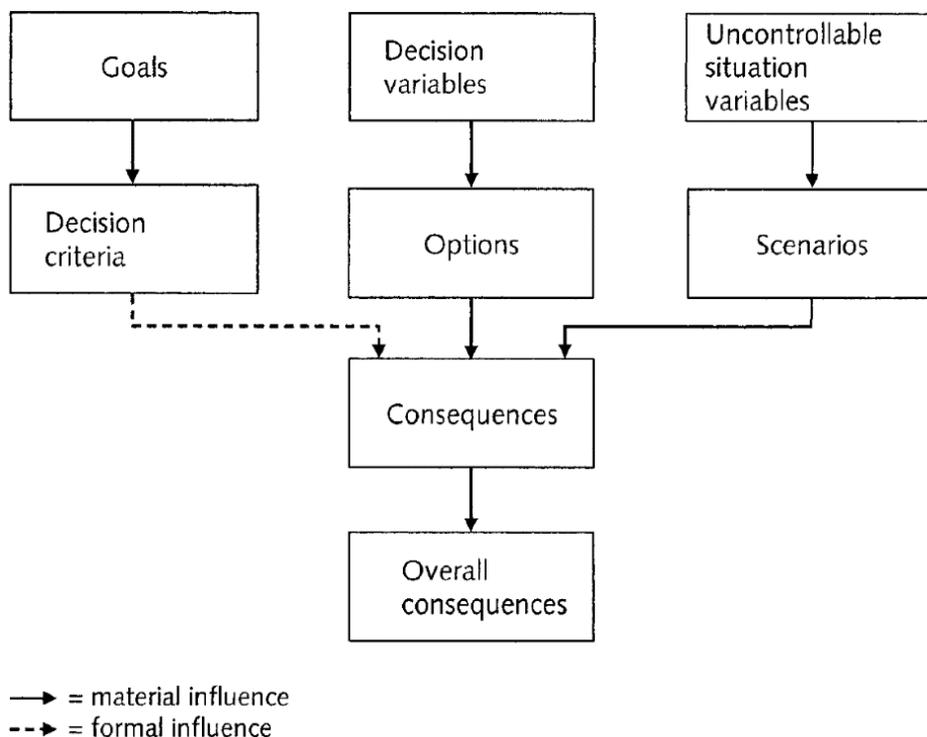


Figure 5: Central terms in decision methodology and relationships between them

Source: (Gruning & Kuhn, 2005)

## ***MODEL IMPLEMENTATION PROCEDURE***

In model implementation analysis, we shall rely on a relatively simple procedure of reaching rational decisions, which was invented by one of the founders of the artificial intelligence for decision making, (Simon, 1977). This procedure comprises of the following four stages:

- 1. Information gathering phase,**
- 2. Design phase,**
- 3. Selection phase,**
- 4. Solution implementation phase (that was added at a later stage).**

### *INFORMATION GATHERING PHASE*

This is the initial phase in strategic management, where necessary information is collected about the state of the organization and its environment. Accurate and relevant information is key for the decision making process. It is necessary to identify and assess the forces that have made the prevailing influence on the changes in the environment and in the organization itself over the previous period. From the complex environment that can be described by a large number of drivers, it is necessary to identify a limited, smaller number of critical drivers that have made the predominant influence on environmental changes. This simplification of changes is the piece of data of the critical importance for any further analysis.

### *DESIGN PHASE*

The design phase can be subdivided into following two sub-phases:

- ***Scenario building,***
- ***Options drafting for particular scenarios.***

***Scenario building*** comprises of identification of key variables and their interactions within the model. Scenario planning or scenario analysis is among the methods used for devising flexible strategies under environmental conditions that hamper reliable predictions of the future.

According to (Schoemaker, 1995), in addition to the above, it is necessary to identify the key drivers affecting the environmental changes, basic trends and key unknown elements of uncertainty. Their interactions are defined by rules of interactions. Scenario planning simplifies available data and enables us to translate these into a set of discrete conditions of critical, inter-related variables. Scenarios are projections of possible sets of states in which drivers of environmental changes can be found in their interactions. These often include the elements that cannot be formally explained or methodologically defined.

Key elements of uncertainty are identified. This analysis includes identification of events that can critically affect the organization, but which have not yet been included in the previous analysis. For each specified critical source of uncertainty, it is necessary to define their contingent influences and possible consequences.

After that, it is necessary to define the interactions and relations among the key variables. In some cases, interactions among the key drivers can be presented qualitative terms. Based on the steps implemented, a discrete set of scenarios can be made to describe possible projections of the future events.

According to the same source, the procedure of scenario building is implemented through the following steps:

1. The scope and timeframe for analysis is defined. The timeframe depends on the rate of change in the critical drivers, such as the rate of technology change, product life cycles, political, regulatory changes or the dynamics of some other change;
2. Major stakeholders need to be identified, along with their respective interests and potential for exerting influence. The key stakeholders usually include customers, suppliers, competitors, etc. It is necessary to identify their current roles, interests, power positions, as well as the changes in their respective positions over time;
3. It is necessary to identify the basic trends. Trends as patterns can be recognized in customers' habits, in demographic, political or economic trends, and so on. It is necessary to additionally assess the future influences that the existing trends can potentially exerted on the organization;
4. Key uncertainties need to be identified. Each event with an uncertain outcome, and thus with unpredictable effect, on the organization can be included in this research. In addition to this, it is necessary to identify the relationships among these uncertainties. Is it plausible that the identified uncertainties are mutually related or not? What are their potential effects in case that their inter-relations are realized simultaneously and alternatively, if realized one at a time only?
5. A greater number of initial scenarios should be constructed. Scenarios can be constructed in a number of different ways. One potential approach is to identify extremity scenarios for two opposing extremes. One scenario will consist of the key elements compiled in the least auspicious manner for the organization. The other extreme scenario will be made up of the combinations of key variables that are the most favourable for the organization. Among the most frequently used methods in initial scenarios' construction is the selection of two most important key variables, which are then used in scenario analysis to determine the most probable combinations thereof;
6. Check for consistency and plausibility. The initial scenarios are not always consistent, since they contain certain discrepancies or insufficiently specified logical relations. A minimum of three types of tests needs to be carried out to confirm consistency and plausibility of constructed scenarios. The first test is performed to establish whether the projected trends' values are compatible within the chosen timeframe. The second test is performed to establish whether the perceived uncertainties actually reflect the scenarios and their outcomes. The third test is carried out to check the stakeholders' interests and to verify the influences they may exert. By performing these tests, constructed scenarios may evolve from one into another one;
7. Development of the learning scenarios. The initial scenario defines a certain type of outline or a rough design and a framework for possible future events.

- In addition to that, it may contain a number of inconsistencies and implausibilities. It is necessary to identify the part of the initial scenario that needs to be further improved, in order to define organizational strategy;
8. Identifying the needs for additional research. By doing this, necessary additional research is identified, which is required to resolve the perceived discrepancies or blindspots in the initial versions of scenarios;
  9. Quantitative model development. Upon acquiring the research results, it is necessary to once again examine all the internal consistencies of the initial scenarios in order to formalize the logical interactions among the elements of the model. If these were performed successfully, it is possible to create the quantitative model, which will relate and define the interactions among the variables within the model;
  10. Evolve towards decision scenarios. A smaller number of scenarios should be gradually developed that will be used for decision making process. The ultimate goal is to create a scenario on which strategies can be tested and new ideas can be generated.

Individual scenarios present different sets of interactions among certain environmental drivers under specified conditions. Despite the fact that these are the continuous variables, it is necessary to specify their plausible combinations in discrete conditions, which have to comply with the following criteria:

1. They must represent discrete conditions, or combinations of most probable environmental drivers. These are a set of inter-related variables. Their interaction should reflect certain relations. Each of the above mentioned states contains elements that cannot be completely modelled, and to identify them, the planners' rely on their gut instincts and intuition;
2. Individual discrete conditions representing specific events have to be mutually exclusive;
3. Probability of realization of all the discrete conditions, as events, should be as high as possible, and as close to the unit as possible;
4. To differentiate specific scenarios, an additional event is introduced, as the so-called 'trigger'; trigger is an event or a value assigned to a variable based on which a decision maker decides to abandon one scenario in favour of another. The trigger can be an event or a certain (critical) value of variables, which indicates the necessity to evolve from one scenario into another.

**Generating Options.** Alternative management decisions, such as the reactions to the future possible situation in which the organization may find itself due to the changes in its external environment, are called 'options'. Each option should represent one creative planner's response to the possible future situation. The number of option may, depending on the case in question, vary from no option at all, to a large number of different options. Lack of options for a given situation is an indicator of the lack of organizational plans for providing responses to a certain scenario.

The number and quality of options depend on the following: organizational resources; the level of organizational knowledge; creativity of the decision-maker; time needed to apply solutions, i.e., the rate of adjustment to the new situation. It is often the case that managers feel that creating one option only is satisfactory enough for them. Organizations invest quite a lot of efforts in scenario building, and then often fail to invest sufficient efforts in devising creative organizational responses to the potential

situation in question. Additionally, it is then commonly expected that the responses provided are aimed at achieving the strategic goals of the organization.

According to (Adair, 2010), it is necessary to create a minimum of three or four different options. It is necessary to take into account all the possibilities for creating options that are provided by the organizational position and resources, as alternative solutions for organizational reaction to a given scenario. In case that the so-called “lobster pot” model is applied, all the possible creative possibilities should be analysed, to come up with only five or six feasible options. From such larger number of practicable options, only three or four options should be preliminary selected, to then finally reduce the choice to two selected alternatives only. These two (true) alternatives should provide the best solution based on the previously set target criteria. Taken together, these alternatives shall point out to the chosen course of action.

### *THE SELECTION PHASE*

For the multivariate planning by using the scenario method under conditions of environmental uncertainty, establishing a set of scenarios is as important as having adequate options as responses to such situations. Once an option is applied, outcomes are provided. Analysis can be explained by saying that if something happens, we can apply the following options (as alternative solutions) and as a result of doing that, certain outcomes shall be produced. Each option individually may have different effects on achievement of organizational goals. The selection of options has to be performed in compliance with the target strategic organizational goals. In the selection phase, selection of the best option is made, based on the strategic organizational goals.

### *SOLUTION IMPLEMENTATION PHASE*

The solution implementation phase should not be understood as a phase in which only one solution is implemented, but as a phase in which a set of alternative solutions is provided for a number of plausible situations. By doing that, the major part of the unpredictability issue is resolved, since possible alternative solutions can be specified for the most probable plausible conditions of the external environment, which are in line with the intended organizational strategy.

## ***IMPLEMENTATION RESULTS FOR THE PRESENTED MODEL***

Among the potential perceived faults of the above presented model is the lack of a formal methodology, which could be used to establish a discrete system of scenarios that are mutually excluding. The obtained system of scenarios, which is used to provide explanations or solutions for the majority of the possible future conditions, is derived by relying on the planners’ gut instincts and intuition, that are specific to their individual experiences, knowledge and understanding of the key environmental drivers.

Existence of the elements that are not formally modelled leads to subjectivity. Thus, different persons may produce completely different sets of projections of future events for one and the same situation. Surprisingly, different people can also provide a fairly similar set of scenarios for the same organization in the same situation. This fact points out to the existence of a discrete set of variables and their interactions, which can be used to demonstrate the future results with a fair level of probability.

Academic explanations of the adequate ways of implementation of scenario analysis in the strategic decision making process are lacking. This methodology has not been completely theoretically explained and there is no scientific method of its application. The presented model is an attempt at providing answer to this question.

A large number of alternative scenarios must be produced with only a minimum of details, where the chosen alternative is the basis for strategy formation and it needs to be developed further. The question of whether the chosen alternative is the right one that needs to be further developed arises here.

For practicality of application, the model is reduced to the selection of a few most probable scenarios and to the design of a few options only. This does not serve to cover for the entire field of possible states that the organizations may find itself in the external environment. In order to offset this deficiency in situations where there are quite a lot of alternative scenarios, critical scenarios are identified as the borderlines for the realization of the future events. In such situations, the borderlines of the future domain of events are defined by means of identifying the worse and the best scenarios. The worse scenario includes all the values of the key drivers and events that are inauspicious for the organization. Contrary to this, the best scenario defines all the positive values of the key drivers for the organization in question.

The positive aspect of this model is that the management is focused on following the key phenomena that drive the environmental changes, which serves to reduce the potential for striking errors and also to motivate the organization to come up with creative solutions.

## ***CONCLUSION***

Scenario planning is a method of visualization of the plausible future events that organizations can apply on a large number of problems that need to be solved. The essence of scenario planning lies in the simplification of an avalanche of data into a smaller, limited number of possible situations in which the organization may find itself in the future. Scenario analysis goes beyond the limits of the usual analysis that is based on facts, and it already contains a large part of the subjective assessment of the possible states. In that way, the planner's attention is directed towards the key drivers affecting the shape of future events.

Multivariate planning and decision making under conditions of uncertainty should create several alternative representations of the possible future of external organizational environment and position in which the organization can find itself. The planner's role is to create alternative actions for the organization based on the understanding of the possible and most probable future states, which will serve to achieve the intended strategic goals. Creating representations of the alternative environmental futures and possible organizational reactions to these, provides the organization with already prepared, general answers to the changes in external environment if these changes happen. By doing that, critical speed in providing reactions to the changes in scenario is achieved.

Presented model is a combination of the intuitive approach, which is based on qualitative assessment, and of the quantitative methods, which are used in decision making procedures. This gap between the practice that offers its applicable solutions and the scientific explanation requires tools in order to theoretically and methodologically explain the part of the procedure that is based on the intuitive approach. It is necessary to link the practicality of application of the rough models with the scientific explanation of their formation.

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## ***CREATIVE AND MANIPULATIVE ACCOUNTING***

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**Abstract:** Creative accounting is based on the need to provide real information displayed in the financial reports related to financial positions and business results of the companies, by using the flexible accounting regulatory framework. With this goal, the IAS and IFRS introduces the institution of estimating assets and liabilities at market "fair" value (IAS 16, IAS 39, etc.) and Institute of impairment of assets (IAS 36). However, applications of these institutes have "cleared the space" for manipulation with the financial reports, on which has greatly contributed very complex, and in some areas unclear accounting standards. Although, the aim of creative accounting is to give a true and fair presentation of items in the financial reports, in some cases it's turned into a manipulative accounting.

The aim of this paper is to clarify the differences between the types of accounting practices, pointing on what could be improved in the practices.

**Key words:** Creative Accounting, Manipulative Accounting, Standards, Implementation

**JEL classification:** M41, D04

**UDC** 657(082)

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## **INTRODUCTION**

Financial accounting monitors the external field of business with the reduced cumulative data on the internal field of business. It includes accounting of assets and liabilities by source of funds, as well as business results of the overall business processes for the accounting unit with an emphasis on financial relationships. Financial accounting is often encountered by the name of business, principal, central or on-balance sheet accounting.

Reporting on the financial position and business performance of the company was created and developed in accordance with the needs of financial reports users. In accordance with the environment and the circumstances in which they operate, changes the range of users of the reports related to a company, primarily classified as external users.

External users from their part, depending on their needs, dictate volume and type of the information they require. In accordance with these requirements, volume and type of information are constantly increasing, which leads to a changing a form and content of financial reports.

Special contributions are by the globalization processes, which require uniform standards for presentation of financial reports that need to be true, reliable and unbiased reports on the assets, liabilities, income and expenses.

Internationalization of financial markets has accelerated the introduction of numerous financial innovations, including modern techniques of financial instruments trading, dematerialization of securities and the introduction of new financial instruments named financial derivatives.

There are several reasons that justify the need for continuous theoretical study of the reform process of accounting system and comparative analysis of the achieved degree of compliance in different countries.

Accounting development clearly makes the difference between financial and management accounting. Increasingly develops into special and tax accounting, which although not specifically defined as a service keeps its own records that are specific and dependent upon the tax laws. Also, creative accounting was developed as "advanced" form of ordinary accounting.

Initially the task of creative accounting was conceived as **providing a realistic and fair presentation of the financial positions and results of operations of the companies in accordance with the legal framework, with the usage of flexible accounting regulations.**

Unfortunately, in practice, the "creative accounting" is often transformed into a "manipulative accounting", great contribution to this situation primarily belongs to a "creative" accounting practices, as to a very complex, sometimes vague International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS).

The aim of this paper is to point out some causes of occurrence, and the differences between these two types of accounting (creative and manipulative) in order to improve accounting practices.

## ***THE INTRODUCTION OF INTERNATIONAL ACCOUNTING STANDARDS THROUGH A PROCESS OF UPGRADING AND HARMONIZATION OF ACCOUNTING PRACTICES***

The improvement and harmonization (compliance) of economic systems and economic practices between countries, including the system of accounting and financial reporting is gaining on the intensity as the result of globalization. Development and harmonization of accounting and financial reporting started in the developed western countries, and then the process expanded during the nineties affecting other countries, particularly those in which began the transition of the economy, followed by a radical economic reforms and legal systems.

The advent of regional integration and multinational companies, especially the development of international financial markets, inevitably created a need for even greater unification of the accounting system and the construction of a transparent system of financial reporting as a basis for evaluation the ability of business entities to participate in a competitive game on the international market.

When the information of financial position, business results and cash flows are inconsistent due to incompliance of the accounting system, then the efficiency of capital markets in the allocation and distribution of resources is at a much lower level.

From the above, follows that the standardization of accounting systems is the right way to overcome these problems. On the other hand, although there are many developed systems of standardization, the greatest chance for standardization and harmonization of accounting systems on a global scale, provide International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), developed by the Board (formerly Committee) for international Accounting Standards, formed by members of the International Federation of Accountants (IFAC), in June 1973.

Harmonization of the accounting system with the IAS / IFRS is going on in the European Union countries and in all countries in transition. Based on the specific programs, harmonization of appropriate EU Directives and IAS / IFRS, is being implemented in both directions. In the process of the harmonization, approaches often differ but the basic goal is the same: with the "permitted specificity" to achieve greatest possible consistency in the near future.

Professional accounting regulations, in sense of mandatory application of International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) have been applied in accounting practices of Serbia since 1<sup>st</sup> January 2004 (for banks since 1<sup>st</sup> January 2003).

Mandatory application of these standards has been introduced with the aim of compliance of our accounting system with the generally accepted international scientific and professional achievements in this field. Applying standards ensures comparability of financial statements of business entities with other business entities in country and abroad, which is especially important for the functioning of financial markets.

In order that financial markets function efficiently, the participants in this market need relevant and reliable information about the financial position and operating performance of issuers of securities quoted on the relevant market.

Professional regulations include the Framework for the Preparation and Presentation of Financial Statements, International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), the interpretations that are an integral part of the standards, International Standards on auditing (ISA) and the Code of Ethics for Professional accountants.

Today, the legal profession is still not unique on what is and what should be the main subject of standardization by the Board of Standards. Most authors believe that the subject of standardization, at the international level, should be financial reports, but some disagree, believing that it should be accounting calculation and accounting as a whole, including the current billing and financial reporting.

Certain misunderstandings are of terminological nature, for example, professionals from English-speaking countries generally use term accounting calculation with a different meaning than our experts do. In our opinion, if we want to use one expression for the IAS and IFRS more appropriate is to use the term "International Financial Reporting Standards", i.e. IFRS, because standards serve as a basis for the preparation and presentation of financial reports used for financial reporting.

In accordance with IAS 1, management of the legal entity selects and apply accounting policy so that the financial reports be in compliance with all requirements of the applied International Accounting Standards (IAS / IFRS), as well as with all the interpretations of the Standing Interpretations Committee (CTS).

In cases when there are no special requirements, management independently establishes an accounting policy, to ensure that financial statements provide information that is:

- (A) Relevant for the users in decision-making;
- (B) Reliable and that is:
  - (1) Showing a fair result and financial position of an entity;
  - (2) Reflecting the economic essence of events and changes, not only the legal form;
  - (3) Neutral and impartial;
  - (4) Cautious (prudent);
  - (5) Complete from all significant points of view.

Therefore, when selecting and application of accounting policies, the management of a legal entity shall abide to the above criteria, i.e. to adopt accounting policies that will ensure the relevance and reliability of information in the financial reports.

## ***FINANCIAL REPORTING AND IAS / IFRS***

The main goal of financial reports is to provide information about the financial position, performance and changes in financial position of an legal entity. A complete set of financial reports normally includes a balance sheet, income statement (profit and loss), statement of changes in financial position (cash flow statement or statement of sources and uses of funds), as well as comments and explanations that are components

of the financial reports. They can also include additional information based on these reports or derived from those statements.

In terms of guidelines, what should specific information, from the financial reports include, in order to achieve their main goal, the starting point of the IAS / IFRS is that the economic decisions made by users of financial reports, require the evaluation of the ability of an entity to generate cash and cash equivalents, as well as assessing the dynamics and the certainty of its creation. In that sense it's required from the financial reports to provide information about the economic resources controlled by the entity and its capacity to manage with these resources in the past, also information on the financial structure, information about the liquidity and solvency of the legal entity for prediction the ability of an entity to fulfill its obligations in maturities.

Information about the financial position of the entity primarily are provided in the balance sheet, information on the effectiveness in the income statement and those about changes in financial position are provided through a separate financial report. In the comments and annexes to the financial statements additional information on the balance sheet and income statement are provided, which are also very important for the users of financial reports.

Parts of the financial reports interrelate because they reflect different aspects of the same transactions or business events. Although each financial report provides information that is different from the others, a single report doesn't serve for a single purpose only or doesn't provide all information that are needed for specific user. For example, the income statement does not provide a complete picture unless it's used together with the balance sheet and statement of changes in financial position of an entity (cash flows and changes in equity).

To achieve the goals of financial reports, it is important that they are created with the usage of two well-known principles: principle of business events (going concern) and the principle of continuity of the entity. The Framework and IFRS give explanations of these principles for the unique approach in their implementation. Third principle is consistency, which occurs in the Framework and IFRS in the context of a comparison of the qualitative characteristics of financial reports.

During the creation of financial reports their qualitative characteristics must be provided, so they would contain information usable for users of the report. These are: understandability, relevance, reliability and comparability. These are the main qualitative characteristics from which we should start with preparation of the financial reports, so that they could provide true and fair information about the financial position, performance and changes in financial position of an legal entity. Some of these characteristics are important for those who prepare financial reports and the auditors of the financial reports. Others are important for the bodies that propose and adopt standards, including IAS Board.

Most important qualitative characteristics of financial reports are:

(1) **Understandability** of information provided in the financial reports is an essential quality that should be present during the preparation and presentation of the reports. Responsibility of the creator of financial reports is to provide understandable information for the specific users. This also means that users of financial reports need to possess a reasonable level of understanding of the nature of business and economic activities of an entity, as well as accounting and a willingness to study the information presented with sufficient attention. However, information about complex issues, if

relevant to the economic decision-making, should not be left out just because certain users find them difficult to understand.

(2) **Importance**, as qualitative characteristic of financial reports, should be regarded from the influence of information, contained in these reports, on the users, in order to make economic decisions in the sense that they can help to evaluate past, present or future events, as well as to confirm or correct previous estimates of users. Some information are important by their nature (for example, information about transactions between related entities), while others are important not only because of their nature, but also for their significance (for example, information on the performance of individual segments of the legal entity). Information is classified as important if its omission or misstatement could influence the economic decisions of users. The significance depends on the size of the item or the wrong grading, of which we judge in the special circumstances that could lead to their omission or misstatement.

(3) **Reliability** is the quality of information which is expressed through the fact that it does not contain significant errors and partiality when fairly displaying what is or what could be represented (credibility). An important aspect of reliability is that the transactions or other events appearing, are complied with their content and economic substance, not just with their legal form. Prevalence of the substance above the form is especially important in right selection of accounting policy related to the recognition of income and expenses in the financial reports. In that context information must be presented neutrally, prudent and complete. Information is not neutral if it is selected and presented in a way that affects the outcome of the decision in advance. Prudence represents applied level of caution in sense that assets or income shouldn't be overrate intentionally, neither that liabilities nor expenses should be underrate, nor should hidden reserves or excessive provisioning created. In order to be reliable, the information in financial reports must be complete within the bounds of their importance and cost of their preparation and presentation.

(4) **Comparability** is the qualitative characteristics of financial reports, which means that measuring and displaying performance of the company, through similar transactions and other events, must be carried out consistently in the framework of a legal entity and during a long period of time for a single legal entity and in a consistent manner for different entities. To ensure the comparability of the financial positions, performance and changes in financial positions, it is essential to adopt consistent accounting policy. Changes in accounting policy may be permitted, but users must be informed of the accounting policy applied into preparation of the financial reports, changes in those policies (if any) and their possible effects.

## ***ACCOUNTING LEGISLATION IN SERBIA***

The financial reports, which are primarily intended for external users should be true, reliable and impartial, in a word, a fair view of the assets, liabilities, equity (balance sheet) and the gain or loss (profit and loss) for the fiscal year or for the period of time they are compiled for. Legislation in Serbia was regulated on these bases. Under this accounting legislation are implied all laws and by-laws that are adopted for the enforcement of laws.

The basic law, that regulates accounting in our country, is the Law on Accounting and Auditing, which was adopted on 25 May 2006th ("Official Gazette of RS", No. 46/06). Provisions of this Law stipulate that the accounting books, recognition and valuation of assets and liabilities, income and expenses, presentation, submission, disclosure and audit of financial reports and internal audit, are conducted in accordance with legal, professional and internal regulations.

The provisions of this Law are applied to:

- Enterprises, cooperatives, banks and other financial institutions, insurance companies, financial leasing companies, voluntary pension funds, companies for managing voluntary pension funds, stock exchanges and broker-dealers and other entities;

- Private individuals who independently perform business activity in order to make profit and who keep their books using double entry bookkeeping system (hereinafter referred to as entrepreneurs), unless a special regulation stipulates otherwise;

- Legal entities and other forms of organization that are legally established abroad, if the regulations of those countries don't require keeping books and preparing financial statements from them;

- Branches and other organizational units of foreign legal entities based abroad who conduct business activities in the Republic of Serbia, unless a special regulation stipulates otherwise;

- Banks and other financial institutions, and insurance companies, who are the founders of legal entities based abroad, obliged to provide, at the request of the National Bank of Serbia, all the information that reveals activities of these entities.

The law is not applied to budget and budget beneficiaries, whether they are direct or indirect beneficiaries of these funds. For these subjects in terms of bookkeeping, the preparation, submission and publication of financial reports, special regulations are applied in accordance with the Law on the Budget System.

When it comes to the legislation, it should be considered that certain issues, primarily the external accounting informing on financial position of the legal entities, are regulated by the laws governing their legal status, such as the Law on Enterprises, the Law on Cooperatives, Law on Banks, Law on Private Entrepreneurs and others. Also, some issues are regulated by the regulations on the Foreign Trade, on the payment system, on the market of securities and other financial instruments, as well as by the tax regulations.

Regarding the obligation for application of the standards, it is necessary to bear in mind the provisions of Article 2. of the Law, which provides that a small legal entities and entrepreneurs can, but large legal, medium legal, parent legal entities that in accordance with the law prepare consolidated financial reports, legal entities issuing securities and other financial instruments traded on a regulated market and all issuers of securities and other financial instruments, must apply IAS and IFRS.

Based on these statutory provisions, the Minister of Finance stipulates the Rulebook on the recognition and valuation of assets, liabilities, income and expenses of small companies and entrepreneurs ("RS Official Gazette", No. 105/06 and 111/06). This regulation applies to those small companies and entrepreneurs who decide not to apply IAS and IFRS.

According to the regulations of the Law on Accounting and Auditing, professional legislative relates to the Framework for the Preparation and Presentation of Financial Statements, International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), interpretations that are an integral parts of the standards, International standards on Auditing (ISA) and Code of Ethics for Professional accountants. Professional accounting regulations, in terms of mandatory application of International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), are applied to our accounting practices from the 1 January 2004th year (for banks from 1 January 2003). Mandatory application of these standards has been introduced with the aim of complying of our accounting system with generally accepted international scientific and professional achievements in the field.

Applying standards ensures comparability of financial reports of business entities with other business entities at home and abroad, which is particularly important for the functioning of financial market. In order that financial market function efficiently, the participants in this market need relevant and reliable information about the financial position and operating performance of issuers of securities quoted on the relevant market.

Objective difficulties while considering newly adopted IFRS, as well as amendments to revised IAS, in our country represents the fact that there is still no official translation of the text of new and revised standards, which would certainly contribute to their better understanding and systematic usage.

According to the Law on Accounting and Auditing, internal accounting regulations include general acts issued by a legal entity or entrepreneur, which contain specific instructions and guidelines for bookkeeping, accounting policy for recognition, evaluating of assets and liabilities, income and expenses, and instructions and guidelines for the approval, submission and disclosure of the financial reports, and other matters of bookkeeping and preparation of financial reports for which the law stipulates that are regulated by the general rule of the legal entity or entrepreneur, in accordance with the laws and professional regulations.

One of the main demands placed to accounting practices, related to the implementation of International Financial Reporting Standards (IFRS and IAS), refers to the obligation of adoption of the accounting policies by each entity that applies IFRSs and displays these policies into the financial reports which announces.

According to IAS 1, the management of of the legal entity selects and applies accounting policies so that the financial reports comply with all the requirements of each applied International Accounting Standards (IAS / IFRS), as well as with all interpretations of the Standing Interpretations Committee (CTS).

## ***CREATIVE ACCOUNTING AS A TOOL IN THE SERVICE MANAGEMENT***

As it can be seen from the foregoing, the accounting regulations provide management capabilities that some parts of the current value assets, liabilities, income and expenses are stated at historical cost or the so-called "fair value." It provides the opportunity of making conscious choices of accounting policies affect on financial position and financial performance in the financial statements of the company.

This was largely contributed to the regulation of alternative procedure for subsequent measurement of tangible and intangible investments, according to IAS 16 and IAS 39 for so-called "fair value." On the other hand, the impact of IAS 36 is very important for depreciate, IAS 19 related to employee benefits, while IAS 37 on provisions etc.

The application of the rules related to the market "fair value" provides the opportunity to express in balance sheets unrealized gain (which is expressed as the difference unrealized gains and losses, arising from the application of fair value of assets and liabilities, which in accordance with IAS / IFRS are value through profit or loss).

While creative accounting should be able, as previously stated, to serve the real expression of the assets, liabilities, income and expenses, it may grow under the influence of a management in to powerful tool for the manipulation of financial statements. This means that creative accounting turns into a manipulative accounting.

We point out that some authors do not differs creative accounting from manipulative accounting and creative accounting in all forms is treated as a "creative accounting". These authors treat the two terms as synonyms.

To prevent the development of manipulative accounting, the application of the principles of implementation is proposed as a condition for the recognition of gains and losses.

That is based on the well-known principles of decrease. This means that for the valuation of assets is necessary to set a lower value and a higher value for the assessment of duties. Therefore the upper value for the property should be purchase price or cost of making, and the lower value for liabilities is determined as the purchase price.

In the financial statements, there isn't and there can be no absolute truth, considering the previously stated regulatory framework for the preparation thereof. This is because in this way it brings flexibility in accounting related to complex interactions.

Management from the standpoint of "creativity" can use a accounting (as a means) in the following ways:

1. Access to the principle of prudence and careful presentation of the status and results of the company (shorter amortization period, the greater amount of provisions and others). It understood that this approach is not abuse of the principle of prudence and it presents a conservative accounting, or fully "*green area of accounting*".

2. That for the most part fair view of the financial position (balance) and the operating result (success), by adhering to the principles of implementation (of

decrease), the shorter the amortization period, and it would present a neutral financial reporting ("green zone creative accounting").

3. Allowed to use the flexibility of accounting regulations which corresponds management in order to create a favorable image of the company. Level of creating a favorable image of the company may differ and from it depends on how creative accounting has become "creative". This accounting is barely allowed, so there is a gray area of creative accounting, but that is defined as "creative accounting".

4. To allowed out of the "flexibility" of accounting regulations in order to create a completely false picture of the company and is a criminal area, and red - the forbidden zone of manipulative accounting.

## ***MANIPULATIVE ACCOUNTING - FORMS***

Manipulative accounting amounts to an abuse of accounting principles and techniques with the aim of displaying false financial statements that deviate from the fair presentation.

The main management motives to create a more favorable image of a company that has stability and steady growth can be reduced to a desire to obtain managerial remuneration and bonuses, increase the value of shares on the stock market or the market value of company with limited liability and attract investors.

Manipulative accounting can affect:

1. the net asset value or balance sheet position
2. the amount of the profit or loss in the income statement

Depending on the motives that drive management, manipulative accounting boils down to:

- expressing bigger financial results and better property / the financial position then it is real
- expressing lower financial result and lower property / financial position then it is real.

In any case, the manipulative accounting is mentioned when these fake financial statements are created with the intent to mislead external users. This is a very complex issue, because frauds in the theory and practice have different interpretations. In any case, our position is that manipulative accounting carries the intention of fraud, and is beyond the scope of good accounting practice.

If it is a false expression of better financial results in practice are more likely to manipulate revenues than the expenditure, because when manipulating the earnings (overstatement of revenues) from the point of view of the tax authorities do not have the element of the offense, and misleading creditors and investors often goes unpunished.

In that situation, the most commonly used following manipulations are:

- Reporting of non-existent income:
- Overestimation of revenues;
- Too early of Income;
- Including non-operating income in operating income.

In this way, the financial indicators of solvency of a company are increased, which is misleading creditors and investors particularly.

In addition to these management activities for the purpose of presenting a constant trend of revenue growth may decide to sell fixed assets, particularly if it is carried at purchased price.

Also, there is a well-known practice of rapid disposal at the end of the business year under stimulating conditions.

If the show is less than the actual expenses (understatement of expenses), from the standpoint of tax regulations is not a criminal offense. That is way this method is quite often used in manipulative accounting. Manifestations of underestimating expenses are:

- Too low rate of write-off of fixed assets (depreciation, derogation from the procedure impairment);
- Too low forming allowances;
- Capitalization of costs that can not be capitalized;
- Treatment of the research costs as an intangible asset;
- Do not show the cost of penalties and costs of the litigation, retirement benefits;
- Not credited to the negative impact on the cost of the course.

In addition to handling the expenses in order to show higher profits, is related to the balance sheet with the manipulation of the assets of the company. This is done by dividing the assets of the company recognized the overestimated values and without expressing any deduction for bad debts, inventories that are actually below the cost of the damage, prolonged storage, the seasonal etc.

Expressing much smaller than the actual financial results can be achieved by understatement and concealment of income, and by overestimation of expenditures.

This behavior of the management is primarily caused by tax evasion, as income tax (net of tax basis in the income statement), as well as taxes on capital (balance sheet). Also, if it does not show the true extent of traffic, it perform and evasion of value added tax.

Besides the basic motif located in tax evasion, often with negative results (the loss that really exists in which case no tax liability), the purpose of the management is done "clean balance sheet." It is actually a write-off of assets rapidly to expenses, primarily high-value assets that can represent long-term assets, outstanding receivables and inventories.

The above cleaning is usually done in bad business years (when a loss), so it is not much matter if it will be increased in this way, and "gearing up" for the better years. However, cleaning the balance can be carried out in extremely good years, and in this way it can create a hidden reserve for next year.

Clean the balance on the edge of legality, often in the area of accounting manipulation.

## ***MOTIVATIONAL FACTORS OF FALSE FINANCIAL REPORTING***

International Standards on Auditing as a major form of criminal activity in the financial statements listed in addition to false financial reporting and misappropriation of assets.

The false financial reporting in terms of criminal activity characterized primarily intended to fraud users of financial statements with the false financial statement to. This means that with the intentional false reporting or with intentional omission of relevant information by the conscious deception external users of the reports.

Misappropriation of assets involves the appropriation of the assets of a person who is often accompanied by false or retrofitted records or documents, in order to hide the appropriation of property or use of property without proper authorization.

Factors contributing to the abuse of financial statements are:

- Notable pressures;
- Remarkable ability;
- Existence of justifications

Most of the pressure to commit fraud by false financial reporting is financial nature, but should not underestimate the pressures of a different nature. Consistent with these notable pressures can be divided into:

- Financial pressures;
- Vice;
- Pressures in the workplace;
- Other pressures.

Financial pressures and pressures from vices are the most common causes of fraud. Financial pressures are greed, lust for life at a higher level of standard, personal financial losses or unexpected financial needs, etc.

Vices are the most severe form of pressure and reduced to the dependence of the individual from the use of drugs, gambling, alcohol, etc.

Pressures in the workplace are insufficient wages, workplace dissatisfaction, lack of respect, fear of losing a job, etc.

Among other pressures are challenging and will to win of the system of internal control, the desire to prove hacking skills in relation to security systems, other legal entities and other legal institutions.

Remarkable opportunity to commit abuse or conceal or avoid punishment is another element that motivates to fraud. It is certainly important in this regard to establish system performance of visible internal control. The absence of system of visible internal control increased opportunities for fraud. Also, ignorance or incompetence are essential, and lack of punishing offender increased opportunities for fraud.

Justifying attitudes are a side effect of almost every crime, and its execution. The existence of a justification for illegal behavior is the last factor that drives a person to engage in the commission of various forms of abuse, which are reduced to change significantly the financial statements.

If there are all three factors that contribute to the abuse of financial statements at the same place, it is a great possibility that it will come to that.

## ***MANIPULATION OF FINANCIAL STATEMENTS AND WARNING SIGNS***

Most of the financial statements, particularly companies whose shares are listed on the stock exchange, have responsible corporate governance and operates in a legal manner, which means that their financial statements give a correct view of the situation and the success of the business. However, financial reports are sometimes deliberately prepared to present the incorrect financial position and the false success of the company. Specially these financial statements pose a number of problems in them and have major negative consequences in terms of confidence of extern users. This can create an economic "devastation" when burst "price bubbles" based on wrong expectations, which took place at the beginning of this century in Europe and the U.S., including the famous "Enron" and "Parmalat".

The negative effects caused manipulative accounting reports are reduced to:

- Reduced reliability, quality and trust in the financial statements,
- Lower credit ratings of the capital market;
- Negative impact on the entire country's economic development,
- Disruption of operations and activities of the company which have drawn up reports;
- Loss of confidence in the reliability of financial Contact;
- Impairment of confidence in the accounting and auditing profession.

Certainly the biggest losers are investors (shareholders-owners of capital). In particular, the investors who are deceived manipulative accounting procedures have invested in expecting large profits. Of course, in case of insolvency, also all the other creditorslosewho were "deceived" by false balance sheets.

Of course, losers are: a company whose financial statements are forged, their employees and the state.

In any case, it cannot be bypassed the role of fair accounting based on IAS and IFRS and its impact on accounting manipulation. This is due to the fact that it is a factor that exacerbates the crisis initiated by other factors, and may be a long period to conceal the crisis, resulting in a lack of timely responses to emerging problems.

Fraud in the system of fair value under IAS and IFRS develop primarily because of the lack of precision of this concept, because the measure includes uncertainties and assumptions that are influenced by changes over time. This is especially evident in the cases of absence of an active market, where a lot is based on estimates and assumptions of management.

Pursuant to set out for each of these stakeholders is essential to timely detect manipulation of accounting reports. In this regard it is important to follow the early signals that there would help to identify potential fraud, such as the following:

- Income or sales that are not in accordance with the non-financial performance criteria;
- A large number of returned sales;
- Significant transactions with related parties;
- The company has very high claims;
- The absence of original documents

- Frequent changes in income;
- Unusual corrections of income through transactions at the end of the period;
- Frequent changes in accounting policies;
- Great to unknown buyers;
- Frequent changes of auditors, management, legal counsel and other key personnel.

Certainly the existence of these indicators does not necessarily represent the existence of manipulation in the financial statements, but these signals should be taken with due care.

## **CONCLUSION**

Based on the above, we can conclude that the financial reports, composed by the company, are always reasonably accurate, and that the expression evaluation of items in the financial reports carries the lack of objectivity. Special contribution to this lack, is in methods for evaluation of fair value in situation when there is no active market, and can greatly influence on the reports.

In this situation, creative accounting can easily escalate into a manipulative accounting, particularly if the conditions that motivate such actions, are created. Financial reports of all entities, not just of those from countries in transition, can be forged, because they are composed from evaluations created by the accountant or by the management which result in different approaches to the application of accounting practices.

On the other hand, it can not be unilaterally observed, that solely application of IAS and IFRS is guilty for manipulating (handling) with financial reports, but as the result of influence of many factors.

Manipulation with financial reports is resulting with frauds and degradation of interests of their customers, which is undesirable practice, focused only on increasing personal wealth of managers or builders at the expense of investors, creditors and lenders. Executors of frauds most often appear precisely at corporate top.

Therefore it is necessary that on the level of companies or corporations, risk management financial reporting arranges systematically, which would improve the process of identifying, neutralizing and preventing frauds. In this regard important roles have auditors, but they are only one of the factors that are need for detection of frauds in financial reports.

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## ***NEW DIRECTIONS IN MANUFACTURING***

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**Abstract:** The manufacturing enterprise in future must adapt to work within the new manufacturing paradigms that are now being created. The better, faster, cheaper paradigm will remain a driving force as companies manage shorter cycle times, increased quality requirements, and customer demands for lower costs. Successful companies will be the ones that can strike a balance between these three challenges. A broader concept of manufacturing will be used in the future, including software to convert information and materials into useful products, biotechnology in the manufacturing process, and aspects of agribusiness that complement the production process. Creativity and innovation will be the bases for this new concept as societal structures become more knowledge-based, dynamic, fluid, and globally distributed. The new model of a manufacturing enterprise is simpler, modular, and looks at innovative production methods to achieve greater benefits.

The paper discusses new directions in production, with an emphasis on the challenges, transformation, energy intensiveness and technological innovation.

**Key words:** Manufacturing, New Directions, Challenges, Transformation, Innovations

**JEL classification:** L60, O31

**UDC** 338.45(082)

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## ***INTRODUCTION***

A decade into the 21st century, the role of manufacturing in the global economy continues to evolve. Over the next 15 years, another 1.8 billion people will enter the global consuming class and worldwide consumption will nearly double to \$64 trillion. Developing economies will continue to drive global growth in demand for manufactured goods, becoming just as important as markets as they have been as contributors to the supply chain. And a strong pipeline of innovations in materials, information technology, production processes, and manufacturing operations will give manufacturers the opportunity to design and build new kinds of products, reinvent existing ones, and bring renewed dynamism to the sector.

The new era of manufacturing will be marked by highly agile, networked enterprises that use information and analytics as skillfully as they employ talent and machinery to deliver products and services to diverse global markets. In advanced economies, manufacturing will continue to drive innovation, exports, and productivity growth. In developing economies, manufacturing will continue to provide a pathway to higher living standards. As long as companies and countries understand the evolving nature of manufacturing and act on the powerful trends shaping the global competitive environment, they can thrive in this promising future.

Over the past several decades, manufacturing has experienced significant change as rapid globalization shifted a significant proportion of manufacturing capacity from developed to emerging economies and substantial new markets and new competitors emerged. The globalization of manufacturing was enabled by a combination of forces coming together simultaneously, including a significant change in geopolitical relations between east and west, the widespread growth of digital information, physical and financial infrastructure, computerized manufacturing technologies, and the proliferation of bilateral and multilateral trade agreements. These factors, along with others, have permitted the disaggregation of supply chains into complex global networks allowing a company to interact in the design, sourcing of materials and components, and manufacturing of products from virtually anywhere – while satisfying customers almost anywhere (Rebecca Milos, 2013).

The manufacturing industry is of great interest to investors and business leaders hoping to take advantage of the opportunities presented by rapid globalization and the significant growth of the middle class in emerging markets, as well as serving high-value customers in developed markets with innovative new products and services.

## ***MANUFACTURING IN 2020***

"Manufacturing" was defined in broad terms as the processes and entities required to create, develop, support, and deliver products. Many forces – social, political, and economic, as well as technological – will shape the manufacturing environment in 2020. The nature of manufacturing enterprises will evolve in response to changes in the technological, political, and economic climate, and following factors will be the most important to the development of manufacturing:

- The **competitive climate**, enhanced by communication and knowledge sharing, will require rapid responses to market forces.
- **Sophisticated customers**, many in newly developed countries, will demand products customized to meet their needs.
- The **basis of competition** will be creativity and innovation in all aspects of the manufacturing enterprise.
- The **development of innovative process technologies** will change both the scope and scale of manufacturing.
- **Environmental protection** will be essential as the global ecosystem is strained by growing populations and the emergence of new high-technology economies.
- **Information and knowledge** on all aspects of manufacturing enterprises and the marketplace will be instantly available in a form that can be used for decision making.
- The **global distribution** of highly competitive production resources, including skilled workforces, will be a critical factor in the organization of manufacturing enterprises.

Customers will require that suppliers of goods and services maximize the value relationships among quality, service, and price. The goal of successful enterprises will be to find the optimum position in this "better-faster-cheaper" competitive triangle. A "we can have it all" attitude among consumers will force corporations to become extremely flexible and adaptable. As large numbers of consumers in newly developed countries gain economic power, this attitude will be prevalent worldwide.

The concept of manufacturing in 2020 will be broader than it is today. It will include software (the conversion of information, as well as materials, into useful products), biotechnology, some aspects of agribusiness, and many other production enterprises. The basis for competition will be creativity and innovation because (1) the manufacturing context will be broader and (2) social and organizational structures will be much more knowledge-based, dynamic, fluid, and globally distributed. Manufacturing enterprises will plan, create, and manage new products, processes, supply chain systems, and other business aspects of the enterprise (e.g., finance and marketing) concurrently.

The structure and identity of companies will radically change to encompass virtual structures that will coalesce and vanish in response to a dynamic marketplace. All activities that are not essential to implementing new ideas in marketable products will be eliminated. A readily available generic transaction and alliance infrastructure (e.g., equitable profit sharing and business processes for protecting intellectual property) will enable individuals and entrepreneurial teams to compete solely on the basis of skills and knowledge.

These developments will require new corporate architectures for manufacturing enterprises:

- **materials enterprises** that can convert raw and recycled feed stocks into an array of finished and semifinished materials to meet the changing demands of product suppliers in a cost-effective way
- **product enterprises** that can convert the new materials into configured products

Although production resources will be distributed globally, fewer materials enterprises and more regional or community-based product enterprises will be linked to local markets. Product enterprises may be part of larger corporations, but they will be located in and serve local markets and will operate autonomously.

Materials enterprises will initially merge to achieve economies of scale, but this will change as revolutionary materials processes (e.g., molecular nanotechnology) enable the local production of specialized materials. Companies will be aggregations of people connected to each other by mutual trust and supported by an alliance and transaction infrastructure. Companies will be characterized by their ability to define an increasingly fluid “core competency” in a supply chain. Core competencies will be perceived as commodities that can be combined and recombined in response to market dynamics.

Team-like organizations will form around new product ideas and quickly assemble the necessary resources from a highly distributed manufacturing capability. All participants will share decision making, risks, and rewards. All functions of the enterprise will be comprised of highly integrated systems of human, material, and information processing capabilities that can be combined to transform ideas and materials into valuable products. All aspects of developing a manufacturing enterprise, including developing business and marketing strategies, research, and product innovation, will be concurrent.

Enterprise teams will interact continuously with each other and with computer-based system synthesis models to explore the complete range of configurations and resources to realize new products. As a result, robust system configurations will be relatively invulnerable to external changes and highly adaptable to changes in technology, the marketplace, and the business climate. Adaptable enterprises will be able to reconfigure quickly to accommodate change while continuing to be profitable.

The manufacturing workforce will be as diverse as the global economy. Interpersonal skills will be highly developed, cross-cultural barriers will be greatly reduced, and remaining differences will be valued for their contributions to innovative manufacturing. Individuals will have a sense of purpose and satisfaction and will be able to see clearly how their skills and intellectual capabilities add value to the enterprise. Information systems that enhance workers’ access to, and ability to use, information will reduce the current gap between individual intellectual capabilities. A diverse workforce, operating on a more level playing field, will have a greater potential for creating new products synergistically.

In addition to the workforce’s situational adaptability, people, information/data processing systems, and material processing systems will be closely integrated. Individual workers will learn not only through access to information, but also by being important elements of a highly integrated manufacturing system. As automation advances toward more “human-like” capabilities, workers will be freed to do what is uniquely human—create valuable new products and make bold and visionary business decisions. The synergistic output of human-machine interactions will be much greater than the sum of its parts.

The innovation that has driven the microelectronics industry toward smaller and smaller processing scales could provide a model for revolutionary advances in

industrial processes and equipment in the future. As enabling technologies are developed, the trend toward small-scale production components will continue. Extremely small-scale process building blocks that allow for synthesizing or forming new material forms and products will emerge. Nanofabrication processes will evolve from laboratory curiosities to production processes. Molecular assembly of complex, precise functional structures will lead to the development of microdevices, such as sensors, computational elements, medical robots, and macroscopic devices constructed from fundamental building blocks. Biotechnology, combining biology and chemistry, will lead to the creation of new biosynthetic and bioderived manufacturing processes that will have new and exciting applications.

The focus on sustainable, low-waste production processes will intensify as the global ecosystem is strained by growing populations and the development of new high technology economies and as awareness and global economic forces increase the need for responsible environmental stewardship. Improved process controls, the recycling and reuse of process waste streams, and new synthetic pathways will result in near-zero discharge processes. Products will be designed to be recyclable and reusable or to exist benignly in the environment.

The growth of economies depends on the growth and survival of industries and firms. If you analyze national or multinational economies, industry competition, or company management, it is important to know how industries develop and change. A crucial part of this change, in many industries and for overall economic growth, is continual development of new or improved production methods and products.

Over the past several decades, manufacturing has experienced significant change as rapid globalization shifted a significant proportion of manufacturing capacity from developed to emerging economies and substantial new markets and new competitors emerged. The globalization of manufacturing was enabled by a combination of forces coming together simultaneously, including a significant change in geopolitical relations between east and west, the widespread growth of digital information, physical and financial infrastructure, computerized manufacturing technologies, and the proliferation of bilateral and multilateral trade agreements. These factors, along with others, have permitted the disaggregation of supply chains into complex global networks allowing a company to interact in the design, sourcing of materials and components, and manufacturing of products from virtually anywhere – while satisfying customers almost anywhere.

Policy-makers, still coping with the aftermath of the financial crisis and hoping to stimulate high-value job growth and create sustained economic recovery, are keenly interested in the benefits of having a globally competitive manufacturing industry. While the changes that have occurred in the recent past are important to understand, it is the future of competition in the manufacturing industry that has the most interest to both business leaders and policy-makers. As depicted in Figure 1, the trends most impacting global manufacturing competitiveness including market forces, such as macroeconomic and demographic forces, as well as the key resources and capabilities where competition will occur for both companies and countries in the future.

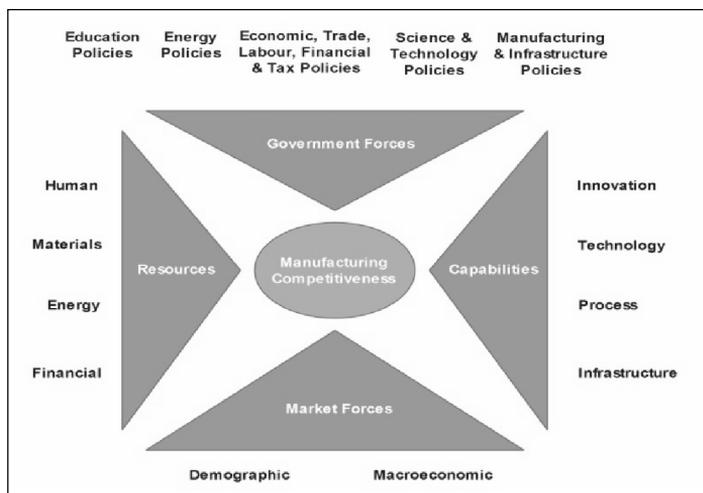


Figure 1: Global manufacturing competitiveness framework

More recently, over the past several decades, a rapid globalization has occurred in the global manufacturing ecosystem driving more change and impacting the prosperity of more companies, nations and people than at any time in the last 100 years. A significant amount of manufacturing has moved from developed nations to emerging economies and this rapid global expansion of manufacturing has dramatically changed the competitive landscape for manufacturers. Nations around the world have taken part in and benefited from the rapid globalization of industry and expansion of manufacturing. Recent re-search confirms manufacturing has been immensely important to the prosperity of nations, with over 70% of the income variations of 128 nations explained by differences in manufactured product export data alone. Globalization of manufacturing has been a key driver of higher-value job creation and a rising standard of living for the growing middle class in emerging economies, including China, India, South Korea, Mexico and Brazil. Developed nations have benefited from lower cost products driven by the lower wages used for production in emerging markets. But this has also dramatically changed the relationship between emerging and developed nations, creating competition as well as co-dependency.

## **DEFINING ADVANCED MANUFACTURING**

Definition of advanced manufacturing is intentionally broad in an attempt to capture all aspects of the topic. This definition does not differentiate between traditional and high-technology sectors because new production processes and materials can also transform traditional industries such as the automotive sector. This definition is based on a synthesis of definitions from peer-reviewed literature and

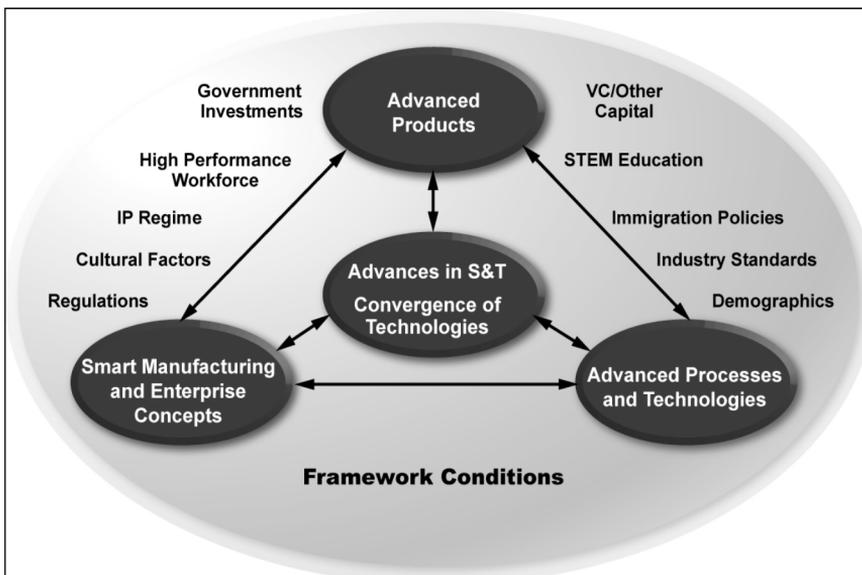
industry press published from 1990 to 2011 (Kotha and Swamidass 2000; Rahman 2008; Sun 2000; Park 2000; Boyer, Ward, and Leong 1996; Noori 1990).

Advanced manufacturing improves existing or creates entirely new materials, products, and processes via the use of science, engineering, and information technologies, high-precision tools and methods, a high-performance work-force, and innovative business or organizational models.

Typical characteristics of advanced manufacturing are illustrated in the following descriptions:

- An advanced manufacturing production system is capable of furnishing a mix of products in small or large volumes, with both the efficiency of mass production and the flexibility of custom manufacturing, to respond rapidly to customer demand and desired quality.
- Advanced manufacturing results from substantive advancements (whether incremental or breakthrough) over the current state of art in the production of materials and products; these advancements include improvements in manufacturing processes and systems, which are often spurred by breakthroughs in basic science and engineering disciplines. These new systems, which are often referred to as "intelligent" or "smart" manufacturing systems, integrate computational predictability and operational efficiency.
- Advanced manufacturing produces goods that minimize use of resources while maintaining or improving cost and performance.

As the framework depicted in Figure 2 illustrates, advanced manufacturing involves one or more of the following elements:



*Figure 2: Advanced manufacturing is a multifaceted concept*

- Advanced products – Advanced products refer to technologically complex products, new materials, products with highly sophisticated designs, and other innovative products (Zhou et al. 2009; Rahman 2008).
- Advanced processes and technologies – Advanced manufacturing may incorporate a new way of accomplishing the "how to" of production, where the focus is creating advanced processes and technologies.
- Smart manufacturing and enterprise concepts – In recent years, manufacturing has been conceptualized as a system that goes beyond the factory floor, and paradigms of "manufacturing as an ecosystem" have emerged. The term "smart" encompasses enterprises that create and use data and information throughout the product life cycle with the goal of creating flexible manufacturing processes that respond rapidly to changes in demand at low cost to the firm without damage to the environment. The concept necessitates a life-cycle view, where products are designed for efficient production and recyclability.
- Advances in science and technology and the convergence of these technologies are a critical building block of advanced manufacturing. The framework therefore highlights the role of breakthroughs in physics, chemistry, materials science, and biology, as well as the convergence of these disciplines, as the drivers for advanced manufacturing. Advances in computational modeling and prediction, in conjunction with exponential increases in computation power, also aid this effort. However, we do not assume that advances in manufacturing are solely driven by breakthroughs. Because substantive, incremental advances can lead to as much innovation in manufacturing as breakthrough advances, breakthrough innovation is not a prerequisite for change that improves the society and economy (Breznitz and Murphee 2011).

There is increasing convergence between manufacturing and services. With manufacturers integrating new "smart" service business models enabled through embedded software, wireless connectivity, and online services, there is now less of a distinction between the two sectors than before. Advanced processes and production technologies are often needed to produce advanced products and vice versa (Wang 2007). For example, "growing" an integrated circuit or a biomedical sensor requires advanced functionality and complexity, which requires new approaches to manufacturing at the micro scale and the nano scale (Parviz 2007). Similarly, simulation tools can be used not only for making production processes more efficient, but also for addressing model life-cycle issues for green manufacturing.

Key framework conditions that set the stage for advances in manufacturing include government investments, availability of a high-performance workforce, intellectual property regimes, cultural factors, and regulations (Zhou et al. 2009; Kessler, Mittlestadt, and Russell 2007). Also critical to manufacturing are capital, especially early stage venture capital; a workforce knowledgeable in science, technology, engineering, and mathematics disciplines; and industry standards. Demographics play a role: emerging economies tend to have younger populations, and more advanced economies are aging rapidly. These factors are relevant in a globalized marketplace, where national policies drive firm-level decision-making around

investment levels in R&D, training, and location of research and manufacturing facilities.

Advanced manufacturing is not a static entity; rather, it is a moving frontier. What was considered advanced decades ago (pocket-sized personal digital assistants) is now traditional, and what is advanced today (portable high-density lithium-ion batteries) will be considered mainstream in the future.

### *CONVERGING TRENDS IN ADVANCED MANUFACTURING*

Over the past few decades, manufacturing has gone from a highly labor-intensive set of mechanical processes to an increasingly sophisticated set of information technology-intensive processes. This trend will continue to accelerate as advances in manufacturing are made. Several broad trends that are changing the face of manufacturing globally are beginning to converge. We consulted experts from academia, government, and industry to identify the broad trends that define these future changes. They identified five large-scale trends applicable to the manufacturing sector:

- Ubiquitous role of information technology,
- Reliance on modeling and simulation in the manufacturing process,
- Acceleration of innovation in supply-chain management,
- Move toward rapid changeability of manufacturing in response to customer needs and external impediments,
- Acceptance and support of sustainable manufacturing.

### *INFORMATION TECHNOLOGY*

The first major trend in advanced manufacturing is the increased use of information technology. Numerous examples of information technology exist in the domain of manufacturing, including its support of digital-control systems, asset-management software, computer-aided design, energy information systems, and integrated sensing. The use of information technology not only speeds up overall productivity in the factory by increasing communication speed and efficiency, it also maintains quality by better controlling processes (Iorio, 2011). In recent years, the tasks that can be monitored and controlled with information technology are increasing in number as well as complexity. These increases are enabling high-speed production with increasing accuracy (Isermann 2011; Mekid, Pruschek, and Hernandez 2009). The greater use of information technology in manufacturing links the design stage of an individual component to the larger assembly manufacturing system to the use of manufactured products (Iorio, 2011).

The use of computer-enabled technologies improves communications that enable both "smart manufacturing" in the factory and "smart supply-chain design" – sending the right products to the right suppliers (Sanders, 2011). The ease of communication is also leading to increasing volumes of data that must be appropriately managed. The growth of fields such as data mining and informatics is evidence of the increasing concern about appropriate management of high volumes of data. Alongside the growing use of information technology is concern over cybersecurity, or the secure collection, transmission, and storage of data. There has been a significant increase in

targeted attacks on large and geographically dispersed networks of businesses and government and military sectors. Often leveraging social engineering and malware, the attacks seek to maintain a persistent presence in the victim's network and infiltrate organizational networks to extract sensitive information.

Sophisticated automation and robotics have the power to democratize manufacturing industries, starting at the lower end of the value chain, but increasingly moving toward complex decision-making roles.

### *MODELING AND SIMULATION*

The second major trend in advanced manufacturing is the use of modeling and simulation across the product life cycle, which may include the development of products, processes, plants, or supply chains. In contrast to information and technology, which primarily drives speed, efficiency, and quality control in production, modeling and simulation approaches are frequently used to move quickly from the design to production stage.

Employing modeling and simulation during the product-development phase allows designs to ensure manufacturing efficiency while decreasing risk from the start by reducing the need for expensive testing and prototyping (Sanders,2011). Further down the product-development line, process-modeling tools also compress the time to market for new products by streamlining the handoff between design and manufacturing divisions of a company (Melkote,2011). In the previous two decades, modeling and simulation approaches have focused primarily on analyses early in the design process, but modeling and simulation tools for later in the development cycle are now being emphasized.

Simulation-based approaches for manufacturing offer the potential to optimize design and supply-chain architectures. Simulations minimize risk by incorporating manufacturing considerations into the early phases of conceptual and preliminary designs, where the flexibility exists to pursue alternatives. Currently, most manufacturability problems are uncovered as the designs are being built and tested for the first time, which can lead to significant cost and schedule overruns (Sanders et al.,2010). At this point, it is extremely expensive and often impossible to change the design to improve the yield and manufacturability characteristics (Sanders,2011).

Simulation-based methods for engineering design and analysis have been in development for over 40 years, and they have fundamentally changed the way products are designed (Glutzer et al.,2009). Specific examples include finite-element analysis for solids and computational fluid dynamics for modeling how fluids move in a designed component (Sanders,2011). Unfortunately, limited attention has been directed at developing comparable manufacturing design and analysis capabilities, and as a result, there is a significant gap in the system-engineering tool kit that can be used to optimize producibility.

## *INNOVATION OF GLOBAL SUPPLY-CHAIN MANAGEMENT*

The third major trend in advanced manufacturing is the management of complex global supply chains. Over the past two decades, several trends have led to more complicated supply chains, among them increasing demand for high-technology goods, globalization, decreasing logistics and communication costs, and the growth of e-commerce (Macher and Mowery, 2008). The management of these supply chains is enabled by advances in information technology, such as enterprise resource planning software (Angeles 2009; Zelbst et al. 2010).

As supply chains have globalized and become more complex, business executives have become more concerned with the associated risks (Kouvelis, Chambers, and Wang, 2006), and security of these global supply chains may become increasingly problematic. Other factors, such as political interruptions, weather calamities, and labor strikes, may be even more important. Within the broader trends of decreasing inventory and mass customization, supply-chain disruptions can become a much more serious issue (Macher and Mowery 2008). Potential security issues include disruptions and presence of counterfeit or inferior goods (McKnight, 2011).

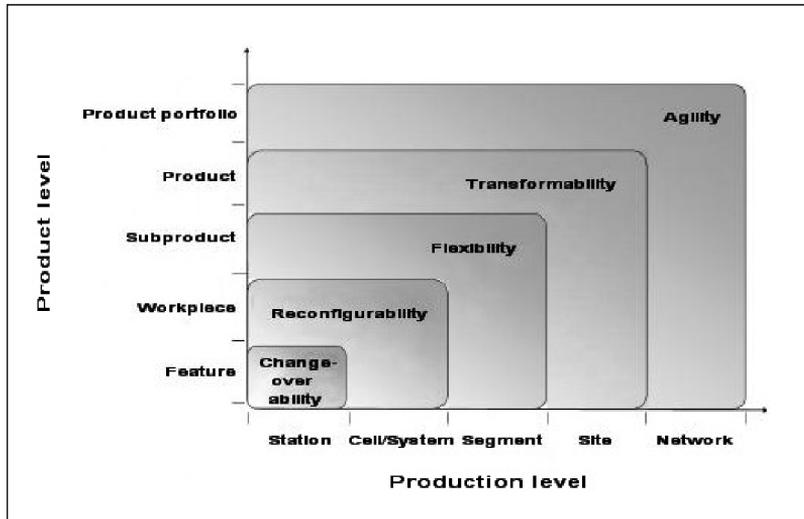
Before the convergence of information technology and globalization, logistics service providers primarily moved goods from one location to another for fixed fees. Today, they work directly with purchasers, service integrators, and consultants to achieve flexible logistics solutions for enterprise resource planning (Sarma 2011; Zelbst et al. 2010). Innovative supply-chain management reduces the time to fulfill customer orders. For example, while a typical product might be manufactured in a day or two, passing that product through supply and distribution chains often takes a month or two. Thus, improving the organization and structure of the supply chain can matter more than increasing efficiency within the factory (Suri, 2011). If manufacturing begins to move toward more distributed, decentralized production, supply-chain management and innovation will matter even more (Sarma, 2011).

## *CHANGEABILITY OF MANUFACTURING*

A fourth trend is the move toward rapid changeability of manufacturing to meet customer needs and respond to external impediments (Wiendahl et al. 2007). Here, "changeability" is used as an overarching term that encompasses the terms that typically describe existing paradigms of changing production capacity. Among these terms are "flexibility" (Buzacott and Yao 1986; Sethi and Sethi 1990), "reconfigurability" (Mehrabi, Ulsoy, and Koren 2000), "transformability" (Jovane, Koren, and Boer 2003; Nyhuis, Heinen, and Brieke 2007), and "agility" (Gould 1997). The hierarchy of these terms shown in Figure 3.

The product hierarchy, beginning with the highest level on the ordinate includes the entire product portfolio offered by a company. Moving down the y-axis, the portfolio is reduced to its smaller constituents, beginning with products, then subproducts, workpieces, and ultimately down to individual features. Similarly, the production-level hierarchy at its highest level along the abscissa is the network, which includes the entire geographically separated production enterprise linked through the supply chain. Moving down the hierarchy presents smaller and smaller production units from site level (i.e., factory), to segment level (e.g., facilities for assembly,

quality measurement, or packing), to cell or system level (a working area) that produces workpieces and the stations that affect feature-level changes.



*Figure 3: Schematic of changeability at various product and factory production levels*

What emerges from these corresponding classes of products and production is a hierarchy of changeability that can be disaggregated into five classes, each subsumed by the next highest level: changeover ability, reconfigurability, flexibility, transformability, and agility (Wiendahl et al. 2007). Regardless of the term used, growing globalization, shortened product and technology life cycles, ever-changing customer demand, and market dynamics are requiring consideration of a comprehensive view of product or production adjustments when made anywhere in the manufacturing system (Wiendahl et al. 2007; Al Geddawy and El Maraghy 2009).

Changeability is furthered by advances in information and technology, as well as modeling and simulation, that help tailor manufacturing systems for goals such as mass customization (Qiao, Lu, and McLean 2006). Achieving truly flexible manufacturing facilities requires advanced processing machines capable of rapidly changing to new designs and new materials, which not only shorten product-development cycles but also make facilities more robust against supply-chain disruptions (Ehmann 2011). Adaptive machines are able to physically move to change the order of operations or internally adjust to deal with changes. Such machines could possibly even predict where changes will show up by learning (Iorio 2011). These changes in turn will dictate the development of new types of manufacturing processes and how we approach the design of products, since now products must be not only producible but also customizable (Ehmann 2011). Changeability can also assist design engineers by reducing some of the constraints on their work as more types of design and materials are possible in production (Iorio 2011).

Increasing changeability in manufacturing could also signal a trend to-ward decentralized production for some product types. For example, Zara is a Spanish retail store that had adopted an advanced integrated manufacturing system that allows it to respond rapidly to the fast-changing fashion demands of consumers. It has tightened its supply-chain management so that the consumer "pulls" the design. Zara uses state-of-the-art IT and distribution systems to collect data daily on trends so they can quickly turn out new designs. Zara keeps costs down by using existing materials in stock and through the use of an automated distribution system that has over 200 kilometers of underground tracking and optical reading devices (Mukherjee et al. 2009).

### *ACCEPTANCE AND SUPPORT OF SUSTAINABLE MANUFACTURING*

One final trend is the emergence of the concept of sustainable manufacturing, or the application of sustainable development to the manufacturing sector. While there are varying definitions used in the literature, sustainable manufacturing defines as "the creation of manufactured products that use processes that are non-polluting, conserve energy and natural resources, and are economically sound and safe for employees, communities, and consumers" (ITA 2011).

Several factors have drawn sustainability to the forefront of manufacturing. The first is increasing costs for materials and energy and, perhaps in the future, water (Weitzman 2011; Dornfeld 2010). Manufacturers have always been concerned with uncertain energy and material input costs, but recently some of these costs have increased at extremely rapid rates. IT-based solutions for reducing waste and resource use are growing in popularity and represent one convergence of trends. Companies are also increasingly pursuing sustainability for marketing or brand-recognition reasons. Finally, concerns about supply-chain disruptions due to material shortages that could impose extreme costs, such as in the case of rare-earth elements, are weighing heavily on many manufacturers (Iorio 2011; Humphries 2010).

### *ENTERPRISE-LEVEL CONCEPT OF ADVANCED MANUFACTURING*

Each of these trends reinforces or enables the others, such that they begin to converge to form an enterprise-level concept of advanced manufacturing. The Smart Manufacturing Leadership Coalition (SMLC) has described the convergence of these trends as "smart manufacturing", a term that captures different dimensions of the trends discussed above. One previous definition of an advanced manufacturing enterprise is the "intensified application of advanced intelligence systems to enable rapid manufacturing of new products, dynamic response to product demand, and real-time optimization of manufacturing production and supply-chain networks" (SMLC 2011). This idea is represented by a "Smart Factory" that relies on interoperable systems, multi-scale dynamic modeling and simulation, intelligent automation, scalable, multilevel cyber security, and networked sensors. Such enterprises utilize data and information throughout the entire product life cycle with the goal of creating flexible manufacturing processes that respond rapidly to changes in demand at low cost to the firm, as well as to the environment. These processes facilitate the flow of information

across all business functions inside the enterprise and manage the connections to suppliers, customers, and other stakeholders outside the enterprise.

The advanced manufacturing enterprise begins with modeling and simulation to minimize the time needed from product conception to delivery. Information technology such as enterprise resource planning software plans an agile supply chain capable of rapidly responding to both upstream changes such as resource prices and downstream changes such as demand. The smart factory utilizes sophisticated applications to optimize production efficiency and quality control. Forward distribution is also tracked and optimized to deliver products tailored to the final consumer, perhaps even via mass customization concepts.

## ***CONCLUSION***

Research advanced manufacturing points to an increasingly automated world that will continue to rely less on labor-intensive mechanical processes and more on sophisticated information-technology-intensive processes. This trend will likely accelerate as advances in manufacturing are implemented.

Manufacturing will become increasingly globally linked as automation and digital supply-chain management become the norm across enterprise systems. This will be possible through the adoption of adaptive sensor networks to create intelligent feedback that will inform decision-making and analyses in real-time. The migration to cloud sharing will be the "computing commons" for small and medium manufacturing enterprises. There will be a need for secure management of massive amounts of data generated within the supply chain and manufacturing facility, with an accompanying need for cyber-security of globally linked enterprise systems. The use of modeling and simulation will accelerate the development of new materials, products, and processes in diverse fields such as integrated computational materials engineering, nanoelectronics, and synthetic biology.

Countries and companies that invest in cyber and related physical infrastructure will be positioned to lead by exploiting the resulting increased flow of information. The underlying expansion in computing and sensing capabilities will, in turn, enhance the importance of semiconductors beyond today's computing and information technology sectors. Intelligent sensor networks will allow the creation of increasingly autonomous systems across sectors, such as transportation, energy management, and health. The use of large datasets will rely on increasingly sophisticated approaches to visualization and analytical tools to detect patterns, accelerate discovery, and reduce risk.

Advanced manufacturing processes will likely be more energy and resource efficient, as companies strive to integrate sustainable manufacturing techniques into their business practices to reduce costs, to decrease supply-chain risks, and to enhance product appeal to some customers.

Increasing demand for flexibility and customization may lead to the proliferation of additive manufacturing for customized geometry and integrated computational materials engineering for customized materials. These trends will allow for local manufacturing that adapts to the needs of the region as well as the flexibility to produce for a global market. Manufacturers will differentiate themselves by how well

they make use of data and how creative they are in designing and marketing new products. New tools will facilitate the analysis of massive data sets to detect patterns, accelerate discovery, and reduce risk.

From a technological standpoint, advances in materials and systems design will likely accelerate and transform manufactured products. For example, large global investments in graphene and carbon nanotubes for nanoscale applications have the potential to change electronics and renewable energy applications. Further, self-assembly-based fabrication processes and biologically inspired designs will be integrated into the manufacturing process as technologies advance and cost-effective implementations are realized.

Biologically inspired designs, nanoscale and self-assembly based fabrication processes will be integrated into the manufacturing process as technology advances. Biomimetics, or biologically-inspired design and materials will yield unique properties and functionality and cut across technology areas, such as bio-electronics. Synthetic biology has the potential to engineer and use biology for manufacturing applications. These developments will form the basis for new ideas and approaches in all domains and have the potential to revolutionize industries.

Establishing an advanced manufacturing sector will continue to be a priority for many countries, with progress depending importantly on market factors. Companies will locate in countries that have large and growing markets. Country-specific policies that spur advanced manufacturing will set the stage for manufacturing sectors to emerge in both developed and developing countries.

In 20 years, many of the early trends and techniques that begin to emerge at 10 years are expected to be more fully adopted, with advanced manufacturing pushed toward new frontiers.

Manufacturing innovations will displace many of today's traditional manufacturing processes, replacing labor-intensive manufacturing processes with automated processes that rely on sensors, robots, and condition-based systems to reduce the need for human interventions, while providing data and information for process oversight and improvement.

Advanced manufacturing will increasingly rely on new processes that enable flexibility such as biologically inspired nanoscale fabrication processes and faster additive manufacturing techniques capable of building at area or volume rather than by layering materials.

Manufacturers will increasingly use advanced and custom-designed materials developed using improved computational methods and accelerated experimental techniques. Advances in design of materials will rely on a combination of computational methods and accelerated experimental techniques to decrease the time from concept to production. The coordination of materials designs, processing, and product engineering will become more efficient as computational abilities continue to improve.

Integrated computational materials engineering and additive manufacturing processes will begin to replace traditional processes. This will have the added benefit of integrating sustainable manufacturing processes by reducing use of resources and eliminating waste across the manufacturing enterprise. Additive manufacturing will allow for increasing manufacture of customized products. In 30 years, advanced manufacturing is expected to be heading toward atomic-level precision-manufacturing processes.

Synthetic biology could change the manufacturing of biological products. Coupled with advances in genomics, proteomics, systems biology, and genetic engineering, synthetic biology will offer a toolbox of standardized genetic parts that can be used in the design and production of a new system. The catalyst to new products will be increased understanding of cellular functions and disease models. The catalyst to new products will be increased understanding of both cellular functions and disease models.

To move advanced manufacturing to new frontiers, science advances are needed, especially interdisciplinary approaches, in multiple areas. Among these are creation of models, databases, and tools for rapid integration of new methods and materials; increasing the quality and availability of materials for additive manufacturing; and increasing fundamental knowledge of genetics, bioengineering, standardization, and predictability of working with complex genetic circuits. Although the increasing automation of the manufacturing sector will likely lead to the continued decline of this sector as a share of GDP and employment, a strong manufacturing sector will continue to complement a strong service sector, supporting communications, engineering, medicine, and other professional services. However, challenges will remain, including the high cost and risk of conducting R&D for advanced manufacturing and the long time required to bring new materials, products, processes, to market.

The advancement of manufacturing capabilities is directly linked to increasing economic prosperity for a nation and its citizens. Proper positioning and movement within the product space determines the ability to accelerate economic development. Many emerging economies are primed for rapid growth, enabled by the complex economic infrastructures they have developed and the manufacturing knowledge and capabilities accumulated. Emerging nations should focus on directing policy and investing resources in building capabilities and in product groups that are the "adjacent possibilities". Developed nations must also continue to advance their manufacturing capabilities and knowledge in order to innovate, create ever more sophisticated economies, and to stay competitive.

For companies, this research also has significant implications. As globalization and economic development make an increasing array of locations appear attractive, better understanding the ability of a country to make the next "adjacent possible" step to ongoing competitiveness, including the critical development of human capital and infrastructure among other factors, will be needed. As more countries develop advanced manufacturing capabilities, more competitors are being created that will someday rise up and challenge today's market leaders, requiring ongoing investments in innovation and new products and new markets to maintain and improve competitiveness. While the growth of advanced research and manufacturing hubs in emerging markets creates new sources for both talent and customers, the higher costs typically seen in developed countries will surely follow into these new complex economies.

For both countries and companies, there are broader implications. Viewing existing capability sets through the economic complexity lens can create a competitive advantage for companies and countries that understand how to use the information and navigate through the "product space". As nations and companies build increasingly advanced manufacturing capabilities, strategic decisions will become more complex and carry more risk for both countries, from a policy perspective, and companies regarding everything from location decisions to joint venture partners and sourcing and supply chain networks.

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## ***SPECIFICS OF VOLUNTARY HEALTH INSURANCE AND DEVELOPMENT OPPORTNITIES IN THE MARKET OF THE REPUBLIC OF SERBIA***

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**Abstract:** Health care expances show a significant participation in national income. This, in the other hand, reflects the fact that the "production of health" has become extremely expensive "factory" in almost all countries of the modern world. The problem of financing health care lies in the the problem of rising costs. Because of that is constantly looking for new solutions and reforms. The reform is aimed at overcoming disproportion between needs and possibilities, which is the result of demographic changes and moral hazard in the behavior of the insured. The prognosis is that causes of a disproportions will have negative trend in the future. Therefore, it is necessary to find a solution that will, with high quality health care to the population, to provide the financial stability of the health system. According to one option the possibility to improve the situation can be seen in the development of voluntary health insurance, based on the analysis of market share and legislation of voluntary health insurance in the Republic of Serbia. In recent years, in favor of this option specifies the modest results achieved by reforms in recent years.

**Key words:** Health Care, Voluntary Health Insurance, Reform, Market Share, Legislation

**JEL classification:** I11, I13, K32

**UDC** 364.32(497.11)(082)

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## ***INTRODUCTION***

The primary role of health insurance is covering the cost of health care. Otherwise, the high cost of health services threaten to endanger the property of the individual when they happen to need them. Therefore, health insurance is an important part of planning of the country, the employer as well as each individual, in the last instance. Funding, i.e. financial intermediation between users and providers of health services is done through health insurance. The function of health insurance is raising funds from potential health service users (patients), their storage and increase so that they could use them to pay medical bills to service providers (doctors, hospitals, etc) instead of them in case of sickness. In the last fifty years the cost of health care records a permanent growth. The reasons for this are numerous: development in technique and technology, the increasing level of education of the population, the emergence of new diseases, as well as the administrative costs. In addition to these reasons, demographic changes (aging of population) and moral hazard are extremely significant, and they lead to a situation in which almost all countries in the world have the problem of rising costs, that is compliance of costs and resources to cover them.

## ***HEALTH INSURANCE AS AN ECONOMIC CATEGORY***

Health insurance is an important segment of the economy of a country. Back in 1963 Nobel laureate Kenneth Arrow proclaimed a separate discipline called **health economics**. **Health economics is the study of sources of funding the health care**. At the same time, while becoming more and more important in the previous century, the cost of health care has increased (Vujadin et al., 2013). The reasons are manifold:

**Demographic changes:** longevity is a phenomenon which significantly affects the economic profitability of most branches of personal insurance (life, pension, health). With the extension of life expectancy (in Serbia, life expectancy for men is 70 and for women 75 years, while in the EU it is 75 for men and 81 for women) ([www.batut.org.rs](http://www.batut.org.rs)), the period of insurance coverage, that is health care, is also extended. And this target group of elderly population is exactly the one that needs the increased health care. Naturally, as a result of the described situation, the cost of health care is increased because it is no longer possible to provide the same quality of care with the recent income. Amendments to the structure of demand services in insurance in favor of life insurance and other types of personal insurance (pension and health) are a result of demographic changes (Kocovic,Sulejic,2002).

**The emergence of new diseases:** the new diseases which require investing a significant financial effort have emerged in the modern world. Also, due to the insufficient exploration, much more money needs to be invested for the diagnosis of the patient.

**Development of technique and technology:** every day we are witnessing the impressively rapid development of technique and the emergence of technological advances in all areas of business and everyday life. Investments in science are very

high, so improving the existing technology becomes more expensive. In the field of health and health care certain improvements occur, especially in diagnosis, pharmaceutical products, and quality of therapeutic treatment. And if we take into account the improvement of the quality of accommodation in hospitals and dispensaries, it is clear that all of this contributes to increasing the health care costs.

**Higher level of education of people:** one of the achievements of civilization is increasing the educational level of population, which is certainly a quality. A widespread view is that an educated man cares more about improving his health. With such prominent consciousness, he opts for disease prevention and invests in it. And if diseases occur, the investments are going towards the highest quality and most expensive medical services.

**Administrative costs:** due to wider and wider range of services of health-insurance and health care in general, in the background of processes in their entirety stands increased paperwork, as well as the large number of employees. This is another important factor which influences the increase in health care costs.

**The share of health economics in the overall economy of a country is measured in terms of share of health care costs in GDP.**

If we take a look at table no. 1, we can see an upturn in the growth of health care costs in the total GDP in 50 years, in all countries. The highest proportion is in the U.S., followed by the Netherlands, Germany, France and Switzerland.

It is anticipated that the cost of health care in the United States will reach 20% of GDP by 2016. In developing markets, the costs of health care are also on the rise. In China, where the economy is growing by double digits, the cost has doubled from 1998 to 2004 (Swiss Re, 2007).

Health care costs show a significant share in the national income. This, however, reflects the fact that the "health production" has become a very expensive "factory" in almost every country of the modern world. In practice, therefore, the fact about excessive and increasing expenditures for health insurance is confirmed.

Nevertheless, no health care system could ever be able to meet the needs of each individual.

**The problem of financing health care lies in the problem of increasing costs.**

Health insurance is a form of protecting the population from financial losses caused by the costs of medical treatment. One way of ensuring the conditions for the continuous health care is a conclusion of the contract of health insurance (Folland, Goodman & Stano, 2007).

According to an option, the possibility to improve the situation is seen in the voluntary health insurance. In recent years, the modest results achieved through reforms are stated in favor of this option.

In discussions about the desirable mix of voluntary private insurance and sources that reside in the collective funds in the system of public financing mechanisms, special significance is given to the part of the health care costs that the customer pays to the provider directly, the so called "paying out-of-pocket". Frequent occurrence of such a form of payment for medical services and medication can have unpleasant consequences, such as exposing some people to unexpected risk, high cost, or denying them access to health care. One of the arguments in favor of strengthening the role of voluntary insurance in European countries can be seen in its role of direct payer through which a part of resources, which is normally mobilized through methods of

direct payments, would primarily collect in the form of previous payments. This would reduce "paying out-of-pocket", mobilize the additional resources and improve patient safety in the system.

After a long period of demonstrating considerable difficulties in financing health, the debate on activation of voluntary health insurance has become topical again.

*Table 1: Health care costs as % of GDP in the OECD selection*

<b>Country/Year</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
<b>Australia</b>	3.7	..	6.1	6.7	8.0	9.1
<b>Austria</b>	4.3	5.2	7.4	8.4	10.0	11.0
<b>Belgium</b>	..	3.9	6.3	7.2	8.1	10.5
<b>Canada</b>	5.4	6.9	7.0	8.9	8.8	11.4
<b>Czech Republic</b>	..	..	3.8	4.5	6.3	7.5
<b>Denmark</b>	..	..	8.9	8.3	8.7	11.1
<b>Finland</b>	3.8	5.5	6.3	7.7	7.2	8.9
<b>France</b>	3.8	5.4	7.0	8.4	10.1	11.6
<b>Germany</b>	..	6.0	8.4	8.3	10.4	11.6
<b>Greece</b>	..	5.5	5.9	6.7	8.0	10.2
<b>Hungary</b>	..	..	..	7.1	7.2	7.8
<b>Ireland</b>	3.7	5.0	8.2	6.0	6.1	9.2
<b>Italy</b>	..	..	..	7.7	8.0	9.3
<b>Japan</b>	3.0	4.4	6.4	5.8	7.6	9.5
<b>Korea</b>	..	..	3.7	4.0	4.5	7.1
<b>Luxembourg</b>	..	3.1	5.2	5.4	7.5	7.9
<b>Netherlands</b>	..	..	7.4	8.0	8.0	12.0
<b>New Zealand</b>	..	5.2	5.8	6.8	7.6	10.1
<b>Norway</b>	2.9	4.4	7.0	7.6	8.4	9.4
<b>Poland</b>	..	..	..	4.8	5.5	7.0
<b>Spain</b>	1.5	3.5	5.3	6.5	7.2	9.6
<b>Sweden</b>	..	6.8	8.9	8.2	8.2	9.6
<b>Switzerland</b>	4.9	5.5	7.4	8.2	10.2	11.4
<b>Turkey</b>	..	..	2.4	2.7	4.9	6.1
<b>United Kingdom</b>	3.9	4.5	5.6	5.9	7.0	9.6
<b>United States</b>	5.1	7.1	9.0	12.4	13.7	17.6

*Source: OECD Health Data 2012.*

## ***MORAL HAZARD***

Hazard is a condition which creates or increases the possibility of damage. There are three types of hazard:

1. physical,
2. legal (legislative) and
3. moral (Rejda,2003).

**Physical hazard** is external (physical) factor that increases the possibility of damage. Thus, the lack of protective equipment on a building increases the chance of injury or, for example, ice on the road increases the chance of accident, etc.

**Legal or legislative hazard** refers to creating legal conditions for increasing the realization of damage, such as the state regulation which obliges the insurer to take all interested parties into the insurance cover, regardless of age or health condition.

**Moral hazard** is viewed in two ways: as **dishonesty** and as **negligence towards possible damage**. It happens quite often that the implausible documentation is handed in or the diagnoses or X-rays are falsified in the procedure for reporting of harm as a result of injury. In perspective, if we want to prevent or reduce such dishonesty in our country, it is necessary to develop activities which will deal exclusively with checking the veracity of the insured event and the consequences of that event which reflect in the insurance. Other, less immoral kind of moral hazard is related to negligence towards potential damage. The reason for such reckless behavior lies in the fact that the insured is aware of the insurance coverage. A good example of this is the unnecessary use of health services and expensive examination.

Moral hazard is present in various branches of insurance (for motor vehicles, for example, on the basis of liability of third party where in case of the smallest accident false injuries of participants are reported or even car theft that is difficult to prove is organized). All in all, it is difficult to control it, so the insurance companies opt for franchises, additional clauses, and the waiting period for the start of insurance.

In practice, moral hazard makes the insurer to increase the calculated premium which is the result of actuarial calculations on the amount of expected damages, but this doesn't include planned frauds. Since premium has to cover the expected payments for damages which occur as well as the operating expenses of the company, due to the presence of moral hazard the premium represents the sum of premium which serves to protect against risk, the premium intended for administrative expenses and allowance for expenses due to moral hazard.

## ***ANALYSIS OF MARKET SHARE OF VOLUNTARY HEALTH INSURANCE IN SERBIA***

Aiming for the more precise definition of voluntary insurance in our country, the Government of the Republic of Serbia adopted the Regulation on Private Health Insurance at the meeting held on 20<sup>th</sup> November, 2008. At the same time, the regulation on the manner, procedure and conditions for performing the additional and

medical practice of medical workers was adopted. Article 30 prescribes the types of voluntary health insurance (Off. Gaz. RS”, 2008, 2009):

**1. parallel health insurance** is insurance which covers the health care costs which ensue when the insured person exercises the right to health care which is covered by the mandatory health insurance in a way and under the procedure that are different from manner and procedure for exercising the right to mandatory health insurance which is prescribed by the law regulating health insurance and regulations adopted for enforcement of the law;

**2. supplementary health insurance** is insurance which covers the costs of medical services, drugs, medical and technical aids and financial compensations which are not covered by the rights from mandatory health insurance, that is insurance **for bigger content, scope and standard** of rights, as well as the amount of compensations covered by the mandatory health insurance;

**3. private health insurance** is insurance for people who are not covered by mandatory health insurance or who are not involved in the mandatory health insurance, for covering the costs for the type, content, scope and standard of rights that are negotiated with the insurance provider. According to OECD, private health insurance can be classified according to suitability for social health care and services which coverage (Colombo, Tapay, 2004) . It may cover only part that will occur by the patients which are under the government programs of coinsurance and therefore has a complementary role.

According to the reporting obligations of the National Bank of Serbia, all the insurance companies are required to submit the credible statistical information in the form of statistical bulletins to the National Bank. They give us an insight into the achieved results.

Since the subject of this work is voluntary health insurance, the analysis of this branch of insurance is made on the basis of data from the past few years. The percentage share of the total voluntary health insurance in total insurance premium is shown in table no. 2 and refers to the minor participation of this branch of insurance in the total portfolio, as opposed to the share of health insurance in certain countries in the region such as Slovenia, for example (in 2002, in structure of the overall premium of insurance, the share of health insurance was 25.6%).

*Table 2: The share of voluntary health insurance premium in total insurance premium*

Premium / Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
Premium of VHI*	336	813	1,258	1,734	2,130	2,082	1,024	972	1,083
Total premium	22,636	34,690	38,333	44,780	52,187	53,535	56,521	57,314	61,463
Share	1.48%	2.34%	3.28%	3.87%	4.08%	3.89%	1.81%	1.70%	1.76%

*\*VHI – Voluntary Health Insurance*

*Source: The National Bank of Serbia, www.nbs.rs*

Analyzing data from the table above, the share of voluntary health insurance in the total premium, it seems that when the Regulation entered into force, there was a significant decline of this type of insurance. What contributed to it was the re-classification of types of tariffs and transfer of tariff called insurance during travel and stay abroad with the included assistance to other type of insurance called roadside assistance.

But the expected growth has not occurred. Moreover, considering only 2010 and 2011 in which there were no legislative changes, a decrease of participation, but also the VHI premiums in absolute values has been recorded.

The causes lie partly in the legal provisions, and partly in their application.

Legal remedy for entities that can carry out VHI and a way to monitor and control its implementation have led to the fact that the Republic Health Insurance Fund (RHIF), which implements the VHI on market principles as well as the insurance companies, is not subject to the control of the National Bank of Serbia (NBS), as the supervising body of the insurance industry in Serbia.

Insurance companies are obliged to report to the NBS, and the NBS uses this to process the data which are disclosed afterwards. Given that the NBS has no jurisdiction over RHIF, it does not collect or process data on VHI which fund implements. In this way, data published by the NBS on the insurance sector, like premium, the structure of premium, the share of premium in GDP, etc. and which are considered to be official are not accurate because they do not contain information about VHI implemented by RHIF.

*Table 3: The structure of VHI premium in the Republic of Serbia*

Year/ Tariff *	2004	2005	2006	2007	2008	2009		2010	2011	2012
	% share	Tariffs by Reg.*	% share	% share	% share					
0201	0	0	0.17	0	0	0	0211	0.61	0.72	0.94
0202	35.47	30.98	27.91	36.84	41.21	43.21	0212	54.09	63.12	57.71
0203	64.05	68.67	68.61	59.83	57.44	55.33	0213	0.69	1.77	7.60
0299	0.58	0.35	3.31	3.33	1.35	1.46	0219	44.61	34.39	33.73

*Source: the National Bank of Serbia*

*\*The classification of VHI;*

0202 Additional health insurance of entities that exercise greater scope of rights and a higher standard of service than the one covered by the compulsory health insurance;

0203 Voluntary health insurance during travel and stay abroad;

0299 All other voluntary health insurance;

*Since 1<sup>st</sup> January 2010, that is since the Regulation entered into force, a new classification of 02 VHI insurance is valid;*

0211 Parallel health insurance;

0212 Supplementary health insurance;

0213 Private health insurance;

0219 All other voluntary health insurance (combination of types: travel health insurance during their stay abroad according to Article 30, paragraph 4 of the Regulation on Voluntary Health Insurance "Off. Gaz. RS", no. 108/08, 49/09 and others).

According to NBS classification, **the supplementary health insurance in case of serious illness and surgical interventions is included in the additional life insurance which provides greater scope of rights and a higher standard of service than the one covered by mandatory health insurance** as well as **voluntary supplementary health insurance**. Since these two different types of health insurance are stated collectively within the same tariff, we are not able to distinguish their shares separately.

The Serbian market is characterized by dominant share of additional voluntary health insurance. The share of this type in realized premium in the Serbian market in 2010 is 54%, 63% in 2011, while the share in the number of the insured in 2010 is 78% and as much as 95% in 2011. The average premium of voluntary health insurance depends on the selected product, the width of coverage, the amount of insured sums, the age needed to access the insurance, the way of concluding insurance (individual, family or collective) and other factors. The range of average premium of voluntary health insurance on Serbian market in 2012 was from RSD 1,000 for the products of additional and private voluntary health insurance to RSD 25,000 for the products that represent the combination of private, parallel and additional voluntary health insurance for each insured.

In the following analysis we will take a look at the share of certain insurance companies which operate in the Republic of Serbia in the voluntary health insurance in the past 3 years.

*Table 4: Share of insurance companies in premium of voluntary health insurance in 2010, 2011 and 2012*

	2010	2011	2012
<b>Delta generali</b>	62.25%	58.65%	51.97%
<b>DDOR*</b>	21.20%	20.69%	15.14%
<b>Dunav</b>	8.82%	11.53%	11.29%
<b>Wiener</b>	2.46%	3.20%	3.97%
<b>Uniqa non-life insur.</b>	2.06%	3.18%	14.61%
<b>Takovo</b>	1.78%	1.15%	0.21%
<b>AMC</b>	1.12%	1.42%	2.59%
<b>Total</b>	99.69%	99.82%	99.78%

*Source: based on the NBS information*

It is clear from the above table that the dominant share of one house occurs, while the following ones are slightly declining from year to year. Data show that concentration is pronounced in this market because only four out of 11 insurance companies cover 94 percent of the agreed premium of the voluntary health insurance in Serbia. By creating a motivating framework for private treatment the competition would probably be bigger, and thus premiums would be cheaper. The fact that about 30 percent ([www.batut.org.rs](http://www.batut.org.rs)) of health care costs are paid by Serbian citizens, while the rest is covered by contributions, tells us that despite all this there is still enough room for expansion of private insurance.

## ***THE ADVANTAGES AND PROBLEMS OF PRIVATE AND SUPPLEMENTARY HEALTH INSURANCE***

In terms of comprehensive private health insurance we apply the same principles of calculations and funding related to health insurance in general. However, a comprehensive private health insurance has two important characteristics:

- Many private health insurance policies have a franchise, so that the insured could take care of the expenses easily. Franchises include either a fixed amount or a proportionate share of the costs.

- Other motivating measure for preventing the excessive spending (for example, for the common cold or headache) is reimbursement of premiums<sup>36</sup>.

### ***THE ADVANTAGES OF PRIVATE AND SUPPLEMENTARY HEALTH INSURANCE ARE NUMEROUS:***

1. Freedom of choice: people have the right to decide for themselves how much they want to spend on health care. A careful person would spend more than the less cautious one, and in global terms it is a cost effective result because everyone gets what they want. The level of use or consumption of health care is determined not only politically but also by the users who know best what they want.

2. All health care systems are increasingly facing the problem of rationality. As medical science advances, the state, mandatory systems are less able to provide the entire amount of health care.

3. Diversity and flexibility of social security system is higher if there is another form of health insurance system in terms of calculation and ways of financing. Comprehensively funded system reduces the endangerment of social security by a demographic threat.

4. Private health insurance often relies on the motivating the insured to use health resources rationally in order to counter the problem of moral hazard.

5. The competitiveness among private health insurance companies leads to improvement of services and products. It has a positive effect on the introduction of private health insurance sector.

*On the other hand, there are the following **problems related to private and supplementary health insurance:***

1. Selection based on risk means that in the beginning of the organized private supplementary health insurance sick people are excluded from this part of health insurance. People who might want to buy the supplemental health insurance the most are already unable to do so in the very beginning. In Germany, people say that: "The insurance companies do not protect homes on fire." However, given the fact that these people are still protected by the basic health insurance, this problem of social policy may not be so difficult.

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<sup>36</sup> For example, if the insured didn't have any medical or hospital expenses, he will receive a refund in the amount of 1 to 6 premiums as a form of motivation.

2. Premium in accordance with the risk means that in the beginning of the organized private health insurance system the older people are often excluded from this part of health insurance because the premium is probably too high. However, since they are still protected by the basic health insurance, this problem of social (in)equality is not that big. Besides, they can also buy the additional health if they directly pay the doctor for medical services, provided that they have enough money.

3. The political process of determining where to draw the horizontal line between basic and supplementary health insurance and where the vertical one between mandatory and private health insurance is very difficult and often time-consuming.

## ***BASIS OF DEVELOPMENT OF THE HEALTH INSURANCE IN SERBIA***

*In order to find good legal solutions in the area of health insurance, it is necessary to determine the financial potential for health care, to define categories of citizens who will have free health care and the basic package of health services that can be funded from the Health Insurance Fund on the basis of mandatory contributions of employees and employers.*

Due to the economic, social and historical circumstances, **basic health insurance must be guaranteed by the country**. Besides, there is a convention issued by the International Association of Doctors, which was also accepted by the European Union, which was written in the early 1980's. According to the convention, the country must guarantee a minimum of health care to its citizens, i.e. a chosen doctor, a specialist in hospital and the necessary hospital health care. The necessary health care includes everything that prevents threats to person's life or health, management of pregnancy and pregnancy outcome. The European Union has added workplace injuries, dental care and rehabilitation to this minimum.

Basic health insurance which expert and political public (due to various economic and social conditions) want to be the state insurance may implement one or more funds. Practice has shown that the most practical and economical solution is existence of only one fund. It is regulated by law all over the world that basic health insurance should be carried out by private insurance companies. The rule formulated by the EU says that if the private insurer uses public funds, he/she must be under strict control. In Serbia, the law regulates the existence of one fund for carrying out the mandatory health insurance, while the supplementary private health insurance may be carried out through a fund, insurance companies or investment funds.

Basic state health insurance provides a basic package of health services. A level of health services which is higher than the ones included in the approved basic package may be provided by **supplementary health insurance**. There is a possibility that supplemental health insurance is the state insurance at the same time if it is conducted by the Republic Health Insurance Fund, and this is exactly what current Regulation of Serbian Government is trying to regulate. However, the experiences of developed countries and countries in transition (like Croatia and Slovenia) which underwent the first stage of the reforms show that it is not the best solution. Their experiences lead us to conclusion that this activity should be left to insurance companies.

Supplementary health insurance in this connotation is generally voluntary all over the world. There are some ideas for turning voluntary insurance into mandatory through stimulating the employers to conclude the supplemental health insurance for their employees.

**Complete private health insurance** means that buying the health insurance policy from a private insurance company **excludes the insured from mandatory health insurance**. Private health insurance policy should provide all the medical care and compensation for loss during illness. These policies provide high comfort of health care, but it comes with a price. In the USA, a country in which private health insurance dominates, 60-70% of the population opted for this type of insurance. It is specified that in the EU member states private health insurance can be obtained by the insured whose annual revenues exceed the prescribed limit, which is about 10% of the population. It's up to us to see to what extent it is possible to provide this portfolio and establish precise criteria.

### ***PREREQUISITS FOR DEVELOPMENT OF VOLUNTARY HEALTH INSURANCE IN SERBIA***

- More expensive participation which would cause a need for supplementary insurance, which would increase the number of the insured,
- The private sector which is included in the government fund,
- Not to treat premiums as a part of taxable income,
- Better standard of living,
- Education of population about characteristics of voluntary health insurance,
- The existence of a larger number of health care packages.

Rather low participation in medical examinations is actually one of the main "culprits" for neglectance of the voluntary health insurance in Serbia. If the participation would become more expensive, the insurance companies in Serbia would increase the number of policies to a great extent, especially because they wouldn't be able to count on Serbian clients for some other, more expensive services much longer. In Serbia, the class of people who could afford the luxury of spending several hundreds of euro on a better medical service every month hardly exists, and the number of those who could set aside €40 a month for the medium-quality package is not much higher. Companies with majority foreign ownership, which currently work and do business in our region, are the main users of voluntary health insurance. Cheap participation is not an excuse for many other imperfections in the way to the rise of voluntary health insurance, where participation represents only one item in the shopping cart. The point is that even abroad, the majority of users of private insurance are actually insured against paying for the participation. After the inevitable increase of participation, the space for the additional insurance will be made even in Serbia, and this insurance will be the largest channel for expansion of voluntary health insurance. It would be good to stop the share of the voluntary health insurance at about 20 percent of the total health insurance, which is the case in Europe, and also to make sure that the citizens don't need to run away from the mandatory insurance, but to enable voluntary insurance to stay a supplement that might come in useful if you don't want to spend money on some other services, such as better accommodation or high-quality nutrition during hospital stay.

In order to incorporate the private sector into the state fund it is necessary to reform the health care so that the citizens have right to a private medical treatment, partly financed by the money given to the state fund. This would make more space for voluntary health insurance because the range of services that would be available to the insured through policy would be much wider. What makes it even harder for the insurers is the fact that RHIF pays the services only to public hospitals. In order to be able to offer high-quality supplemental insurance, RHIF should include all health institutions to its list. Such is the case in Austria where the state health fund pays for the medical treatment, regardless of the institution where it was received. For example, if an operation is more expensive in a private institution, the customers pay for the additional charges themselves or through the insurance policy. The Health Insurance Act prohibits the insurer to choose a doctor in one of the private health institutions, and this often discriminates against patients who want to be treated in private institutions, and the number of them is higher and higher. In the past few years in Serbia, private health institutions have significantly developed, from community health centers to hospitals, and many of them are able to meet the requirements implied by the concept of chosen doctor. The current system forces citizens treated in private sector to use the services of public sector only for sick leave, for obtaining prescription medicines and certificate of health. Some neighboring countries such as Macedonia and Romania integrated the private sector in their health systems many years ago, so that you are able to go to a private doctor with your health care card, and not only for the examinations in primary care, but also for operations and deliveries.

People with a low standard of living rarely decide to purchase the private health treatment policies. The possibility that the larger number of companies decide to insure their employees is also small, because the voluntary health insurance premium is treated as income and therefore is taxable, i.e. it is subject to full tax and contributions, as well as personal income, which discourages the employers from the insurers. That's why everyone involved in the chain, citizens, insurance companies, private practice and RHIF at least agree on one thing: tax breaks for voluntary health insurance premiums should be introduced. To begin with, at least one part of the premium should be tax exempted, as is the case with a premium for a private pension fund, which is non-taxable to a certain monthly level. The reason for this partly lies in the fact that changes in the area of VHI legislation was not followed by the changes of legislation in the area of tax exemptions; currently, tax breaks exist only in the case of group insurance of persons in case of serious illness and surgery - additional voluntary health insurance.

The recent development of voluntary health insurance products in Serbia was followed by the pronounced elements of caution and consideration of perspective and risk. This approach has been partly guided by establishing new legal frameworks and the economic crisis which hit us and which is still present, and which essentially determines the purchasing power and the interest of population in voluntary insurance products. Investments in Serbian national resources would further enrich the offer of voluntary health insurance, by rehabilitation and spa treatment, which would provide the location for the service which allows you to control the quality of services of voluntary health insurance and their cost. Access to the EU market and the synchronization of legislation with the EU regulations in the field of insurance for the insurers mean the possibility and preparation of the offer of new products and capacity of voluntary health insurance for new markets.

## **REVIEW OF THE REGULATION OF THE SERBIAN GOVERNMENT ON THE VOLUNTARY HEALTH INSURANCE**

In the spirit of reforms in voluntary health insurance conducted in our country, steps are made towards the development of this segment of the insurance of every individual that became inevitable.

Even though the frequently mentioned Regulation of the Government of the Republic of Serbia on voluntary health insurance regulates the future functionality of the implementation of voluntary health insurance in a fairly clear manner, a series of paragraphs that are at odds with the current way of implementation of health insurance has been noted by the insurance companies.

**Article 10 states that:**

*"The National Bank of Serbia issues a license for performance of voluntary health insurance in accordance with the law which regulates insurance to the insurance company which received a positive opinion from the Ministry on fulfillment of requirements for the organization and implementation of certain types of voluntary health insurance from Article 30<sup>37</sup> of this Regulation."*

So, in order to begin with performing the tasks of voluntary health insurance, the insurance companies are obliged to seek the opinion of the Ministry of Health before the final supervision of the National Bank of Serbia. At the same time, the Ministry allows this activity to the RHIF. The obligation to submit the tariffs of voluntary health insurance to the Ministry of Health includes the transparency of prices of the insurance services of the insurance companies. Insurance companies set new products with their actuarial teams, and they improve the existing ones by using actuarial methods of tariff calculation. Given that the Ministry of Health has insight into the method of calculating premiums, the question arises - to what extent the future position of the person who takes over the same job could really be competitive.

**According to Article 12:**

*"The insurer is obliged to conclude a voluntary health insurance contract with all persons, i.e. to conclude a contract for all persons for whom the contractor demonstrates a clear intention to conclude a contract for the voluntary health insurance with the abovementioned insurer, under the conditions prescribed by this regulation, regardless of the risk to which the insured is exposed, i.e. regardless of age, sex and health condition of the insured."*

**According to Article 13:**

*"While concluding the contract for voluntary health insurance, the insurer must not request access to genetic data, that is the results of genetic testing for certain hereditary diseases of the person who expresses a clear intention to conclude a contract for voluntary health insurance with the aforementioned insurer."*

These paragraphs limit the choice of insurers regarding the inclusion into the insurance coverage. Since the "actuarial fair premium" requires a large and defined portfolio, an obligation to include anyone who is interested into the health coverage, regardless of health condition (primarily referring to the individual concluding of the health insurance), it will be difficult to provide the technical premium which would

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<sup>37</sup> Article 30 is cited in the previous section, p. 6

succeed in meeting all demands of the insured at the very start of this business. Moreover, some analysts believe that it is possible to provide the adequate insurance coverage for all the insured only in the case when all the citizens of a country are included in insurance (as is the case with mandatory insurance). Therefore, the unenviable basics of dealing with contracting health insurance will tie the hands of insurance companies to a great extent and jeopardize the survival of the aforesaid insurance.

***According to Article 23:***

*"The contractor is obliged to pay the insurance premium to the insurer within the time limits specified in the agreement on voluntary health insurance, i.e. the insurance policy." "The amount of the insurance premium is determined by insurer in accordance with the Act and this regulation. The insurer cannot increase the insurance premiums for the period for which the contract regarding voluntary health insurance was concluded."*

Given that (in various forms) voluntary health insurance is concluded for a number of years, it makes no sense if we don't facilitate the increase of premium, at least annually, because the costs of health care are those that rise inevitably, and the insurance coverage is obliged to follow them.

Current changes of the adopted regulation should regulate this issue as well. However, it is stated in the proposed amendment that a paragraph should be removed from Article 25. This paragraph says that the insurer establishes rules on voluntary health insurance which regulates **the method of calculation and the amount of premium for certain types of voluntary health insurance, i.e. the insurance policies.**

Similarly, the subject of consideration of representatives of Ministry of Health concerns the obligation to record each insured individually through their health care cards, in order to form a unified database which would allow full insight into the use of health services of each insured. From the standpoint of the insurer it is a rather unrealistic demand, because it would launch a massive paperwork that could not be carried out completely due to the fact that certain types of health insurance (health insurance in case of serious illness and surgical interventions) conclude collectively.

The obligation of the insurance companies is to synchronize organization and realization of voluntary health insurance with this regulation.

## **CONCLUSION**

The health sector in Serbia is one of the sectors hit by a huge flood of reforms known as the transition process. Reforms have been initiated after a decade of destructive and serious events that occurred after the breakup of the former Yugoslavia, followed by wars, hyperinflation, sanctions and NATO bombing.

Unfortunately, the political problems that shaped the economic trends have resulted in a significant reduction of system resources for health care. Stability of the system is compromised by reducing the required rate of finance that was set aside for health insurance, where two million of employees funded seven million of the insured. The cumulative effect of these events has caused a significant decline in the quality of

health of the population as a whole, widening the gap between the population of Serbia and the EU. The big difference between costs and revenues realized in the system was turned into the increased spending from private sources, that is from users' pockets – from already physically and materially weakened population.

In any form of health insurance there is a very complicated administration, moral hazard, as well as the aging of the population, which affects the increase in costs of health care. Insurance companies fight against moral hazard by introducing participations and franchises.

Reform Health Insurance Law adopted in 2005 regulates mandatory health insurance, but allows for the possibility of introducing the voluntary health insurance which is specially regulated by the Regulation on Voluntary Health Insurance adopted in 2008. The Regulation imposed the conditions for the organization and development of voluntary health insurance in Serbia, as an additional form of mandatory, social health insurance, similar to the EU member states.

Voluntary health insurance in Serbia is at the very beginning of its development. In 2010, the share of voluntary health insurance premium in total premiums in Serbia was 1.81%, 1.70% in 2011 and 1.76% in 2012.

The main reasons why voluntary health insurance in Serbia is not developed are insufficiently regulated legal framework which would stimulate the development of this type of insurance, and the fact that the economic situation is bad.

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## ***POSSIBILITIES FOR DEVELOPMENT OF LIFE INSURANCE MARKET IN SERBIA***

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**Abstract:** The sector of insurance has a significant influence on economic and trade development of every country. The Serbian market is in the group of developing markets with significant potential in the segment of life insurance first of all. The speed of growth of life insurance market in Serbia has been different and it showed great exposure to external and internal influences of various factors. One of the characteristic observations is that the citizens of Serbia do not have an adequate awareness of the significance, content and need of life insurance for solving social, health and financial problems in every individual's future. Domestic insurance sector is currently underdeveloped since it is currently under the average rate of development when compared to the states members of European Union and to the countries in the region. In order to achieve the wanted growth of life insurance market, an adequate marketing strategy has to be set in motion as well as certain political and market processes which will, along with the transition of the existing PDIF and health systems lead to higher level of citizen's perception of the need for life insurance.

**Key words:** Insurance, Life Insurance, Insurance Market, Serbia

**JEL classification:** G22

**UDC** 368.91(497.11)(082)

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## ***INTRODUCTION***

Insurance companies as institutional investors are important participants in financial market, above all in the capital market. Their significance and activities reflect in securing the financial stability and strengthening the competition at financial market. In the future, insurance companies can easily take over the leading position of financial investors, because they deal with large amounts of capital (the amount is no longer measured in millions, but billions of Euros) which they invest in different segments of financial market. Observing the dynamics of world insurance development in the past ten years, we can see the growth of insurance share at the global market in respect to other financial institutions. World economic crisis, which has been influencing the entire world for the past couple of years, also came to the West Balkans and Serbia, country that is still in transition. Serbia did not feel the real domino effect of the world economic crisis, which was the cause of many bankruptcies of financial institutions in the world. Observing the dynamics of insurance development in Europe in the period from 2005 to 2010, we can see the increase of insurance companies share in relation to other financial institutions. Although the sector of insurance played an important role and gave support to other financial institutions, in the conditions of crisis and in the past two years it has not been isolated at the financial market but it felt the negative effects through decrease of capital and financial potential. According to the data from the beginning of 2010, published by Bloomberg, insurance sector had suffered the loss of 261 billion dollars in the conditions of economic crisis.

## ***FACTORS WHICH INFLUENCE THE INSURANCE MARKET***

Insurance market represents a very important segment in the financial sector and has a significant role in its development. The market is influenced by the string of factors which determine its growth and development. Factors can be divided in two groups. The first group includes the factors which cannot be influenced by the participants in the insurance market when deciding upon the development and growth strategy and the second group can include the factors which can be influenced, and through these we can influence growth and development of insurance market.

### ***FACTORS OF GROWTH WHICH CANNOT BE INFLUENCED***

Factors which cannot be influenced when deciding about the growth and development strategy when it comes to life insurance market in Serbia are:

1. The change of behavior of institutional systems: PDI fund, health insurance fund;
2. Gross domestic product;
3. Decrease of public expenses;
4. The change of responsibility perception and
5. Legal solutions and regulators.

The existing system of social and health care relies on socialistic, or better historical, Byzmark's model of generation solidarity, in which the employees give a part of their income, which is used to pay the pensions to retired people, cannot function any longer.

Byzmark's model of social and health care started at the end of 19th century in Germany by the decision of Chancellor to help working class in solving their health problems, accident insurance and getting pensions. Model is based on the principle of 8 working people and only one getting pension. From then until today that model lives in most of European and other countries where the number of people who work is much larger than those that are retired. That picture started changing drastically at the end of 20th century, and in the first decade of 21st century it culminated by the fact that the unemployment rate is growing in underdeveloped countries, and when we speak about Serbia these data are discouraging. The latest reports tell us that the relation of employed people and pensioners is 1,16:1 (<http://webrzs.stat.gov.rs/axd/index.php>).

In this way model collapsed on its own, that is, very soon it will not be possible to do the transfer of means to the pensioners, because the number of retired people will become larger, and the income will not cover all expenses which this system brings. Because of this, activities of the three financial pillars which solve this crisis started in Europe and surrounding countries.

The first pillar, would represent the investments in already existing fund and system of generation solidarity, which means obligatory setting aside of means which should be reduced from 22%, as it is in Serbia today, to 15%.

The second pillar of financial security should be represented by voluntary pension funds which would be established by banks, insurance companies and other institutions and which would be managed in a way that transferred means would enhance and in that way citizens would also have a certain gain. The suggested and used percentage would be around 5%. In the neighboring countries (Croatia, Slovenia, Slovakia, Hungary) this model was adopted as obligatory by the state, that is, the companies had to give 5% of incomes to these funds, but the employee alone decided which fund he or she wants the means to go to. Unfortunately, this model and these funds had their collapse in 2009 when the world economic crisis came, because the largest amount of means was invested in bonds and funds whose value dramatically collapsed at the market of securities in 2008 and 2009.

The third financial pillar should represent voluntary savings for pension where the best form of investment are mixed life insurances which have a character of savings and where insurance company manages portfolio of life insurance investing the insurance premiums in various sources making the dispersion of risk according to the existing models.

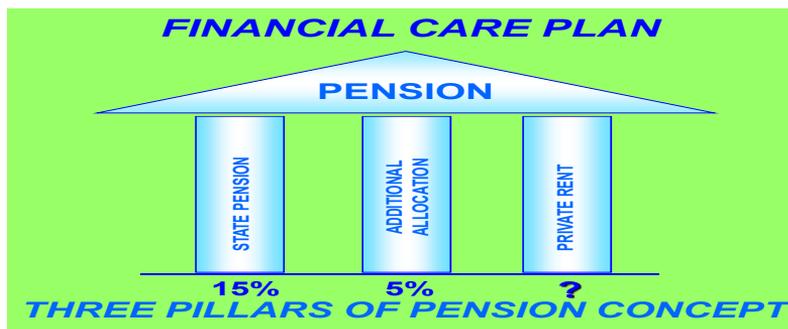


Figure 1: Graph of the model

The down side of this model is the fact that insurance companies in this moment can very little or can not at all influence the transition in this direction; regardless of the little increase in influence that life insurance has in the overall insurance market. In developed countries the share of life in relation to non-life insurances is 60:40 in the favor of life insurance, and in Serbia 31.12.2010 the relation was 83,5:16,5 in favor of non-life insurance. The situation of Health insurance fund is worse, because the medical care, diagnostic and treatment expenses are dramatically increasing because of introducing and using the sophisticated ways of treatment, so soon, the statement that health care is free will become fiction because treatment is not free and it will no longer be available to everyone. The situation is specifically complicated in the urban areas where according to unofficial health insurance data 40% of population does not have health insurance.

The existing health system in Serbia is additionally burdened by law. We could also find a part of the answer in cooperation with insurance companies and private health practice, but for now the feeling for the possible cooperation is underdeveloped, even though it is inevitable.

The second factor, which we cannot influence, is GDP per capita which, among other things, shows capability of population to participate in solving their own social and health problems. Data for 2010 say that the GDP in Serbia was 43.6 billion USD. In 2009 was 42.9 billion USD, which is a growth of 3% in relation to 2009 (<http://webrzs.stat.gov.rs/axd/index.php>).

*Table 1: GDP in Serbia in past 10 years*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>GDP in billions USD</b>	8.7	11.5	15.3	19.8	23.8	25.3	29.7	39.9	49.3	42.9	43.6
<b>Growth of GDP in %</b>	4.5	4.8	4.2	2.5	8.2	6.0	5.6	7.1	5.6	-4.0	1.9
<b>GDP per capita USD</b>	1,160	1,536	2,036	2,640	3,186	3,408	4,009	5,387	6,685	5,808	5,898
<b>GDP per capita USD</b>	5,713	6,177	6,512	6,857	7,638	8,357	9,141	10,071	10,821	10,635	10,897

*Source: www.nbs.rs*

To which extent it influences the life insurance market, is best shown by the data of the share of insurance premiums in GDP in dominant countries in the world and in the countries in the region (the first 6 countries are ranked according to the size of

GDP) (Swiss Re ,2012) we can see this in table 2. Table shows that the leading countries are the following UK with 8.9%, Japan with 8.17%, France with 7.43 %, and then US with 3.50% and China with 2.51%. From the table we can see that Serbia and the former Yugoslav republics are at the very bottom according to the share of insurance premiums in GDP.

This little share of life insurance in GDP in former Yugoslav republics clearly shows that this factor can be influenced, which means that by developing the awareness of the significance of life insurance for increase of GDP is not at the satisfactory level. Of course this segment hides the great potential which can be adequately used.

*Table 2: First 6 states are ranked according to the level of GDP*

2010 god.					
State	Population in millions	GDP in USD billions	GDP real change (in %)	Life insurance premium per capita in USD	Life insurance premium in % GDP
USA	310.2	14,490	3.0	1,633.3	3.50
China	1355.2	5,708	10.5	105.5	2.51
Japan	127	5,485	2.5	3,529.9	8.17
Germany	81.8	3,278	3.5	1,391.9	3.47
France	64.9	2,561	1.4	2,930.3	7.43
UK	62.2	2,255	1.2	3,223.3	8.90
Austria	8.4	380	2.4	1,194.1	2.64
Croatia	4.4	61	-1.2	100.8	0.73
Slovenia	2.1	47	1.2	423.9	1.84
Serbia	7.3	40	1.8	15.2	0.28

*Source: Sigma Word insurance in 2010, No 2/2011, January 2012*

The third factor that cannot be influenced is decrease of public expenses. These indicators, when it comes to Serbia, are maybe the worst. Public expenses are costs or the expenses of public sector. They comprise budget, fund and other non budget public expenses. The data about public expenses, that refer to budget and non-budget fund expenses in Serbia, are so far published only by the National Bank of Serbia.

The fourth factor that cannot be influenced is the change of perception of responsibility of population. This sociological phenomenon disappeared under the influence of almost 50 years of socialistic way of management and thinking about strategic decisions. The average Serbian citizen considers that the state is completely responsible for his or her health, social and financial care. This perception has been changing slowly, but very painfully. Middle class, which used to be the generator of new value, has disappeared and turned into two polarized groups of people.

UNDP reports for 2010 said that around 40% of population in Serbia is at the edge of poverty, which is defeating data for growth and development of life insurance market. But the situation in which, according to unofficial estimates, only 3% of people in Serbia has the life insurance policy, has enormous potential. The problem of responsibility perception is the one where one has to decide about his or her destiny on his own (or at least in the family circle) and it requires heavy investments in media advertising that would emphasize the importance of this segment. Besides this changes must happen in the law regulations which will influence the favorable surroundings and by that the favorable atmosphere for this kind of investments in one's own future.

The fifth factor is already partially mentioned in the discussion about the factor of change of perception of citizens' responsibility. Namely, without the positive law solutions in this area, one cannot expect fast growth and development of this segment of insurance.

The state has to set in motion the process of transition of PDI funds and health insurance; it has to provide incentives which will direct people towards taking responsibility for their own future. But this is the process that requires painful cuts which always have broader political implications, which in this country often represents the slowing factor for reaching any kind of strategic decisions and changes. Still, it is clear that this is an inevitable process which has to happen because it is one of the standards, which is set in front of Serbia by European Union in the process of joining it, the increase of the share of life insurance in total insurance premium, that is, the increase of number of people which will by this act remove the part of the responsibility off the state for their own future

### *FACTORS OF GROWTH WHICH CAN BE INFLUENCED – MARKETING DEVELOPMENT*

Factors which can be influenced on in defining the strategy of growth and development of life insurance market in Serbia are connected to the acceptance of marketing strategy as business philosophy of insurance companies that deal with this kind of service. What characterizes the marketing of financial services is huge competition in this segment which results in constant globalization process worldwide, process of developing companies, groups or systems by their enlargement through purchases, joinings, partnerships and mutual operations on global and local markets. In this respect, Serbia can be characterized as a market dominated by financial services which offer companies that are in ownership of foreign corporations, concerns, groups and joinings.

So, for example, 5 leading bank groups (Unicredit group, Raiffeisen group, Hypo group, Intesa Sanpaolo group and NLB group) hold 80% of bank market in Serbia (NBS,2011).

The situation is very similar in the segment of leasing companies, insurance companies, investment funds and broker houses in Serbia.

The second segment that we wish to turn to in this paper is life insurance market in the world, Europe, the closest surroundings and finally in Serbia. Life insurance has become an essential segment in the world, when it comes to social protection and financial status of citizens, especially later in life. As developed countries realized the significance and the need of this kind of insurance, they started stimulating it by law

and other measures, so this kind of insurance had a constant growth in the last 10 years, and in some regions even an explosive growth. Moving force of these insurances lies in the fact that the life insurance premium can be connected to savings and thus one can create the fund of means which can be invested in the long term in development of economy of any country. These accumulated means, under the state's guarantee, are then directed towards development of infrastructure, employment and development of production, and in the end they bring the profit which is in many cases much larger than the profit from any other financial investments. In the following tables we can see the motion of life insurance premiums in 6 most developed countries and in some countries in the region.

*Table 3: Motion of the life insurance premiums in 6 most developed countries and countries in the region in US dollars*

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Market share in the world in % 2010
USA	443,413	480,452	481,527	494,818	499,112	533,649	579,215	578,211	501,675	506,709	20.21%
JAPAN	356,731	354,553	371,831	386,839	378,729	362,766	297,040	367,112	413,536	448,206	17.87%
CHINA	15,556	25,054	33,093	35,407	39,604	45,092	58,673	95,831	109,175	142,999	5.70%
GREAT BRITAIN	153,753	159,656	161,220	189,591	231,032	311,691	423,743	342,759	216,719	200,571	8.00%
FRANCE	75,676	80,411	103,947	128,813	150,472	177,902	189,626	181,146	193,950	193,133	7.70%
GERMANY	55,623	60,860	76,246	84,535	90,225	94,911	102,084	111,278	115,290	122,063	4.87%
AUSTRIA	5,162	5,321	6,469	7,695	8,854	9,018	9,874	10,831	10,335	10,013	0.40%
SLOVENIA	203	252	344	531	578	678	835	946	879	870	0.03%
CROATIA	111	146	201	260	319	373	463	515	471	447	0.02%
SERBIA	2	4	15	34	47	57	79	114	108	111	0.00%
THE WHOLE WORLD	1,445,776	1,536,122	1,682,743	1,848,688	2,003,557	2,209,317	2,441,823	2,490,421	2,367,419	2,507,715	

*Source: Sigma Word insurance in 2010, No 2/2011, January 2012*

We can notice that a very important thing, the first 6 most developed countries (from the greatness of GDP point of view) comprise 64.35% of total world life insurance market.

Europe took the leading position in total markets with 38.10% of world market share in relation to Asia with 34.23% and North America with 22.21% world market share. The markets in the countries in the region (Austria, Slovenia, and Croatia) are growing in the past 10 years extremely fast, while the countries in transition become larger and stronger factor in total life insurance segment. People's Republic China is

for example from the 20th place on the list in 1999 became the 6th country according to the amount of premiums in 2008. Former Yugoslav Republics had a two digit and three digit growth in the last 10 years. (Serbia with less than 1 million USD in 2000 came to 111 million USD in 2010).

### *WHY IS ALL THIS IMPORTANT FOR US IN SERBIA?*

Having in mind the fact that Serbia wants and can enter European Union, these processes are inevitable part of that future economic growth. Life insurances have a clear function of social, health and financial protection of citizens so in this moment there is no adequate alternative. Besides this, the process of globalization, which we talked about, put the financial sector in Serbia in the hands of Austrian and Italian financial groups, so it is logical that we can expect the quality and the content of the offer to be similar to the ones in these countries.

Austria, for example, with its 8 million people had life insurance premiums in 2010 at the level of 2.64% share in total GDP. Austrian insurance companies in Serbia in 2010 had over 92.5% life insurance premiums (61.1% non-life insurance premiums, 66.7% in total assets and 65.6% in employees' number).

The existing trends in the last 10 years show that in the life insurance market, along with the good strategy, we can expect explosive growth in the 10 year's period to come. Even this incredible economic crisis, which hit the world's financial order in 2009, was least felt in the sector of life insurance. Some countries in transition (Poland, Slovakia, Baltic countries) even had a growth in 2009. For all of this of countries had to have adequate strategies. Not having in mind the macroeconomic factors of the development strategy of these countries, we can mention few important elements from the point of view of marketing strategies:

a) Bank-oriented financial systems, where the bank dominated with the function of gathering savings deposits, have been transformed in market-oriented financial systems with emphasized function of offer of other financial intermediaries such as insurance companies, pension and investment funds.

b) One of the marks of modern financial systems is a process of clustering in which financial conglomerate can be found most often, as well as institutional form of ownership and market connections (bank dominates the conglomerate most often, also the insurance companies, leasing companies, funds etc.)

c) Most countries had the pension systems reform in a way that boosted life insurance and offered it as an alternative which is taken care of by citizens voluntarily.

d) Informational technology, with its incredible advancement, influenced the creation and the usage of life insurance through optimization and reduction of expenses in sales channels which are based on the usage of new technologies (MLM sales systems, direct sale through internet, SMS communication etc)

e) Sales of life insurance developed from the agency distribution to multi-distribution systems which comprise using broker distributions, direct distributions through own sales network, mass marketing (classic mail and e-mail) as well as bank insurance as the latest in the distribution chain of life insurance products.

All this points out that marketing strategy in the segments of life insurance in the past 10 years has significantly changed, but that the absence of the strategy does not provide any growth or generating of revenue for insurance companies.

## **LIFE INSURANCE IN SERBIA**

Life insurance market in Serbia has a tendency of constant, but uneven growth. For example in 2005 life insurance market boosted, because in that year NBS had many activities in the following areas: stabilization of insurance sector, removal from the insurance companies market, which jeopardized or could jeopardize the means of insurance by its inadequate business operations and improvement in sales network quality, strengthening of corporate management and transparency of insurance companies operations, regaining the public's trust in the sector of insurance. Sector of insurance is significantly stabilized, the sales network quality is improved and supervision of company's business operations is established.

This shows that the life insurance market growth depends on the general condition of economy in a certain period. The greatest danger lies in the fact that the GDP growth and the budget expenses are under direct influence of factors over which the market has no control.

The following table shows a few significant facts which determine the growth and development of life insurance in Serbia.

*Table 4: Life insurance premium in Serbia in billions of dinars the share in the total premium and growth percentage*

Statistical year	Life insurance premium in billions of dinars	Percentage in total insurance premium	Percentage of growth in relation to the previous year
2004	1.21	4.8%	n.a.
2005	3.30	9.5%	172.73%
2006	4.44	11.6%	34.55%
2007	4.93	11.0%	11.04%
2008	6.37	12.2%	29.21%
2009	7.86	14.7%	23.39%
2010	9.49	16.8%	20.74%
2011	9.97	17.4%	5.06%

*Source: NBS, Sector of insurance in Serbia, reports from 2004 to 2011*

According to the data, the reduction of the budget in Serbian government will have consequences like the reduction of consumer budget. The consumption is also at loss when we consider the great unemployment rate, difficult access to loans, and lowered remittance which happened in the years of great economic crisis in 2008 and 2009. Slow and moderate recovery is expected in the following years. Economic growth before 2008 was encouraged by foreign capital, with strong foreign direct investments and consumer loans from foreign banks. As the global

liquidity problem grew, it influenced investments and private consumption and it slowed the economic growth between 2008 and 2009.

The growth of GDP fell from 5.4% to -4.0% in Serbia. The government's budgets were damaged because of the lower amount of export and lower payment of taxes, which led to decreased consumption. Serbia got the money from IMF in 2009 as a part of stand-by agreement. However, IMF requested enhanced measures before giving the money, with the reductions in social expenses and pensions in 2011.

It is logical for this kind of turbulences to have implication of reducing finance, which affects the weak consumer incomes:

—Between 2008 and 2009 the unemployment rate (% of economically active population) rose from 13.6% to 16.1% in Serbia;

—Consumer confidence was very low between 2008 and 2009, real year income per capita decreased by 4.8% in Serbia;

—Increase in demand in public sector for loans and stricter lending of money, excluded the consumer loan as a safety net for consumption;

—Since the consumption became a strong booster of growth in the Balkans in the last few years, its weakening will contribute to weaker economic growth. Private consumer expenses in 2009 were 71.9% GDP in Serbia.

What is the perspective like if the situation, caused by world economic crisis, is very complicated?

Consumer demand in Balkans will continue to suffer while the unemployment is growing. It is expected that the consumer expenses per capita will decrease by 2.0% in Serbia. The governments, having an obligation to decrease budget deficit, will aim for business surroundings; Serbia wants to strengthen the banks through giving the interest subsidy and loans. Weak consumer demand will continue to influence the economic growth but a modest recovery is expected in the following years.

In order to realize the perspective of the overall life insurance market we have to point out certain indicators and trends. Let us look at the following tables and graphs.

Table 5: Data on insurance companies in Serbia in the period from 2005 to 2011

Balance sheet in millions of dinars							
	2005	2006	2007	2008	2009	2010	2011
AMS	859	1,002	1,399	1,739	2,261	2,485	2,511
AS insurance				489	922	1,386	1,155
Alico a.d.o.					278	385	
Axa Non-life							722
Axa Life						485	622
Basler Non-life			391	378	361	798	812
Basler Life			247	258	253	437	422
Credit Agricol Life			212	313	425		
DDOR	10,09	13,18	14,42	15,28	15,49	16,819	16,706
DDOR Re					480	1,389	1,475
Delta Generali	3,578	5,033	8,061	10,33	13,70	17,144	20,180
Delta Re	664	1,023	803	684	1,605	1,653	1,942
Dunav	16,33	19,74	20,22	23,80	24,18	25,509	26,551
Dunav Re	1,250	1,667	1,800	2,361	2,497	3,001	3,256
Energoprojekt	357	434	572	806	911	1,127	925
Globus	775	1,504	2,220	862	1,163	1,273	1,035
Grawe	1,776	2,214	3,878	5,103	7,000	9,097	10,051
METLIFE							481
Merkur Insurance			259	347	486	741	942
Milenijum	719	898	1,087	1,257	1,477	1,627	1,816
Sava Non-life		1,083	1,555	1,887	2,353	2,793	2,608
Sava Life				308	303	267	271
Societe Generale					335	282	395
Takovo	1,274	1,871	2,239	2,674	3,307	3,908	4,073
Triglav (Kopaonik)	1,711	1,487	1,750	2,333	2,684	3,208	3,585
Uniqa Non-life		1,961	1,359	3,032	3,571	4,087	4,365
Uniqa ado			2,594	2,587	2,729	3,282	3,504
Wiener	2,360	2,966	5,542	7,291	9,361	11,634	12,916
Wiener Re				449	1,087	2,298	2,353
The rest	4,943			230			
	46,70	56,06	70,62	84,80	99,23	117,11	125,67

Source: NBS, Insurance sector in Serbia, reports from 2004 to 2011

*Table 6: Summary according to ownership structure of insurance companies in Serbia in the period from 2005 to 2011*

<b>Balance sheet in millions of dinars</b>							
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Domestic</b>	<b>39,47</b>	<b>39,40</b>	<b>42,885</b>	<b>47,761</b>	<b>49,822</b>	<b>54,122</b>	<b>55,057</b>
Total share in %	<b>84.5</b>	<b>70.3</b>	<b>60.7%</b>	<b>56.3%</b>	<b>50.2%</b>	<b>46.2%</b>	<b>43.8%</b>
<b>Foreign</b>	<b>7,230</b>	<b>16,66</b>	<b>27,738</b>	<b>37,047</b>	<b>49,414</b>	<b>62,993</b>	<b>70,617</b>
Total share in %	<b>15.5</b>	<b>29.7</b>	<b>39.3%</b>	<b>43.7%</b>	<b>49.8%</b>	<b>53.8%</b>	<b>56.2%</b>
<b>Austrian</b>	<b>4,136</b>	<b>5,180</b>	<b>12,273</b>	<b>15,777</b>	<b>20,663</b>	<b>27,052</b>	<b>29,766</b>
Total share in %	<b>8.9%</b>	<b>9.2%</b>	<b>17.4%</b>	<b>18.6%</b>	<b>20.8%</b>	<b>23.1%</b>	<b>23.7%</b>

*Source: NBS, Insurance sector in Serbia, reports from 2004 to 2011*

The previous table shows a few very important facts:

Austrian insurance companies ((Merkur, Grawe, Uniqa and Wiener) significantly participate in overall insurance market, with a constant growth tendency. Each of these companies constantly grows with the life insurance premium where Merkur and Uniqa have an explosive growth. It is obvious that in these companies there is a marketing strategy of growth and development of this market segment, unlike the others which have the leading position in total premium (but based on non-life insurance) like DDOR, Dunav and DELTA GENERALI insurance.

These factors in correlation to the trends in life insurance in the broader region and the world, together with the condition of light but steady recovery of world financial and economic market, emphasize the importance of development marketing strategy for safe and stable life insurance market growth.

Competition in the market led to increased media presence of insurance companies as well as the increased communication with the state in the sphere of raising awareness of citizens about the need for life insurance as one of the pillars of pension and health systems reform. It all together implies the change of approach to the insured, that is, the potential client. Here marketing strategy is a significant qualitative progress which also brings the progress in quantitative respect (through the growth of life insurance market).

The most usual obstacles are: organized resistance, slow learning and fast forgetting. In some departments in companies it is believed that the stronger function of marketing makes their strength weaker (especially in finance, production or research and development). We can move the thinking that marketing is equally important function as others in a company to the thinking that it is the most important function in a company, because the client is the center of interest of company. With life insurance as a service this is perhaps emphasized the most.

## ***THE POSSIBILITY OF LIFE INSURANCE MARKET DEVELOPMENT - CASE STUDY***

For the needs of this paper the research on the sample of 500 people on the entire territory of Serbia was done. Methodology used is the survey done by the telephone according to the CATI model. The sample comprised 50 municipalities. The sample comprised 63.8% city and 36.2% country areas. The sample comprised 48.2% people age from 18 to 40, 28.4% age from 40 to 60 and 23.4% older than 60 (until the age of 65). It comprised 47.8% employed people, and 52.2% unemployed.

Main results of the research are:

-The highest percentage of respondents who do not have life insurance policy was 59.7%, and 19.1% does not have it but plans to get one.

-The highest percentage of respondents who do have life insurance policy - 20.2% has one for 3 or 4 years, and the number of those who have a policy for 10 to 20 years or more, is also significant (17.7% that is 7.5%).

-The highest percentage of respondents that do not have life insurance does not think of getting one 78.3%.

-As a main reason for not thinking about purchasing life insurance respondents state the lack of money 52.3%, and 18.2% thinks that there is no need for a policy, 14.2% has other reasons and 12.3% states that they do not know anything about life insurance.

-The highest percentage of respondents considers that when deciding to buy life insurance the most important thing is the amount of gain 84.3%, number of risks covered by the insurance 83.3%, image and reputation of the insurance company 82.1%.

-The highest percentage of 19.4% respondents would choose Delta Generali insurance, 17.6% Wiener, 15.7% Merkur, 13.3% Grawe, 11.2% Uniqa, 9.7% Dunav, 7.4% DDOR etc.

-As the main reason for buying the life insurance policy at a specific insurance company, the highest percentage of all respondents gives the amount of premium and the ways of payment 29.7%, and second comes image and reputation of insurance company with 26.8 and third the number of risks covered by the insurance 15.3%.

-The highest percentage of all respondents, as a main reason for deciding to buy life insurance states family protection 34.9%, second comes savings for retirement and third comes personal protection with 21.6%.

-The highest percentage of all respondents states that their life insurance policy covers medical care expenses 82.5%, illnesses 71.2%.

-The highest percentage of all respondents states that the most important sources of information about supply of life insurances are radio and TV 34.2% and recommendation of friends 24.3% and agent presentation 9.8%.

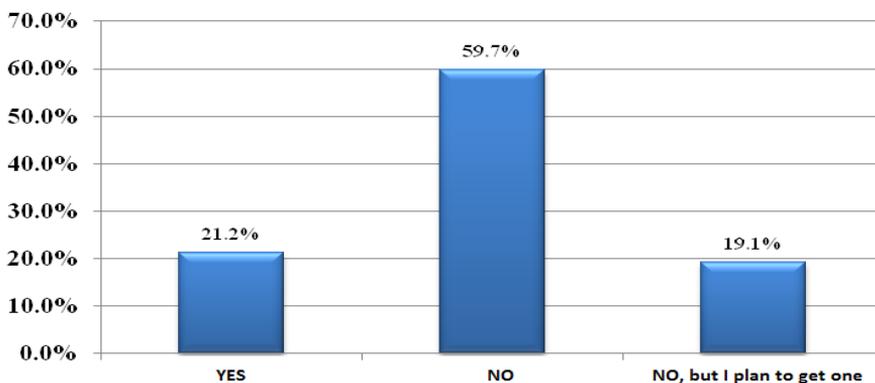
-Most of the respondents from the total sample 30.3% considers that the best form of savings is investing in real estate, and life insurance is in the third place with 18.9%.

-The highest percentage of all respondents considers that life insurance is essential to family people 75.3%, the young 68.4%, singles 61.2% and people who will be retired soon 58.2%.

The research began with a basic question:

**Do you have a life insurance?**

Results can be seen in the graph 1.



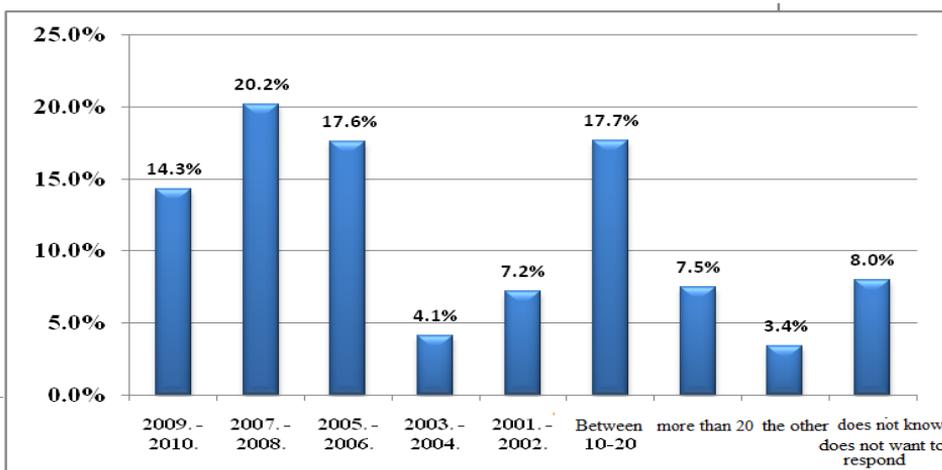
*Graph 1: Do you have a life insurance?*

From graph 1. It can be seen that the percentage of people who have life insurance is 21.2% which points to the real condition of life insurance market in Serbia. The fact is that relatively small number of people has life insurance, tells us that there is a potential in this market, but that the awareness of people about the need for life insurance policy is not developed enough. 59.7% of respondents stated that they do not have a policy, and 19.1% does not have a policy but plans to get one. These data point out that life insurance is not developed enough at the territory of Serbia, and that there is a great potential as well as a great number of interested in the life insurance policy.

The next question for those who already have life insurance was:

**Since when do you have a life insurance?**

Results can be seen in graph 2.



*Graph 2: Since when do you have a life insurance?*

Since 2004 the payments of life insurance premiums in Serbian market soared, which can be seen in the percentage of people who signed contracts in that period. It is very interesting that there is a significant number of those who have life insurance for more than 10, 20 years or more.

This is the result of the fact that, at the territory of former Yugoslavia, through agents one could buy life insurance and directly pay abroad (Wiener Stadtische, Grazer Vexcelzeit, Merkur versicherung, Uniqa) which led to a significant number of people having a policy which they still do today.

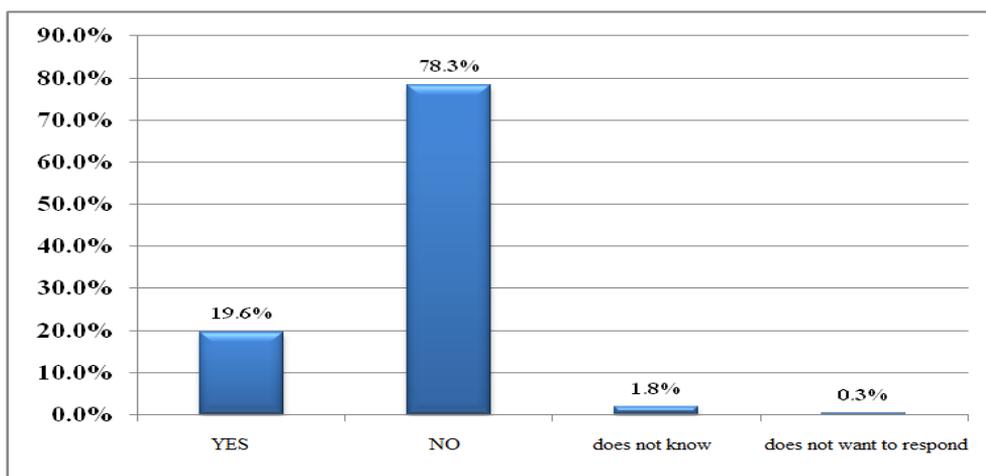
During war time on the territory of former Yugoslavia large number of people stopped paying insurance or tried to collect the premium abroad (Austria). That helped many to go through war horrors and developed the trust in these institutions.

Drastic decrease happened when the world economic crisis emerged in 2009, which results in the decrease of number of people who are willing to make the life insurance policy.

The thing that worries the most at this moment is the number of negative answers of those who do not have life insurance (78.3%) to the following question:

**Do you consider getting life insurance?**

The answers are in the graph 3.



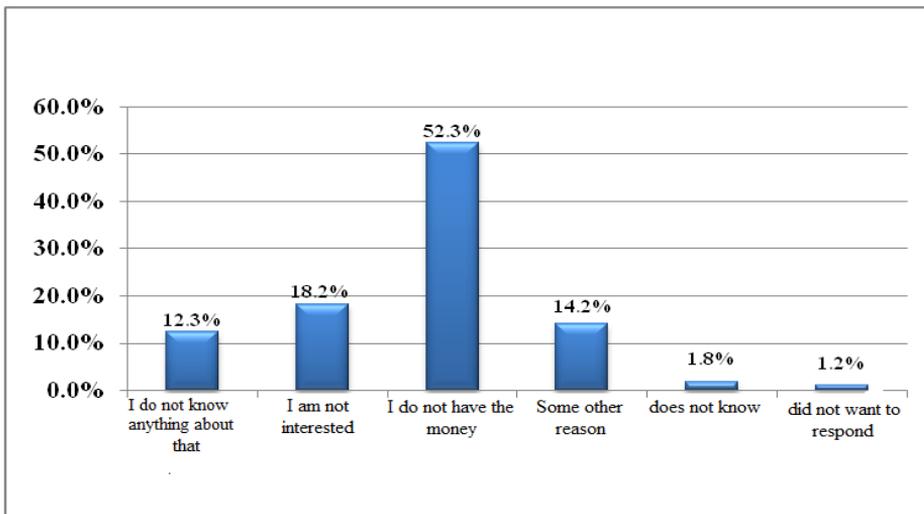
*Graph 3: Do you consider getting life insurance?*

Unfortunately these are the results of the current state at the Serbian market which lacks strategic concept for overcoming the crisis and the lack of readiness of the state to face piled problems.

Life insurance depends, in the large amount, on trust and its long-lasting character, and does not have proper environment for development in these conditions.

And responses to the following question:

**What are the basic reasons for which you do not think about purchasing life insurance?** show the previous statement.



Graph 4: What are the basic reasons for which you do not think about purchasing life insurance

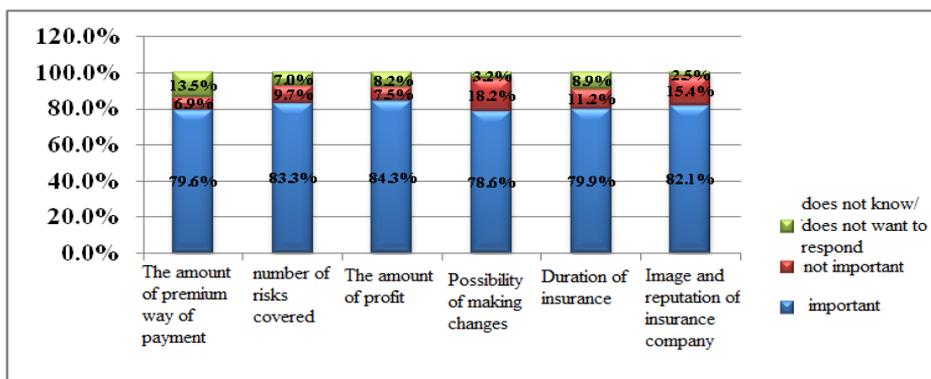
According to the research 52.3% of respondents claims that the reason for not wanting to life insurance policy is a lack of money, which shows that it is necessary to strategically change economic and political situation in Serbia, which would automatically lead to significant growth and development of this market.

12.3% of responses show that there is not enough information and basic knowledge about this service which is a great base for development of supply of life insurances.

Analyzing the reasons of those who would like to have a life insurance we come to the answers to the question – which factors of supply are those that would lead you to decide to purchase life insurance.

Question: **The significance factor when deciding to purchase life insurance?**

Responses are given in the graph 5.

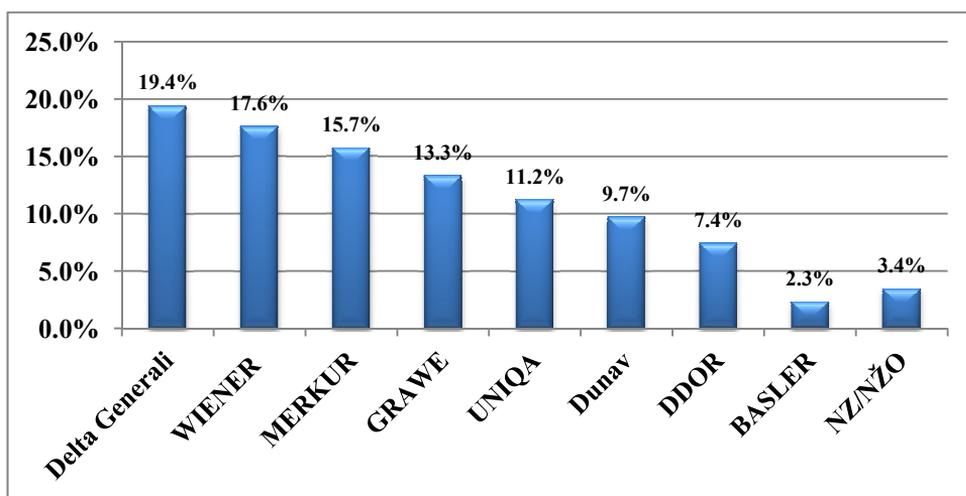


Graph 5: The significance factor when deciding to purchase life insurance?

Largest number of respondents, 84.3% puts the amount of profit to the first place, then the number of risks covered by the insurance 83.3%, then the reputation of insurance company 82.1%, and finally the duration of insurance, amount of premium and the possibility for making changes.

These responses, when compared, do not give a completely realistic picture of the significance of each of the factors, so we made two more questions which will clear that in detail. The question was posed to the ones who still do not have life insurance but want to get one.

The first question was: **Which insurance company would you choose to get your life insurance policy?**



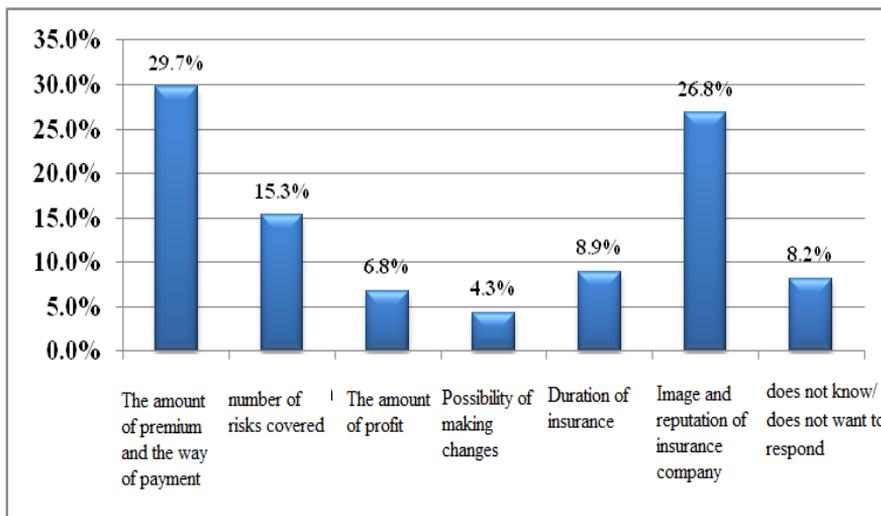
Graph 6: Which insurance company would you choose to get your life insurance policy?

Graph shows that the first place belongs to Delta Generali 19.4%, and then come Austrian insurance companies, which shows us the fact that currently in Serbia the most popular insurance companies are mostly owned by foreigners. This is one of the indicators that Serbia is an interesting market for insurances which is confirmed by the fact that, in the last years, the number of insurance companies that are mostly foreign-owned increases.

The second question was:

**What is the main reason for which you would purchase life insurance policy at a specific insurance company?**

Responses are given in the graph 7.



Graph 7: What is the main reason for which you would purchase life insurance policy at a specific insurance company?

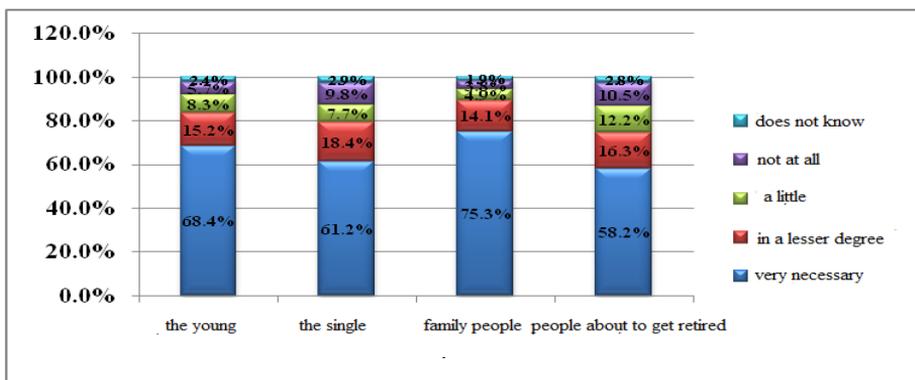
In graph 7 in this research, it looks like all the factors are equally important when deciding on insurance, but when you must put them in order according to the priorities, we can see that the most important are the amount of premium and the way of payment, image and reputation of insurance company.

By response analysis, in the research that we conducted, it was important to see the significant factors for the ones who already have life insurance. One of the important factors, which has to be held in mind when setting the marketing strategy, is to know what is the basic motif for people to want to get life insurance.

The last question that we gave to the respondents was:

**Please, can you tell us, for each of the groups, how necessary is life insurance for people in that group?**

Responses are given in the graph 8.



Graph 8: Please, can you tell us, for each of the groups, how necessary is life insurance for people in that group?

From the responses to this question we can see that the largest percentage thinks that life insurance is mostly necessary to family people 75.3% and the young 68.4%. These results show us the need to pay attention to every segment equally in development strategy.

## ***CONCLUSION***

Insurance sector has a significant influence on economic and trade development in any state. The insurance market in Serbia is in the group of developing markets with significant potentials, above all in the segment of life insurance and a very dynamic growth of this sector is expected in the years to come.

When we spoke about life insurance market development in Serbia in the following 10 years, we were guided by the thesis that an adequate marketing strategy will lead to the growth in percentage of people who have some kind of life insurance policies.

When we spoke about insurance market in the past 10 years in Serbia, it was said that the market had a constant growth, but that the speed of that growth was different and that it was very susceptible to internal and external influences of various factors. One of characteristic findings was that the citizens of Serbia do not have an adequate knowledge and awareness of significance, content and need of life insurance for solving social, health and financial problems in every individual's future. This lack of awareness, or to put it better, inadequate perception of life insurances caused the significant investments, made by Austrian insurance companies and put in promotion and placement of life insurance in Serbia, not to result in enough number of people purchasing the life insurance policy so far.

In order to achieve the desired goal in the future, along with the adequate marketing strategy we have to set in motion certain political and market processes and make existing PDI funds and health systems undergo a transition. All of this together will lead to higher level of citizens' awareness, that is, perception of the need for life insurance.

Life insurance, just like all other insurances, has its objective lacks which are intangibility, indivisibility and abstract usefulness for purchasers – the insured. This influence could be manifested through subjective insurance users' expectations, which is the element which has to be focused on by the present and future life insurance companies. The usefulness of the insurance service is realized in positive or negative assessment made by the insured, in his or her satisfaction or dissatisfaction by the service offered. Adding the fact that life insurance is a long-term contract it becomes clear that the marketing strategy for development of this kind of business has to change a great deal in respect to the period of 10 years ago.

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## **COMPARATIVE ANALYSIS OF THE LIFE INSURANCE IN THE REPUBLIC OF MACEDONIA AND THE REGION**

**Bratislav Milosevic**<sup>41</sup>  
**Dusan Cogoljevic**<sup>42</sup>  
**Ana Aleksic**<sup>43</sup>

**Abstract:** Inspired by the actual transition of the life insurance market “incited” by the financial crisis in The Republic of Macedonia, as well as the conditions in this sphere in the region and wider, in this work I would like to highlight the meaning of the life insurance in the developing countries and the already developed market economy.

In this work, i have made a descriptive-causal elaboration of the meaning of the life insurance, as a development factor for the economic-financial situation in one national economy. With the help of the empirical, analytical and comparative method, the place and the role of the life insurance will be analyzed and compared, in other words the life insurance companies and their causal successive connection with the fulfillment of the goals of the company.

The purpose of this research is to point out the fact that the life insurance and the insurance companies have a particular effect on the economic growth and development, in other words the overall welfare of one country.

The Republic of Macedonia and the countries in the Region in the period between 2008 and 2012, according to the data received from the accomplished life insurance premium are under the average of the European Union.

The life insurance, as it is today, is a product of a particularly long development process, where the significant importance from one side was the necessity for economical protection from the risks, and from the other side were the opportunities given from the insurance techniques.

Within the world framework, in the structure of the whole stipulated policy premium, life insurance takes part with a great 56.8%, while in the Region it is even higher, 60.4%. In the Republic of Macedonia in 2012 was 8.5%.

**Key words:** GDP per capita, Total Stipulated Policy Premium, Premium of Life Insurance, Penetration of The Life Insurance and Density of The Life Insurance

**JEL classification:** I16

**UDC** 368.91(497.7)(082)

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## **INTRODUCTION**

Catastrophes, accidents, fires and similar things are causes of great dangers for the man himself, which is why the society, from the beginning of its existence saw the need to protect its members, and the economic values that they have created.

The man was always prone to great number of dangers which endanger him and his property and was facing and is still facing them, nowadays in the era of developed science and technology, he is exposed to significant damages from dangers that occur every day. From that point, historically seen, he had been trying to protect himself in an appropriate way from the outcomes that may occur if any of these present dangers fulfill.

The life insurance is a base of the economic development of the country. There is no country which in its economic development does not consider it with great significance. It is wrong to apprehend life insurance solely as a simple mechanism which allows payment of the insured sum to those who had had suffered some kind of damage, from funds which have accumulated on the bases of charging interest from the great number of insured. That mediation function is more and more, less important in comparison to the other functions of the insurance, in other words the life insurance, which provides a complex union of necessary services for the economic activities and long term development.

Life insurance has an important role because with the insurance from the possible dangerous consequences, which can affect the health of the person and its property, he can provide financial and psychological security in one society. The protection of the individual in a society (its personality and its property), as well as the protection of the society in the economic sphere, are conditions for the survival itself and also for the progress, and that is the reason why the insurance of the population came into existence.

The financial stability as a function of the life insurance consists of insignificant amounts of premiums charged from the insured, accumulated in one place, where they receive a shape of large financial means. Those amounts paid as premium, if there was no such thing as insurance would have been left unused or would have been spent in non investment expenditure. By concentrating these means in funds of the insurance companies they are separated from the regular circulation, the national economy accomplishes significant effects with the reduction of the amount of money that is in circulation, and it also contributes to the conciliation of the market turbulences, in other words the occurrence of the inflationary movements.

In the past twenty years, life insurance in The Republic of Macedonia was diminishing. As opposed to the past years, nowadays it is slowly starting to penetrate in the market of insurances. Currently, in the area of The Republic of Macedonia life insurance has been serviced by four foreign companies, such as: Croatia life insurance, Grave insurance, UNIKALIFE AD and Wiener LIFE insurance.

Nowadays, in these complicated contemporary market conditions, it is of great importance to make a comparative analysis of The Republic of Macedonia and its surrounding, that is to say the region. Namely, Life insurance in The Republic of Macedonia is insubstantially developed because, considering all the development indicators it is under the average of development compared to the countries members

of the EU, as well as the surrounding countries. From that point, in order to acknowledge the position and the degree of development of the domicile life insurance, a comparative analysis has been made between The Republic of Macedonia and random chosen countries from the region (Italy, Austria, Slovenia, Croatia, Serbia, Bosnia and Herzegovina), considering the period between 2008 and 2012.

## ***LIFE INSURANCE IN THE REPUBLIC OF MACEDONIA***

In The Republic of Macedonia, same as in the other national economies, life insurance has its own dynamics of development, it has its own specific characteristics in different periods, and it has its own insurance institutions (Jovanovski,2005).

Contrary to the reviews of a great number of European experts who come from the area of economy, especially from the financial sector where the global financial crisis has left deep traces, it is my pleasure to highlight that this year's statistical publication (year 2013) denotes that in The Republic of Macedonia not everything is that pessimistic, especially in the area of life insurance. At the end of 2008, when the already started financial crisis threatened with all its fierceness, individual financial analysts in The Republic of Macedonia had the opinion that, „the present“ from the global financial crisis will not be felt and that even a significant prosperity will be made possible. That happened in the area of Life insurance in The Republic of Macedonia, where in 2012, compared to 2008, an increase which is more than double is noticeable.

Macedonian life insurance market, in the real sense of the word has been functioning since April 2005. On the 31<sup>st</sup> of December 2012, the insurance market in The Republic of Macedonia consisted of 11 companies for non life insurance, 4 (5, Qubi only updates the previously made contracts for life insurance) companies for life insurance, 8 companies for representation in the insurance and 23 insurance broker companies. The institutional advancement of the sector has been accompanied with an annual increase of employment of 4.6% (the total number of employees in the insurance companies at the end of 2011 was 1.419 people) and a higher degree of development of the “insurance industry”, shown by the growth of the total policy premium (5.1%).

The data persuasively show the continuous increase of the stipulated (policy) premium of the life insurance (year 2012, 20.3%) and also a continuous increase in the participation in the total stipulated (policy) premium of the insurance in The Republic of Macedonia.

According to the indexes from the chart display (Chart number 1) it is evident that the company for life insurance Grawe, for the period observed, permanently takes the dominant position in the market of life insurances in The Republic of Macedonia with high 44.4% (year 2012). Namely, the above mentioned company for life insurance notes a rapid increase of the insurance portfolio in the analyzed period for highly 186.1%. It is left to the future to persuade us in the rivalry with the other participants, which also in the past few years note a high increase from year to year, which is very praiseworthy.

According to the data from the annual report made by the Agency for Supervision of the Insurance in The Republic of Macedonia, life insurance companies, which had been present at the market in the period between 2008 and 2012, noticeably have increased the total premium. The companies from the area of life insurance in 2012 had

enchased a total premium in the amount of 9.726 thousand Euros, which shows an increase of 20.3% as opposed to the previous business year. It is inevitable to ask the question „How can this happen in The Republic of Macedonia, when the stipulated (policy) premium for life insurance in Europe and in the EU has noted a decrease in 2012; in Europe 12.02%, in EU it is even higher, 13.5%“.

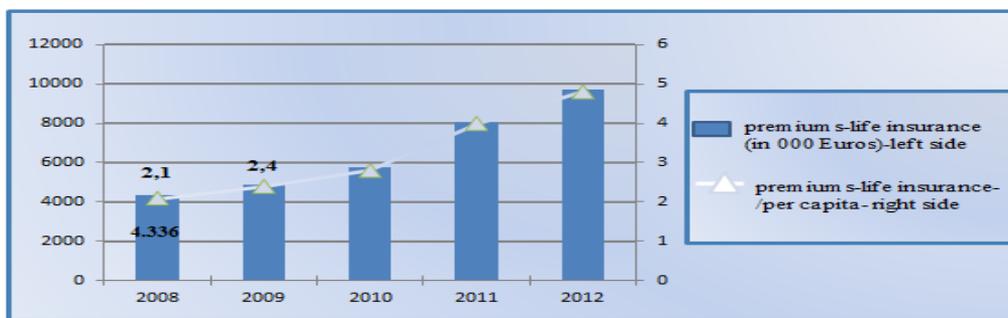
in 000 Euros

Insurance company	2009	Index 2009/2008	2010	Index 2010/2009	2011	Index 2011/2010	2012	Index 2012/2011
QBE Macedonia	358.5	/	242.0	/	186.2	/	130.3	/
Croatia Insurance	1,844.5	124.33%	2,229.2	120.86%	3,268.0	146.59%	3,964.2	121.30
Grawe Insurance	2.688.3	115.95%	3,293.2	122.50%	3,973.5	120.66%	4,315.1	108.59
Unica life AD	/	/	/	/	218.9	/	661.6	302.29
Wiener Life – Viena	/				434.5	/	654.4	150.60
<b>Total</b>	<b>4,891.3</b>	<b>112.8%</b>	<b>5,764.4</b>	<b>117.84%</b>	<b>8,081.1</b>	<b>140.19%</b>	<b>9,725.6</b>	<b>120.35%</b>

Figure 1: Total policy (stipulated) premium- life insurance for the period of 2009-2012

Source: The report for the capacity and the content of the work of the Insurance Companies, The Agency for Supervision of the insurance, 2009, 2010, 2011 and 2012, Skopje.

The degree of the development of the life insurance, measured through the degree of density (policy premium- life insurance per resident) annually has increased by 20.3%, while the degree of penetration (participation of the policy premium- life insurance in GDP) as opposed to 2011 hasn't noted significant changes (0.019 index points), Graph number 1.



Graph 1: Indicators of the development of the life insurance market

Source: - Annual report of the movements in the insurance market in The Republic of Macedonia in 2010, 2011 and 2012, Skopje, page 6-Personal calculations

The degree of penetration in The Republic of Macedonia (0.11%) was a little bit lower compared to the neighboring countries, the degree of density at the end of 2012 was 296.00 denars (4.8 Euros), the gross stipulated policy premium per resident, which indicates that the cultural level considering the insurance in The Republic of Macedonia is still low, although it notes a high increase of 20% compared to the previous year. The number of smokers in The Republic of Macedonia has risen and according to the estimations 35% from the total population in the country consumes tobacco, show the analyses presented by the Institute of labor medicine. Macedonians are among the most passionate smokers in the world, the analyses of the World Health Organization show. Currently Macedonia is on the second place in Europe in using tobacco per person, and Poland is the only country that is before us. People in The Republic of Macedonia, approximately spend 95 € on tobacco per year, which indicates that the „arguments“ that we are poor, that we do not have enough means for life and that we have more important things to spend our money on than insurance „do not wash“.

According to the analytical acknowledgements given in the Business Monitor International, in the following years, the indicator for density of the life insurance should continue with the trend of positive movement ([www.businessmonitor.com](http://www.businessmonitor.com)). Compared to the countries in the region, the degree of density of the life insurance in The Republic of Macedonia is at the lowest level. Such indicators show a greater potential for growth and development of this segment of the financial system.

The number of the life insurance policies sold (year 2012) is 6,971.00, where Grave has issued 1,882 policies, Croatia 3,731 policies, Wiener 509 and Unika 849.

During 2012 there was no prominent change in the structure of the ownership of the life insurance companies. The insurance companies are dominantly owned by foreign investors, and that is 98.1% of all the life insurance companies. Of all the foreign investors, foreign legal entities are also dominant in the area of non life insurance. In the last years in The Republic of Macedonia, rebranding of the domestic companies is also evident, using the name of the world known foreign companies. The trend of penetration of the foreign capital in the insurance business allows intensification of the competition, introduction of new products, regular and on time servicing of the damages and leading an effective management politics with the means and their sources.



Graph 2: Structure of the shareholders capital in 2012

Source: Report for the capacity and the content of the working of the Insurance Associations, The Agency for supervision of the insurance, 2012, Skopje, page 13

The life insurance insurers are still a successful part of the relatively unsuccessful Macedonian story. While everything around is on hold or in stagnation, the life insurance companies somehow manage to keep the pace from year to year, increasing the gross policy premium. How? That is the first question for the economic analysts. In a situation when the price of the essential food products increases enormously, and the average salary still stays 330 Euros, when it is harder to find a job than to win a lottery, the only thing left is to admire the people of The Republic of Macedonia who still manage to pay for their insurance, which on the other hand is not obligatory.

According to the data (research of the European bank for renewal and development (EBOR) and The World Bank (SB) performed on 38 thousand households in 29 developing countries in Central and Eastern Europe, Central Asia, as well as in 5 developed European countries), from all the 34 countries The Republic of Macedonia is positioned on the high 7<sup>th</sup> place when answering the question whether the head of the family has lost its job during the recession. 20.85% had answered positively; the worst answer was received from the people who were questioned in countries such as Azerbaijan, Turkey, Armenia, Uzbekistan, Moldavia and Tadjikistan. The surveyed from all our neighboring countries said that a lower percentage of the heads of the families had lost their jobs.

Even more dangerous for The Republic of Macedonia are the results received on the question: „Whether some other member from the family had lost its job during the recession?“. The people from our country had persuasively the biggest percent among all these 35 countries; the positive answer was received from 31.31%. None of these 35 countries had given such a bad answer on this question. The closest to us according to the answers on the question of losing the job of any of the family members during the recession are countries such as Tadjikistan, where 26.52% had said that the member of the family had lost the job, Moldavia (27.88%) and Uzbekistan (24.78%).

## ***CURRENT SITUATIONS ON THE LIFE INSURANCE MARKET IN THE REGION***

According to Swiss Re analysts, the developed countries and the countries in the development process are exposed to various possibilities of development in these complex contemporary market conditions (SWISS RE-Sigma Media Information, 2010). Namely, the market in the developing countries shows an explosive increase, while on the other hand the market in the developed countries notes more moderate increase which can also be expected in the following years. The effects from the financial crises overflow into the real sector, mainly through the shortage of capital and the sharpened conditions of debits which solely can be seen by the increased interest, shortened period for payment of the credits and the more rigorous selection while allowing the same ones.

The business of insurance has a special place as a factor for economic development in every country and it is a significant sector. The insurance, mainly, the life insurance is an important factor for the stability of the financial climate in the national economy. Namely, the financial means accumulated are means with purpose and are left for a longer or shorter time reserved to fulfill their function. By doing it, by

separating these means from the regular circulation, certain effects of lowering the quantity of the money in circulation are achieved, and that contributes to the calming of the market turbulences, in other words the occurrence of the inflationary movements (Milošević,2010).

As an indicator of the meaning of this economic activity in the world economy, is the fact that among 500 of the largest world companies, selected on the bases of the total income, there are 50 insurance companies, while eight insurers are among the world's top 50 companies. The total stipulated policy premium on the global bases in 2008 was 4.219 billion dollars, with 57.8% participation of the life insurance; in 2012 it was 4,612 billion dollars, with 56.8% participation of the life insurance in the structure of the total policy premium (Sigma Swiss Re,2013).

Before we start the analysis of the data from the chart above, only for illustration and better further comparison, we should mention that the gross domestic product (GDP) per resident in The Republic of Macedonia in 2012 had the level of 27.7% from the regional average, while in the 2008 the level was 22.8%. According to this relatively acceptable macroeconomic indicator for showing the level of the economic activity, that is to say the welfare in one national economy, Austria is on the highest level with 270% from the average of the observed region. At the same time, in Italy with highly developed life insurance (65% from the total insurance), the gross domestic product per resident was 183% from the average gross domestic product of the countries from the region. The Serbian Republic is on the level of 34% from the average of the region.

In a combination with the unstable financial conditions and dramatic change of the competitive surrounding, a number of companies are facing and extremely unpredictable future. A great number of theoreticians and experts from that practice are making great effort to predict the consequences of the financial crisis that can ruin the business in the area of life insurance. The insurance sector is strong and has a good capital base for overcoming of all the possible temptations in this period. However, the positive things in the global market of life insurance in 2012 have also particular repercussions on the market in the region, which slowly but safely revives and stabilizes from the global financial crisis that was present in the previous years.

Country	Italy		Austria		Slovenia		Croatia		Serbia		B&H		Montenegro		R. Macedonia		
	2008	2012	2008	2012	2008	2012	2008	2012	2008	2012	2008	2012	2008	2012	2008	2012	
<b>Indicators</b>																	
Gross domestic product (000,000,000 Euros)	1.755,86	1.532,12	282,74	309,97	41,85	38,05	47,76	43,90	37,52	34,15	14,40	13,24	13,24	3,3	6,52	7,9	
Number of population in 000	59.464	59.464	8.121	8.121	2.019	2.019	4.284	4.284	7.121	7.121	4.499	4.499	4.499	625	2.022	2.022	
GDP per capita (euros)	29.528	25.765	34.816	38.169	20.728	18.846	11.148	10.247	5.269	4.796	3.201	2.943	2.943	5.280	3.224	3.907	
Total gross premium (000,000 Euros)	107.064	112.250	18.149	16.305	2.261	2.002	1.494	1.208	713	542	232,00	258,25	258,25	60,58	105,27	114,04	
Life insurance premium (000,000 Euros)	62.876	72.597	8.240	6.517	720	545	393	325	81	98	33,69	44,05	44,05	7,24	4,4	9,7	
Participation of the life insurance in the total insurance in %	58,72	64,67	45,40	39,37	31,84	29,18	26,30	26,90	11,36	18,08	14,52	17,06	17,06	11,95	4,20	8,50	
Penetration of the life insurance (in GDP%)	3,60	4,81	2,91	2,10	1,72	1,43	0,82	0,74	0,21	0,29	0,23	0,33	0,33	0,22	0,14	0,12	
Density of the life insurance in Euros	1.057,38	1.220,86	1.014,65	802,49	356,61	269,93	91,74	75,86	11,37	13,76	7,49	9,79	9,79	11,63	2,18	4,80	

Figure 2: Macroeconomic indicators in the Region

Source: Sigma, Swiss Re No 3/2008, page 38 and Sigma, Swiss Re No2/2011, page 34 and Swiss Re No3/2012, pages 38 and 39- Personal calculations and consultation with the number of available sources

Total stipulated policy premium on the world level in 2012 compared to 2008 notes an increase of 9.3%, while in the European range 12.02% decrease, as well as in EU a decrease of 11.5%; in our so called region the total policy insurance premium notes an increase of 2.05%.

Similar destiny has the stipulated policy premium in the life insurance, on the world level in 2012 compared to 2008 notes an increase of 7.5%, while in the European frame it is 9.8% decrease, as well as in EU, 13.5%, and in „our“ region the total policy premium for life insurance notes an increase of 10.8%.

Contrary to different countries in the region, where a particular stagnation can be noted and also a lowering tendency in the development of the life insurance, we mentioned in the introduction, in The Republic of Macedonia the gross stipulated policy premium (life insurance) continuously notes, taking into the consideration our conditions, remarkably large increase. Italy which is positioned really high on the world's chart, 7<sup>th</sup> place (year 2012) in the life insurance with achieved participation of 65% in the total gross policy premium, has been achieving uneven tendency, 11.2% decrease of the life insurance premium compared to 2011, although there was a high increase in the analyzed period, 15.5%. The participation in the life insurance market in the Region of Italy is particularly high with colossally 90.6%.

The second position, according to the participation in the life insurance market is reserved for Austria, but only 8.1%, further in the list is Slovenia with 0.7% and at the end is The Republic of Macedonia with 0.012%.

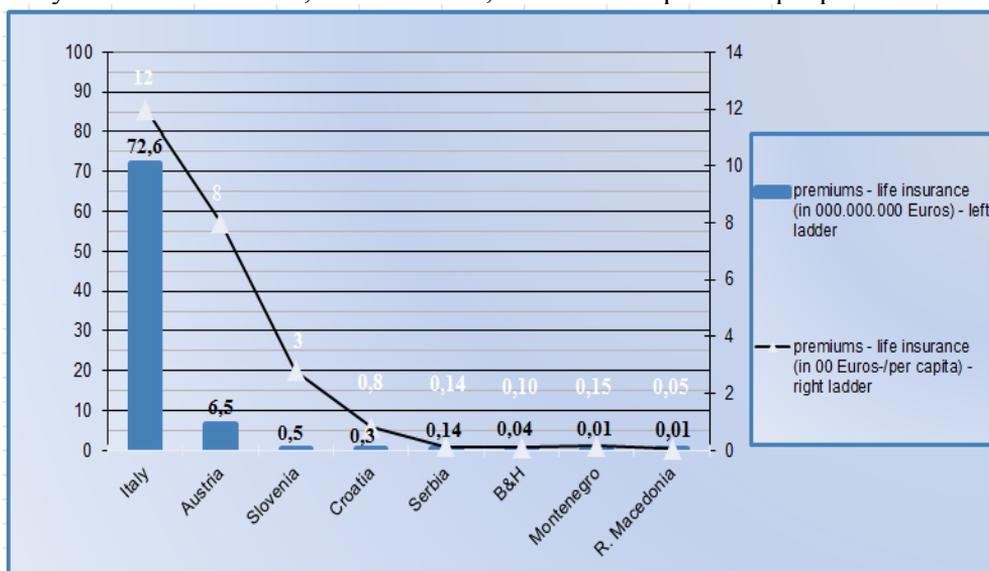
In the observed period The Republic of Serbia notes a rapid growth of the life insurance at highly 21%, although the total stipulated policy premium was decreased. Also, in the last years The Republic of Serbia is among the countries with relatively satisfactory presence of the life insurance in the total stipulated policy premium, 18% places it among the group of countries with intermediately developed life insurance. From the total of 28 registered insurance companies, 7 of them are for life insurance, which makes us optimistic for the future prosperity of the life insurance. Above, we mentioned that Italy is highly placed in the world list of life insurances; Serbia is on the 78<sup>th</sup> place from the 88 listed countries (Sigma, Swiss Re, 2013). The participation of The Republic of Serbia in the market of life insurances in the Region is with the insignificant 0.12%.

Quite interesting is the fact that Slovenia, which is a member of the European Union, in this period has achieved adverse trend in the life insurance as well as in the total premium. Differently, from 22 companies registered for insurance business, only 6 are engaged in life insurance. As we mentioned above, contrary to the countries members of the European Union where the ratio between the life insurance and non life insurance was 2:1, the structure of the insurance in The Republic of Slovenia is absolutely opposite; the participation of the life insurance in the total insurance in 2012 was 29.18%. Also, important significance have the indicators for comparison among the countries, the degree of penetration and the degree of density of the insurance; exactly in the period which has been analyzed they note stagnation, especially the participation of the life insurance premium in the GDP. This kind of dramatically adverse results rang The Republic of Slovenia on the 54 place on the world's list of life insurances, with participation in the life insurance market in the Region of 0.7%.

Croatia, as the newest member of the European family, is not in a position to positively acknowledge the previously elaborated indicators, which for us are relevant only from the area of life insurance business. From all the subject indicators for analysis

covered in the Chart number 2, Croatia, in 2012 notes decrees. From the total of 27 companies registered for insurance business, only 6 are life insurance companies. As if they had some kind of agreement with Slovenia, they have the same number of life insurance companies (our observation), which for countries with European orientation is dramatically low number. The participation of the life insurance in the total insurance is 26.9%. They hold the 64<sup>th</sup> place in the world’s list, with the participation in the market for life insurances in the Region with 0.4%.

The numerated indicators (GDP, Population, GDP per capita, total policy premium, life insurance premium, the structure of the premium, the penetration of the life insurance and the density of the life insurance) are of particular value for each national economy for showing and realizing their own growth and as well as for the possible development perspectives. However, a number of analyses are possible from the chart and also comparisons with other national economies, even further, for example Europe, The European Union and in our case the Region. Namely, besides coming to particular conclusions from the life insurance premium analyzed, either in different periods in the scope of one national economy, or among the chosen countries, they are a good „barometer“ for the conditions of the overall economy and the comprehension of the density of the life insurance, in other words, life insurance premium per person.



Graph 3: Life insurance premium, also per person in the Region

Source: Personal calculations

According to the analyzed data, illustrated in the chart number 3, The Republic of Macedonia with the full right can be called a leader. Namely, in the analyzed period it notes rarely evident in other countries, high increase of life insurance, almost the highest in 2012, 20.3%, however, with a relatively low 8.5% participation in the total policy premium (on the world level for 2012 the participation of the life insurance in the overall gross policy premium is 56.86%, on the European level for that same year was 57.1%, while in Japan 80.2%).

## **CONCLUSION**

In The Republic of Macedonia, the life insurance is not on the satisfactory level of development, the capacity of the insurance companies is low, and the means accumulated from the insurance are modest.

It is remarkable, the low level of life insurance of the population, as well as the types of insurance which are still not affirmed and are not in use yet. Contracts for insurance are concluded, solely for those well known types of insurances, which are basically with a high risk of damage occurrence, while the types that are not adequately presented to the potential insures, yet, are left uncovered.

The insurance, particularly the insurance of people, is in a close relationship with the situations in the economic and society life and suffers from all the oscillations connected to the economy in the wider sense of the word. Namely, it is proved that there is a close correlation between the growth of the gross domestic product and the expansion of the life insurance, with the increase of the gross domestic product per person, the rise of the premium is significantly higher than the rise of the gross domestic product per person and vice versa, by lowering the gross domestic product, the premium for life insurance falls. The field of working of each insurance company is conditioned unlimitedly, but then there is a need of use of standards of the loyal competition, and effective adjustment to the transitional rules and normative which are conditions for development of all the participants in the economic and the society sphere in The Republic of Macedonia.

The life insurance contract differs from the insurance of property, because there are no limitations on the sum insured, there are no sub insurances and above insurances, the accumulation of the damage and the insured sum are allowed.

Because the life insurance belongs in the insufficiently developed areas of insurance in our country, there was a need to separately explain the technique of conclusion of different contracts in this area, such as: contract for insurance of the life, contract for additional insurance from the consequences from an accident and insurance for personal lease. According to the existing law regulations and The Conditions for life insurance from several insurers, the specific characteristics connected with the drawing up of the offer, policy, the obligations of the contracted parties and the consequences for not fulfilling these obligations are stated.

The world's insurance market is facing a rapid growth initiated by the changed structure of the need for insurance, as well as from the enormous, catastrophic damages caused by new risks, which directly influence the structure of offer, that is to say, the insurance market.

When we discuss about the countries in the Region, new members of EU, the structure of their total premium indicates that there are large development capacities, especially in the area of life insurance, and by that on the guaranteed increase of the profit, which made the insurance market in those countries very attractive for the foreign insurance companies.

The meaning of the life insurance is especially evident in the developing countries, because it provides financial services and investment means on the market of the capital. Namely, this insurance provides, for the individuals as well as for the economy, two very important financial services. First, life insurance is a source of a

long term saving which can be invested in projects of public or private sector, where commonly that investment is performed through the market of capital and in that way the life insurance contributes to the development of the market of capital and for the growth of the gross domestic product. Second, the individuals, facing the rapid urbanization, mobility of the population and formalization of the economic relations among them, life insurance has gained an increased importance as a mean which will allow the individuals and also their families to manage the risk connected with income, in other words the family budget.

Life insurance market will have safe and stable future if predicted scenarios for European orientation, additional investments in infrastructures, further development of capital market, attracting foreign investments, raising the employment and continuing with pension and health system reforms are achieved.

From all the facts, we can see that this way of saving is the main pillar of every national economy and should be stimulated, just as governments in EU and in developed countries do.

The life insurance market in the Republic of Macedonia is among the group of markets which are in the process of development. As we have ascertained, it can be qualified as under developed market for life insurance, with the lowest number of insurance companies according to the number and per resident compared to the countries in the region. The percentage of participation of the life insurance in the total stipulated policy premium is low, 4.15% in 2008, and in 2012 with a particular increase of 8.5%. Besides the already mentioned negative attributes (developing market, small number of companies, and low participation in the total premium) life insurance is a significant potential for development. The experience from the countries which are in the developing process presents us the acknowledgement that for the development, for the expansion of the life insurance market time is an important factor, this sector can develop in conditions of stable and developed financial system.

In the following period, all the subjects (insurance companies, the insured, authorized people in the insurance, brokers, the Macedonian National Biro for Insurance in Macedonia, The Agency for Supervision of the Insurance of the Republic of Macedonia and the Government of the Republic of Macedonia) in this sphere should give a personal attribution towards the affirmation and arising of the role and the place of the life insurance:

—Special treatment of the life insurance given from the Government, the popularization of the same one, as it has been done with the third pension column.

—Reconciliation with the law life insurance regulative of the EU, with a special review on the tax treatment.

—Quantitative and qualitative enlargement of the insurance companies that offer life insurance, incorporating them in the so called Global Market.

—Development of new channels for sale.

—Coming closer to the potential customers.

—Extending the range of products.

—Affirmation and practicing of the corporate management.

—Creating conditions for healthy competition.

Taking into consideration the importance of the life insurance for the economic and financial development, the question arises „Which factors determinate the claim for life insurance in The Republic of Macedonia?“.

Insurance as one of the factors of social reproduction is in relation with general economy and social movements in a country. There are determinants which apply for all types of insurances, but some only determine life insurance. Possibilities of developing life insurance can be viewed from two different directions, economic and organizational, demographic angle. In economic-social determinants mostly mentioned are GDP of the country, value of income standard, level of development of social insurance in the country, stability of domestic currency, the unemployment rate and size, age-sex structure of the population, family status. In the hierarchy of numerous factors, those from organizational nature take their place, and most important are the degree of organization in insurance institutions, good and bad experiences in the past periods, and business politics in insurance organizations.

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## ***THE IMPORTANCE OF FRANCHISING FOR DEVELOPMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES IN REPUBLIC OF SERBIA***

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**Abstract:** The subject of this paper is franchising, as a method of economic development and a new way of business in the domestic market. The aim of paper is to show, based on previous experience in applying of franchising in Republic of Serbia as a country in transition, the potential, unused areas, and the cause of not accepting franchising on a larger scale.

The paper will be applied the method of description, the method of explication, the method of content analysis, a method of comparison and methods of field research, with special emphasis on the impact of franchising at the development of small and medium-sized enterprises in Republic of Serbia.

Within the available material will be used research studies, publications, and official reports of European Franchising Federation, International Franchise Association, Centre for Franchising of Serbian Chamber of Commerce, Serbian Franchise Association, also as the other appropriate national and international literature.

**Key words:** Franchising, Advantages of Franchising, SMEs

**JEL classification:** L26

**UDC** 339.187.44(497.11)(082); 334.713(497.11)(082)

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## ***INTRODUCTION***

Due to numerous benefits of economic and social nature, such as economic and technological flexibility, creating new jobs, employment, particularly for young workers and women, sector of small and medium enterprises (SMEs), rightly, stands as a generator of economic development. For this reason, all developed economies of the world are trying to help SMEs development significantly more. In Serbia, in the period since 2000. till the first effects of global financial crisis in 2009, very one SME sector was the most effective segment of the economy.

Despite the initial support founders of new businesses get at the beginning of their business operations, many of them do not survive their third year of operation (OECD Outlook, 2005). It is often said in literature, that the average life cycle of SMEs is not longer than 5 years, or that more than half of new businesses do not survive the first 5 years of existence. Failure in the early stages of SME development is usually a consequence of absence of management capability and lack of financial resources. In order to forestall these deficiencies, SMEs can turn to franchising as a successful and proven way of doing business. Franchising reduces degree of failure in start-up, as the recipient of a franchise accepts already validated and worked out business system. Thereby franchising has become powerful tool for development of small and medium-sized enterprises, because it allows easier access to the market and relative stability on it. This is a safer way to enter into the world of entrepreneurship, rather than starting its own business venture, because it is in interest of both sides, donor and recipient of franchise, to work successfully and to develop. More than 90% of franchises survive in the first 5 years of doing business, and at standalone entry in entrepreneurship that percentage is only 20% of SMEs. Franchised business is considered to be an aggregate of employment, because it opens new jobs, and contributes to growth, export and competitiveness of a national economy.

Franchising, therefore, provides a safer start of business and significantly increases the chances of survival of SMEs in a very turbulent market today. This is very important to countries in transition such as Serbia. For this reason, the popularization of franchising concept in Serbia is one of the key aspects of rapid economic development of Serbian economy and its integration into the global and the European flows, as well as improving the competitive position of the domestic economy. This paper explores the current condition of franchising in Serbia, also as its development potential, and tries to identify the main obstacles for broader implementation of franchising as a desirable business model for SMEs.

## ***FRANCHISING – A LITERATURE REVIEW***

The very concept of franchising has many definitions, but this time we will mention some of the most important. Franchising is a system of marketing goods and/or services and/or technology, which is based upon a close and ongoing collaboration between legally and financially separate and independent undertakings, the Franchisor and its individual Franchisees, whereby the Franchisor grants its

individual Franchisee the right, and imposes the obligation, to conduct a business in accordance with the Franchisor's concept. The right entitles and compels the individual Franchisee, in exchange for a direct or indirect financial consideration, to use the Franchisor's trade name, and/or trade mark and/or service mark, know-how, business and technical methods, procedural system, and other industrial and/or intellectual property rights, supported by continuing provision of commercial and technical assistance, within the framework and for the term of a written franchise agreement, concluded between parties for this purpose. (European Code of Ethics for Franchising, 2003). According to Martin Mendelsohn (2005, pp. 2), perhaps the most famous author of the franchising, a term franchise has become more popular with expanding of so-called concept of franchising, which means giving license by one person (franchisor) to another person (franchisee). This license entitles franchisee to conduct business under the brand name (brand, trademark) of franchisor and to use a franchise package, which contains all the elements necessary to establish an independent company that will operate, with the active assistance of franchisor, by predetermined rules. In laic words, franchising is a business association in which business concept, that successfully operate in a field, is cloned / transplanted from main field to another, according to the "turnkey" principle. (What is franchising, 2007).

We can also say that franchise is an agreement or license between two legally independent parties which gives:

- a person or group of people (franchisee) the right to market a product or service using the trademark or trade name of another business (franchisor)
- the franchisee the right to market a product or service using the operating methods of the franchisor
- the franchisee the obligation to pay the franchisor fees for these rights
- the franchisor the obligation to provide rights and support to franchisees (An Introduction to Franchising, 2010)

Franchising is a commercial development strategy based on an independent partnership between independent commercial entities, the franchisor and the franchisees (World Franchise Council). The franchisor contributes the initial capital investment, development efforts, know-how and experience and the franchisee contributes the (usually far greater) supplemental capital investment, plus motivated effort, operating experience in a variety of markets and innovation. That is also a method of market expansion utilized by a successful business entity wanting to expand its distribution of services or products through retail entities owned by independent operators using the trademarks or service marks, marketing techniques, and controls of the expanding business entity in return for the payment of fees and royalties from the retail outlet (Keup, 2004). Franchise represents a business relationship where "one firm (the franchisor) sells the right to market goods or services under its brand name and using its business practices to a second firm (the franchisee) (Combs, Michael, Castrogiovanni, 2004). In our legal theory, can be found that franchising is a long-term contract, by which one party (the franchisor) obligates to perform successive delivery of goods and provide certain services, and share its knowledge and experience in the business to the other side (franchisee), and the other side agrees to pay a specified fee. To summarise, franchise is a licence that gives franchisee rights to sell

products/services of franchisor using franchisor's trade/service mark and it's business experience. For this rights franchisee is obliged to pay franchise fee/royalties and the franchisor has right to control the use of given rights.

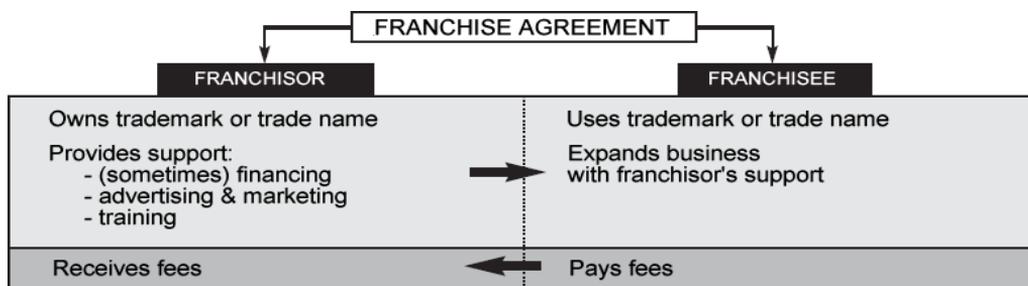


Figure 1: Franchise agreement

## THE FEATURES AND ACTORS IN FRANCHISING

Franchising is a special form of business cooperation between independent business subjects connected based on the agreement in which the franchisor gives users the right to use its trademark, image, and systems of work, and in turn charges a fee as a franchise (Radosavljević, 2006). In order for a business to become a franchise, it has to meet some basic criteria and must be (Franchising - yesterday, today and tomorrow, 2008):

- **Unique** - a new concept that has potential for expansion in the domestic and international conditions.
- **Profitable** - a concept must bring profits firstly to franchisor, and after the projected franchise, profit margins built into the concept should be large enough so that each recipient of a franchise could achieve attractive repayment of its investment.
- **Systematized** - all business operating systems need to be developed in detail and overviewed, in the form of a manual.
- **Easy transferable** - it should be easy to transmit the overall knowledge and experience to franchisees.
- **Available** - if the franchise is very expensive, a very few people can afford it. Ideal investment in the franchise would be between 5.000 and 40.000 €.

**The main participants** in franchising are donor and receiver of the franchise. **Franchisor** is a legal entity that allows franchisees the right to operate under his trade name, and in return receives a fee. Franchisor is a company that standardized and tested its business concept and gave it to SMEs together with trademark or brand and all the details consisting that specific business concept. This transfer of knowledge, experience, visual identity and brand entails payment by franchisees. We can also say that franchisor is a legally independent entity which developed brand and unique concept due to business experience in an industry and this concept could be transferred to another legally independent entity. Franchisor is an entrepreneur who:

- is the owner of a brand and visual identity recognizable on the market
- offers a range of products/services/technology by conventional distribution channels
- has developed a method of sales and labor that is tested and updated in individual centers
- is able to transfer to others its own methods, experiences and knowledge through training and ongoing consulting
- has developed his own company, so he is able to continue to develop his own methods and manage the franchise network(What is franchising, 2007).

**Franchisee** (receiver of franchise) is a legal or natural person, who signed a separate agreement and accepted a system of work imposed by franchisor and which is now his system of operations. Franchisee is a legally independent entity that gets the right from the franchisor to do business under franchisor's trademark, for which franchisee pays a fee. For the franchise are most interested in:

- SMEs and entrepreneurs in the growth phase, which want to conquer new markets with its recognizable product and expand their brand or brands
- unemployed, who wish to settle their status by self-employment
- employees, who become technological surplus or want to change jobs
- employees, who received termination benefits and want to start a new career in their own work.

Receiver of franchise is usually SME elected by franchiser, and has the following characteristics: a great desire for affirmation, has the necessary means, wants to work closely with others, wants to work within the system and by given rules, accepts to be a member of the network and has developed a team spirit, by accessing the network acquires the right to use all elements which are subject of the bid: method, system or know-how, products, brand and image, help before, during and after the opening, etc. (What is franchising, 2007, pp. 6). Franchisees, in fact, may be all SMEs that want to have a stable business future. By buying a franchise, SMEs skip the first few steps and do not repeat the same mistakes that franchisor certainly had to pass in order to succeed.

## ***TYPES OF FRANCHISES***

Mostly we can understand franchising itself as:

- a learning from and replication of good practices
- a tool for giving chances to individuals to create their relatively independent self-employment opportunities and at the same time provide chances for employment
- generation in general (a franchise unit can be seen at a minimum giving job to 1 person, and as a maximum giving job to a medium sized enterprise)
- a form of transferring know-how and technology to carefully designed replication units - franchisees
- a productive employment within national economic and social strategies.

Franchising is essentially selling a successful and validated business system. Entering into a franchise is often represented as a marriage, or entering into a legal relationship for a long period of time. Franchisor offers its proven business system, brand, manuals, equipment, training and support services. On the other hand, the recipient pays an initial fee and a fee for using trade name and business methods. (Franchising - Frequently Asked Questions)

Franchising is used in various forms, and is divided mainly by:

- property (goods, services or manufacturing)
- grading (donor - recipient of franchise or even a degree in between)
- the nature of the franchisee (other manufacturer, wholesaler, retail)
- various economic criteria (volume of business, duration, value of turnover and profit).

Franchising can be understood in other ways, of which the most common are product distribution franchise and business format franchise. The **product distribution franchising** is typically a distribution system for marketing goods manufactured by the franchisor. The franchisor licenses its trademark and logo to the franchisees, but typically does not provide them with an entire system for running their business. Receiver of franchise pays name or brand, so he has to be sure in strength of name/brand which he pays on his territory. Familiar and reputable name in Italy or Spain, may be completely unknown to customers in Serbia. Achieving market penetration is a key motivation for product franchising. The industries where we most often find this type of franchising are soft drinks, automobiles and gasoline. Some familiar product distribution franchises include: Coca-Cola, Goodyear Tires, Ford Motor Company, John Deer. Although product distribution franchising represents the largest percentage of total retail sales, most franchises available today are business format opportunities.

**Business format franchises**, on the other hand, not only use a franchisor's product, service and trademark, but also a complete method to conduct the business itself, such as the marketing plan and operations manuals. So, business format franchising, or simply commercial franchising, is a system of marketing goods, services and technology based upon a written contract between two legally, financially and fiscally separate and independent undertakings, the franchisor and each of its individual franchisees, whereby the franchisor grants each of its individual franchisee the right, and imposes the obligation, to conduct a business in accordance with the franchisor's concept. (Franchising: a Vector for Economic Growth in Europe 2011). Business Format Franchising as a marketing system is highly flexible and adaptable and has been adopted to develop brands across a wide variety of product and service sectors, and that is the most common type of franchise. Examples of business format franchising are found in food service, lodging, automobile after market maintenance (muffler and brake replacement, oil change, cleaning and waxing), convenience stores, automobile and truck rental, business services (bookkeeping, accounting, temporary and permanent employment) and consumer services (home cleaning and repair, lawn care, day care, educational services, tax return preparation and real estate brokerage). (Expanding a Business by Franchising).



Figure 2: Some of the most famous franchises worldwide

## DEVELOPMENT OF FRANCHISING

In recent decades there has been a great expansion of franchising in the world market. Franchising as a way of doing business is often used in economically developed countries, and its use has grown dramatically over the last two decades in both the USA and Europe (McKee, 1999, pp. 76-82). Franchising has spread to a large number of economic sectors and is present not only in the automotive industry and servicing, production and sale of food (bakeries, cafeterias, pizzerias), catering (fast food restaurants), hotel industry, retail and wholesale trade, but also in bookkeeping, advertising, dental and medical services, insurance, photographing, photocopying, packaging, transportation, washing and chemical cleaning, pharmacy, etc. Franchises are offered in as many as 75 different activities, but it is still, as much as 60% of all franchises, located in the food and restaurants, which were also the first-born in this area.

Having in mind the need of sublimation of franchising in the world, International Franchise Association (IFA) was founded in 1960 in the United States. In Europe was established European Franchise Federation (EFF) in 1972, made up of 17 national franchise associations, expanding with new members. Until the beginning of the 80s, almost 90% of franchise management was related to the North American market, while today half of franchise networks has its headquarters in countries outside the United States. A 2005 survey by the EFF found that there are 6,500 distinct franchised brands operating in different countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, the Netherlands, Portugal, Slovenia, Spain, Sweden, Switzerland, Poland and Russia). Already in 2009, EU-17 counted over 10,000 franchise brands, with average annual growth rate of franchising brands by 8.1%, between 2007 and 2009. The share of franchise enterprises among SMEs in the EU-17 in

the relevant sectors was 4.6% at 2009. Countries in Eastern Europe have been concurred by franchising in the late 80s and early 90s, mostly trough fast-food restaurants. Today, some countries in this part of Europe can boast a significant degree of development of franchising, such as Hungary and Romania. Franchising is best developed in Hungary, which has more than 400 franchise chains, of which 50% were domestic, followed by Poland 73% and Slovenia 48% domestic brands. According to unofficial data, there are about 150 franchise brands in Serbia, and only 20% are national, and in Croatia operates 170 franchise brands, also only 20% were domestic.

*Table 1: EU-17's number of franchise brands (FRANCHISING: a Vector for Economic Growth in Europe)*

Country	Brands/ systems	brands	brands	growth over 2years	% of domestic brands
17 EU states	2007	2008	2009	2007/2009	2009
Austria	390	411	435	11.5 %	55 %
Belgium	200	240	320	60.0 %	60 %
Czech Republic	131	137	150	14.5 %	50 %
Denmark	180	185	188	4.4 %	82 %
Finland	220	255	265	20.4 %	75 %
France	1.137	1.229	1.369	20.4 %	89 %
Germany	910	950	960	5.5 %	80 %
Greece	544	560	563	3.5 %	70 %
Hungary	320	350	341	6.6 %	70 %
Italy	847	852	869	2.6 %	96 %
Netherlands	676	669	679	0.4 %	85 %
Portugal	501	521	524	4.6 %	55 %
Poland	383	480	565	47.5 %	73 %
Slovenia	103	106	107	3.9 %	48 %
Spain	850	875	919	8.1 %	81 %
Sweden	350	400	550	57.1 %	67 %
United	809	835	842	4.1 %	89 %
<b>TOTAL</b>	<b>9.102</b>	<b>9.687</b>	<b>10.176</b>	Av. 2007/2009 16.2%	
				Annual Av. 8.1%	

Increasing importance of franchising on economic development, consists three stimulating factors: the need for expansion, lack of capital and the need to overcome the distance. However, besides positive effects, it has been showed and their negative effects, embodied in numerous attempts to light and rapid enrichment, fraud and other criminal activities, all in an effort to use the great popularity of franchising at the time. Predictions were that franchising will reach its culmination in 2010, when it will become the dominant form of business for SME, especially in Germany and France, but the global economic crisis postponed the prediction.

When it comes to the United States, over the past three years franchise business growth has been restrained due to underlying factors that have been a drag on the economy as a whole. Since a high proportion of franchise businesses serve consumer markets, the weak rebound in consumer spending following the recession has hampered the growth of the franchise sector. Tighter credit standards have limited the formation of new franchise small businesses and the expansion of existing businesses (IFA Educational Foundation by IHS Global Insight). The recent IFA Franchise Business Leader Survey reports that over 80% of franchisors say that limitations on access to credit continue to have a negative impact on their ability to expand. IFA expects that in 2013, the number of franchise establishments in the U.S. will increase by 1.4% and employment in the franchise sector will increase by 2.0%. Furthermore, according to Franchise Business Economic Outlook for 2013, the GDP of the franchise sector is expected to increase by 4.1% to \$472 billion in 2013 (this is approximately 3.4% of U.S. GDP in nominal dollars).

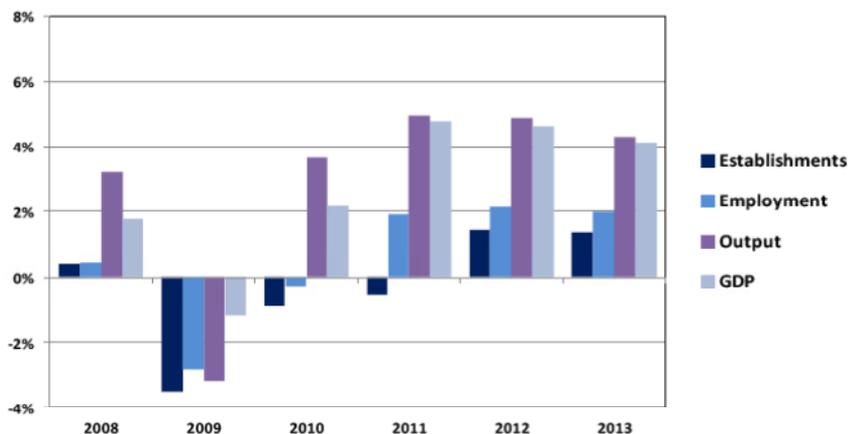


Figure 2: Franchise Business Growth by Year, 2008-2013: December 2012

Forecast (*Franchise Business Economic Outlook for 2013*, pp. 2)

## **THE ADVANTAGES OF FRANCHISE BUSINESS MODEL FOR SMES**

Economic analysts agree that the global economic crisis has hit franchising for at least, as evidenced by the fact that the percentage of shutdowns of franchising outlets is still significantly lower than in the case of independent entrepreneurship. Associated SMEs, which are operated under the franchise system, are much safer compared to the eventual extinction, than to operate alone, independently. Franchising has a special significance in terms of increasing unemployment, because it allows faster and more productive use of funds that receive fired workers. According to the U.S. Chamber of Commerce, the franchisee has a 97% chance that his business will survive after the first year of operations. After five years on the market, survive 92% of franchises, and

the tenth year of operations welcome even 90% of the franchisee. For independent SMEs those numbers are not nearly so positive. Specifically, the first year on market survive only 62% of them, and over time this number decreases. After the fifth year, 23% of SMEs are closed, and after ten years only 18% of them remains on the market. From this, we can conclude that the main reason why SMEs are buying franchise is, in fact, to **reduce risks** and choose safest path to success. Another reason is that SMEs can thoroughly **investigate financial operations of franchise**, before they enter into any significant costs. When SME independently starts job (not franchise), it often operates blindly and regardless of previously conducted market research, it is very difficult to master just about any aspects of the business. Next very important reason to buy franchise is that franchising relentlessly **leads to rapid growth**, by providing SME access to capital for expansion. It is known that SMEs often cite lack of capital as their biggest problem, while it can be said that limits of growth in franchising, almost doesn't exist. Spreading franchise system, name of SME becomes recognizable, which most people associate with success in the market. Franchise starts to crowd out the competition with its size and prevalence. A large number of franchise locations provides a tremendous **franchise advertisement**, which also **increases the sale of products**. This creates a synergy in which success creates success. Unlike self-initiated activities, surveyed franchisees in 95% of cases fell successful, and 75% of them would buy a franchise again. To summarize the above mentioned, we can conclude there are five key reasons why SMEs are recommended to buy a franchise, rather than to develop their own business idea:

**1. With franchise, SMEs are buying already established business formula** and enter the tested, profitable and well-developed system of business, which has gone through many phases and which developed, proved to be successful and repeatable. Although it is not a guarantee of success, in itself, the risk is smaller than to enter the market with a new product that must be developed.

**2. The product development and management have been established.** The product has already established (and registered) trade mark, beaten distribution channels, procurement, distinctive marketing and customer confidence. Since the complete system is already developed, SMEs can exclusively devote to operating business and activities for sales increment.

**3. It is established a complete support**, which means that SMEs have all the technical assistance and know-how, which the owner of franchise have developed for years. After introductory technical and vocational training, by which a franchise owner handed to SMEs its overall knowledge and developed skills for them to work independently, during the entire duration of the contract, SMEs have a permanent, 24-hourly assistance.

**4. By entering into a franchise system, SMEs have a better opportunity to get a loan from the bank**, because franchising is for bank guarantee of safe and successful business. Also, the franchise owner will assist to SME, in the way that will shape incentive amount of the initial fee to join the franchise (and subsequent royalties), which provide to SME the ability to enter the business, to cover operating costs and to take a certain level of income.

**5. Practice and statistics show that the factor of success of franchise systems is far greater than in business of independent SMEs.** As stated, in the first ten years of business operations 90% of the independent SME fail, and only 10% of the franchise.

There are numerous advantages for SMEs who choose franchising as a growth option. (Murray, 2003) has emphasized **faster growth**, the **development of better managerial skills**, and **benefits that accrue from local knowledge**. Other advantages include **minimizing business and financial risks**, fewer employees in the field and less administration in the main offices, and the faster establishment of a national image for the company, because of franchise-system growth. As a result, the challenges associated with competition are diminished. Other authors note additional advantages: **lower risk of failure**, **standardization of product and quality**, **help in choosing locations and other logistical activities**, **benefits from the franchisor's research and marketing programs**, and **some protection from competition**. Franchising also contribute to a country's gross domestic product (GDP), contribute to employment and job creation, provide new sources of tax revenue, help make goods and services more available to ordinary folks, promote gender empowerment, and improve the economic situation of minority groups and other vulnerable segments of the society.

Other advantages include: training, economies of scale advantages, lesser possibility for errors in business process, product and quality standardization, access to franchisor's research programs knowledge base. In addition, the transfer of knowledge and technology between the donors and recipients of franchises, without which franchise relationship can't even be imagined, equally stimulates transfer of innovation and entrepreneurship culture, and not just within the borders of one country, but between countries and cultures of the world, which is the facts of broader social significance. Franchising, finally, enables relocation of development from big cities to small towns and rural areas, which will, through necessary help and assistance of successful systems, reach new business opportunities and wealth. Among the other advantages that franchise brings to SMEs, versus private entrepreneurship, are listed: help with starting business or the expansion of existing activities, quickly, efficiently and safely startup and expansion of business, the introduction of new jobs, the provided training and instructions and IT support, excellent cooperation with the environment (other recipients) and headquarters (franchisor), great support by the franchisor in the times of crisis, continuous exchange of experiences and timely transfer of good business ideas in the system, formation of market competition, the use of company's name and licensing rights (world known brands), precisely defined marketing strategy and objective, continuous monitoring and assistance, freedom to adapt the location, precisely defined financial plans and landmarks of profitability, particularly attractive method of cooperation in services (How to choose a quality franchise network, pp. 10-11).

## ***DISADVANTAGES OF FRANCHISING SYSTEM FOR SMES AS FRANCHISEE***

As any business relationship isn't perfect, so the franchise itself brings certain disadvantages for SMEs as a franchisee. The SMEs' decision about joining the franchise system is strategic and vital decision that must be made reasonable and with arguments. It is important, that in spite of its numerous advantages, SMEs be aware of weaknesses of the franchise concept.

As a major disadvantage of franchise, is often pointed out that ***SMEs are not completely independent***. They are required to operate their businesses according to the procedures and restrictions set forth by the franchisor. These restrictions usually include the products or services which can be offered, pricing and geographic territory. So, franchisees, though legally independent, are subjected to very strict control by the owners of the franchise. Each SME must ask itself whether such control is a problem, and in interview with the owner of the franchise, accurately determine how supervision will look and in which extent. Individual SME as a franchisee, can business very good on market, have good business turnover and reputation, but even so, not be independent. SME is not owner of the brand, but only uses it for duration of the franchise agreement, and loses that right at the end. Also, ***SME*** as a franchisee is ***less trained in regard to the development and upgrading of products, monitoring market trends*** and news, so if there is an interruption of the contract, the harder it will be to handle the new situation. It is often ***limited with market competition protection***, ie can not perform a certain job in the same market after the expiry of the contract. Thomas and Seid (2006, pp. 42) have also observed significant disadvantages for franchisees: mentioned ***lowered independence, greater addiction to franchisor's non-elastic franchise system, and unrealistic profit expectations***. For some franchisees, an additional disadvantage is the obligatory, ***continuous coordination of contracts and standards*** that are prescribed by the franchisor and the franchise system, including those ***financial obligations*** which the franchisee has to pay regardless of his actual financial status. Another disadvantage for some SMEs as franchisees, are other franchisees who, if the territorial exclusivity of franchise recipients is not well defined, may represent competition between themselves. We may point out and other disadvantages of franchising for SMEs: in addition to the initial franchise fee, SMEs must pay ongoing royalties and advertising fees, SMEs must be careful to balance restrictions and support provided by the franchisor with their own ability to manage their business, a damaged, system-wide image can result if other franchisees (SMEs) are performing poorly or the franchisor runs into an unforeseen problem, the duration of a franchise agreement is usually limited and the SMEs may have little or no say about the terms of a termination, etc.

Essentially, each company has, at the moment of starting business venture, to choose from three options: starting business, buying a new franchise or buying an existing franchise. Pros and cons for each of these options are shown in tables that follow (An Introduction to Franchising, 2010, pp. 13-14).

*Table 2: Starting a new business*

ADVANTAGES	DISADVANTAGES
usually lower start-up costs	requires more time and energy
	higher risk of failure
freedom with locations and procedures	takes longer to become profitable
no inherited problems from existing business	more difficult to obtain financing

*Table 3: Buying a new franchise*

ADVANTAGES	DISADVANTAGES
reduced risk of failure over an independent business	costs more (fees, royalties, supplies)
start-up assistance	smaller profit margins
on-going training and support	lack of independence and freedom
collective purchasing power	difficult achieving redress if franchisor fails to meet obligations
research and development	
association and synergy with other franchisees	a franchisor’s problem may become SME’s problem
easier to obtain financing	

*Table 4: Buying an existing franchise*

ADVANTAGES	DISADVANTAGES
the business is already up and running	<b>tangible limitations:</b> <ul style="list-style-type: none"> <li>· design problems</li> <li>· location problems</li> <li>· merchandise problems</li> </ul>
<b>the basic infrastructure is in place:</b> <ul style="list-style-type: none"> <li>· established locations,</li> <li>· existing customers and reputation</li> <li>· employees</li> <li>· vendors</li> <li>· policies and procedures</li> <li>· cash flow</li> <li>· no start-up period – quicker profitability</li> <li>· easier to obtain financing</li> </ul>	<b>intangible limitations:</b> <ul style="list-style-type: none"> <li>· customers and employee ill will</li> <li>· pricing problems</li> <li>· inadequate procedures</li> <li>· lease problems</li> </ul>
	potentially higher costs to buy
	legal liability in inheriting lawsuits

## ***FRANCHISING IN SERBIA***

### *THE EMERGENCE OF FRANCHISING IN SERBIA*

Franchising is one of several possible models for business growth and is widely used in economically developed countries throughout the world. Franchising as a business model, arrived in Serbia in the mid-seventies, when the country was still a part of the former Yugoslavia. The concept was introduced primarily by U.S. concepts: Coca-Cola, Avis, Hertz, Diners Club International, Intercontinental, Hyatt, American Express and McDonalds among others. In recent years, Serbia is focused on reestablishing the country as a regional trade and investment center. Starting in 2003, the country saw a significant increase in franchise businesses entering the country, including concepts such as Zara, Springfield, Mango, and Oviessse. After them, Office 1 Superstore and Hungarian bakery franchise Fornetti established operations, followed by Re/Max, Century 21 (U.S. real estate brokerage concepts) and I Quit Smoking in 2007. Domestic enterprises have started to realize the benefits of expanding their systems using this concept, so they began with construction of national franchises (Tigar, Pekabeta, C Market, Yumco). In the following years, domestically developed franchise concepts also included Afrodite Mode (women's fashion), DIS (retail), ComTrade (IT equipment), E-shop (internet shopping portal), Dve Šmizle (accessories), Mini Maxi (retail), Rakia Bar (brand café), Krofna Bar (fast food). (<http://www.globaltrade.net/f/business/text/Serbia/Business-Environment-Business-Practices-Franchising-Market.html>). Serbian Chamber of Commerce established Center for Franchising in 2008 and Serbian Franchise Association (SURF) in 2009, to support the expansion of franchise concepts in Serbia. SURF is an independent organization with the aim to gather the franchisors in Serbia and to introduce them to the European Federation of Franchising (EFF), which was finally done in May 2011. In 2010 and 2011, Commercial Service of Belgrade, in conjunction with the Serbian Chamber of Commerce, the Belgrade Expo Center, and the Serbian Franchising Association, co-organized Franchise Trade exhibition in Belgrade.

### *PRECONDITIONS FOR DEVELOPMENT OF FRANCHISING IN SERBIA*

Franchising development in the transitional economies requires special attention in terms of the elements for setting up national franchise development strategies as a part of SME development, transfer and development of technology, international trade development, etc. As late comers in the franchising industry, they may require special franchise development support systems. Time lag in the development of their franchising may not be bridged only by the import of international franchise systems, but also by developing home grown franchise systems. There are market niches that can best be filled by home grown systems, which could take shortcuts only by supporting them in their endeavours. Thus the role of the national franchise association is not simply advertising their member companies and caring for their well-being, but creating conditions for the development of a healthy franchise industry that includes both international, as well as national franchise concepts. Learning from international systems and, at the same time, competing with them may take some time. Another

issue is learning from countries with similar characteristics such as the size of the economy and other economic and cultural specifics, the type of settlements which affect development of franchising. All these may be critically important for the future of the transitional countries' franchising. (Report on training and support structures for young SMEs in Slovenia, 2010, pp. 28-29)

To succeed and make positive contributions to the economy, franchise-operated businesses need an enabling environment. Appropriate laws and regulations must be in place, government support to small businesses is crucial, SMEs must enjoy ready access to capital and technical advisory services, and the overall economy must be strong, vibrant and support robust consumer spending, and the financial system must be friendly to SMEs in terms of credit standards and availability. According to the above mentioned, including franchising as tool for SME development presupposes the following conditions (Report on training and support structures for young SMEs in Slovenia, 2010, pp. 4):

- adequate legal and economic framework
- strategy for SME development containing this element
- adequate research and data gathering mechanisms
- proper education and training programmes and institutions involved in this process
- careful targeting the education, training and consultancy (legal, economic, managerial etc) in franchising to franchisees and to franchisors as two different players in this approach.

In the context of franchises and franchise business in general in Serbia, the prevailing attitude of most citizens is that they do not share the same preference polls like those in Western countries. In fact, most people don't understand what is franchise business system and the possibility of franchising, as a form of assistance in the development of Serbian economy. Also, although the model franchise in huge steps enters Serbia, the advantage of this way of doing business in the Serbian business community still has not the required level. In this sense, the popularization of franchising concept in Serbia, is one of the key aspects of faster economic development of Serbian economy and its integration into the world and European integration process and improvement of domestic economy competitiveness.

Franchising should become a general trend in the development of SMEs. Past experiences and results of franchise business have proven to be successful, but the total balance can not be positively evaluated, because the real possibility remained unused. In order franchising to become basic working method for most SMEs, it should be provided an adequate market ambience with appropriate legislation and institutions necessary for its application, what in our country still isn't done. Franchise operations are followed by reduced market and financial risk, because earned reputation and developed marketing of a company standing behind them, facilitate their market penetration, with relatively low individual entrepreneurial investment. Therefore, it is estimated, that entrepreneurial development programs based on franchise are opportunity for easier bypass the increased political, legal and economic risks, which currently prevail in the economy of ours and other countries in transition. Moreover, it is evident there are many predispositions for development of franchising in Serbia, such as:

• relatively large market in Europe (with a population of 8 million people, Serbia is the second largest market in the SEE region, after Romania)

- the growing spending power
- appreciated products from the West
- laws modeled on European Union legislation
- There are no restrictions of U.S. franchises entry.

Some of world's best known companies, which operate mainly through franchising are: McDonald's, Burger King, KFC, Coca-Cola, Hilton Hotel, Pizza Hut and Starbucks Coffee. In our country, in addition to mentioned, there are several franchise chains, such as OMV, Fornetti (MiniPani), Tarkett, Fly Fly Travel, Zara, Palmers, Costa Coffee, etc. In essence, when it comes to the number of recipients and providers of franchising, Serbia lags behind many countries in Europe and region, and there is also a great difference comparing domestic and foreign franchises. There is only a small number of high quality domestic franchising concepts in Serbia, and number of foreign is much higher. Currently, according to unofficial analysis, in the country operates around 150 franchise brands (only 20% domestic), the number of sales outlets is about 1.550, and the number of employees in the franchise business around 18.500. Users of franchises in Serbia are mostly large companies, which in the future, will certainly altered, given that this business is suitable for SMEs. National policy, which would include franchising as a tool for SMEs' development and transfer of know how and technology, would also be benefit to the development of quality franchising.

### *LIMITATIONS FOR THE DEVELOPMENT OF FRANCHISING IN SERBIA*

As highlighted by many recipients and providers of franchise, there is a small number of high quality franchise concepts in Serbia, in relation to its potentials and interests, and number of foreign is much higher. Also, one of the differences from other countries is the absence of legal regulation of franchising. Lack of support to franchising businesses indicates that franchising is not properly understood by the society at large, most critically by the financial sector – banks, by the state, and of course by would-be franchisees. They all need to realise proper concepts, potentials, misgivings and realities of the contemporary franchising in the context of the networking economy. (Report on training and support structures for young SMEs in Slovenia, 2010, pp. 19).

The current state of the economy, high foreign trade deficit, despite the macro-economic and currency stability, indicates the necessity of rapid accepting and implementation of franchising in our economy, along with the application of other business relationships, such as leasing, factoring, barter and others. According to the national experts in franchising, to develop this way of doing business in our region, *is primarily needed to*, in addition to defining in the Law of Obligations, *the place of franchising be determined in the Trade Act, as well as in the Law on International Economic Relations*. There is not enough skilled personnel and *institutions, and the state, does not provide adequate support for development*. In addition, there are no banks that approve franchise loans, and SMEs mainly rely on their own finances. Thus, a major problem for the development of franchising is currently misunderstanding of financial institutions for this type of business. Financial institutions are still cautious about small business lending and are prepared to

tighten their underwriting standards at any signs of economic distress. A shortfall in lending has limited franchise growth since the start of the recession. In other words, financial institutions are not keeping up with the lending capital demanded by franchises. In 2013, franchise activity is projected to improve as a result of the continuous albeit slowly improving economy. However, capital access will remain a challenge. (Small Business Lending Matrix and Analysis The Impact of the Credit Crisis on the Franchise Sector, 2013, pp. 5-7).

In countries such as Serbia, which have only recently achieved market economy status, the situation regarding finance for start-ups is relatively more difficult. Moreover, the difficulties that face new enterprises in obtaining bank finance internationally, are also compounded in Serbia and other new market economies, due to a lack of bank experience in lending to small businesses and issues such as a developed infrastructure ranging, from sufficient ability to prepare credible business plans to confidence in security arrangements.

In Serbia, *there are no even special credit lines to finance franchising*. Lack of money is precisely the biggest problem to entrepreneurs and SMEs who want to start a business buying a franchise. Average price of investment to enter into franchise ranges from 5.000 to 50.000 euros. In other countries, where franchising was developed (eg, Italy), loans are approved for beginners and up to 100.000 euros, without additional guarantees and seeking mortgages. It is necessary a recommendation from franchisor, who must be a member of the National Association of franchising. Serbian banks even don't want to recognize franchising as a safer way of entering into entrepreneurship, as a fully validated and successful project. The banks in Serbia haven't yet developed a specialised knowledge related to franchising and therefore do not contribute to the improvement of local franchising practice. Naturally, there is also a problem of high interest rates, that are still high due to the existence of political risk. The banks are expected, besides providing favorable conditions for financing SMEs involved in franchising, to play a very important role in the future in educating potential recipients of franchise, through seminars, forums and conferences on franchising, which would present franchising opportunities. While in Serbia franchisees up to 70% of investment funds provide through loans, there is still a large number of SMEs and private entrepreneurs with sufficient funds to commence small size franchising operations, without having to borrow money. As a result, the current economic crisis may not have as big an impact on this segment, as one might expect. On the other hand, obtaining financing for more expensive concepts is also possible, but in light of the current global financial crisis could become more difficult.

To summarize all the above, on the basis of the insights of the national franchise association, the following observations that characterize Serbian franchising can be made:

- Domestic franchise systems lack franchise philosophy and are short-term oriented.
- Domestic franchise systems lack know-how to sustain the growth required within international competition to continue their operations.
- Though with limited resources, the only institutions promoting franchising nation-wide have been the Serbian Chamber of Commerce and the Serbian Franchising Association.
- No specific support has been extended to franchise systems from the development agencies and banks.
- No specific legislation has been adopted for the franchising business.

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*FRANCHISING AS A CHANCE FOR  
DEVELOPMENT OF SMES IN SERBIA*

For the economic life of a country, are not crucial only big companies, but the right combination of small, medium and large enterprises. Experiences of the developed economies show us that we must orient on SMEs. U.S. company General Motors cooperates with 2.500 SMEs (franchisees), metallurgical conglomerate Alpine Fest in Austria, with about 4.000 SMEs, while some chemical industry enterprises even with 6.000 SMEs. One of the significant results of Serbian transition economy, is an accelerated development of SMEs and entrepreneurship sector, which grew into an important economy segment. Franchising can play a very important role in improving business environment, raising the standard of living and reducing unemployment, especially in the moment when the country emerging from the crisis and when more new jobs are required. Although franchising isn't unknown form of business and practices in Serbia over the years, not all possibilities, this type of entrepreneurship provides, are exploited. In the past decade, the government didn't paid special attention to franchising, as a route to economic development in general, or as a route to SMEs' development. Potential of franchise business is still not fully understood, and entrepreneurs and SMEs often insist to have their own company, although they not have all the necessary resources, strengths and knowledge. Therefore, the vast majority of business ventures fail in the first three years of operation. On the other hand, entry into entrepreneurship through franchise offers the knowledge, experience, skills, and someone who is always ready to help with his advice. For this reason, franchising is often explained as entering in independent business, where SME isn't left to itself, but operates under the umbrella of success. Benefits of Serbia for developing this type of business are numerous signed free trade agreements with other countries, which contribute to faster and cheaper placement and movement of goods and services in different markets. The services sector is particularly suitable for developing franchising, especially in those areas where Serbia is lagging behind neighboring countries, such as catering, tourism and trade. Franchising can be a way to bring on the territory of Serbia large companies that could facilitate SMEs' business operations. By introducing of foreign franchise companies, it should be provided greater inflow of investment funds, acquired innovative technology and ensure the application of validated models of work, and thus accelerate privatization. It is estimated that currently is registered about one million unemployed workers and that there are huge unused production and business space, that, with certain financial investments, should be activated by using franchising. Especially because after privatization, a large number of workers lost his job, but with certain financial severance payment, that can be invested in the establishment of SMEs and become actively involved in the franchise business.

It is a fact that consumer and economic conditions in Serbia are developing quite favorably for the entry of international franchising. Business and government experts generally agree that the foreign franchising industry will be the pioneer of further economic growth and technical development. Serbian customers are intrigued by a variety of new products, but quality merchandise and quality services are still lacking in the market. Therefore, new marketing ideas, promoted through franchised systems, are welcome. Consumer and economic conditions, weak market saturation, and significant consumer demand for a variety of types of merchandise and services, make Serbia a

promising market for a wide range of franchised businesses. Also, day by day, there is increased interest of Serbian companies to expand through franchising and by developing quality franchise concepts for national and international spreading. Franchising facilitates performance of domestic companies in foreign markets, because fulfillment of valid franchise concept criteria, confirms the quality of their products and services.

Franchising in Serbia may be applicable in a number of activities, by acceptance of a large number of unemployed workers or by opening SMEs as franchising companies. It is important that Serbian SMEs have recognized the franchise as a highly effective and easy way to spread the existing work, which is conducive to raising industry awareness of the benefits and possibilities of developing a franchise business in Serbia. There is a strong potential market for franchises in services, food, and apparel sectors. The development of services was carried out in specific conditions and in various other indicators which did not follow current trends. In the transition process, service industries were provided with a more dynamic development in comparison with agriculture and industry. The place and role of the service sector in economic development of Serbia in this respect are strategically important issue. Serbians spend a disproportionate amount of their income on eating out. Typical Serbian restaurants are heavy on meat. Italian and French cuisines are also very popular, and few Asian or Mexican restaurants exist in Serbia. Currently, there are three U.S. fast food chains: McDonalds, with several restaurants throughout Serbia, Pizza Hut with one restaurant in Belgrade and Kentucky Fried Chicken with restaurants in Belgrade and Novi Sad. The number of foreigners living in Serbia is still increasing, which is another target market for franchisers (Doing Business in Serbia, 2010, pp. 45-46). The apparel sector is another good prospect for franchisers. Other than the establishment of retail outlets, production franchises would support the government strategy and revive the deeply troubled textile sector. Franchising concepts such as dry cleaning, fitness facilities, pet grooming, etc, that have lower buy-in costs than restaurants, probably have the strongest potential in Serbia. Experts also point out that for franchising currently the most suitable are: real estate chains, child care centers, cinemas, tailoring and hairdressing salons, sport services and learning foreign languages. Very interesting is also agriculture, the area village tourism, processing or preparing of agricultural products for industrial processing. Then there are pharmacies that can be supplied through franchise by the manufacturer or wholesaler.

Currently a large number of world companies is looking for partners to start a franchise business in Serbia, and also a number of domestic successful companies is trying to build its own franchise and offer it in market. In addition to already existing franchises, companies interested to expand their business in Serbia, and thus creating a great opportunity for SMEs' development are: franchise PRINT NONSTOP (production and distribution of cartridges), franchise Lifepreserve (protective clothing/uniforms), franchise Derma Art (laser treatments), franchise Xtravaganza (methodology for weight loss), franchise Smart Education (foreign language learning), franchise ci gusta! (frozen Italian food), franchise Swiss Break (restaurants with healthy fast food), franchise SoSushi (sushi food), franchise AXON Global Education Network (a global leader in foreign language learning), franchise RE/MAX (Real Estate), franchise BackWerk (German bakery concept), franchise Spinalis (therapeutic chairs), franchise Expense Reduction Analysts (cost control in companies), franchise K2 Chocolate Beauty Center (a leading Italian brand in the field of beauty and solarium), franchise CNA INTERNATIONAL (Headhunting), franchise Chocolate moment (chocolate products), Franchise Cafe Jubilee (concept of

bistros), franchise Odeja (Slovenian blankets), franchise GoPasta (Italian fast food concept with pastas and sauces), franchise Mrs. Sporty - Steffi Graf (training for health improvement for women), the franchise Juice Box (fresh fruit drinks), Golf USA franchise (stores for golf equipment), franchise Palmers (modern underwear), franchise Francesca (Italian food), franchise Nouvum (publishing house), franchise Shape Line (programs for shaping female body), franchise KIESER TRAINING (strength training for health or prevention), franchise Cup&Cino (selling coffee and machines for coffee, concept of cafés), franchise aDORé Chocolat (chocolate products), franchise GOLD To Go (machines for quick purchase of gold), Franchise WSI (internet and technology services). As can be seen, franchise concepts are from different activities, and investments range from 10.000 € up to few 100.000 €.



*Figure 3: Franchisees entering the Serbian market and looking for SMEs as their partners*

## **CONCLUSION**

According to the EFF, franchising is an excellent tool for SME and entrepreneurship development. Franchising represents a business growth model with broad area of implementation possibilities in developed economies worldwide. Key advantages of franchising as a business model lie in quick growth and expansion possibilities, risk minimization and lower investments, and its success derives from establishing and managing a healthy balance of mutual interests between the franchisor and the franchisee. In every line of business and in every state, franchising is a major source of jobs and a critical engine of economic growth. It is believed that today franchise market in Europe is worth about 200 billion dollars and that franchise companies employ more than 2.5 million people, while in the United States, 70% of the market economy is based on franchising. Beside that, an average franchise unit provides approximately 11 direct jobs and 10 indirect jobs and creates 1.1 million dollars of direct economic output and 1.7 million dollars in indirect economic output (Franchise Business Economic Outlook for 2013).

Informal analysis conducted by Franchising Center of Serbian Chamber of Commerce showed that in Serbia operates about 150 franchise concepts that employ more than 20.000 people. Unfortunately, Serbia is almost at the bottom when it comes to the number of franchise in Europe, so there is a great potential for development this form of business. Popularization of franchising concept in Serbia is one of the key aspects of rapid economic development of Serbian economy and its integration into the global and the European flows, as well as improving the competitive position of the domestic economy. Franchising has become a powerful tool for SMEs development, as it affects on creation of new jobs and reduction the overall unemployment rate. In fact, there are numerous advantages for domestic SMEs who choose franchising as a growth option: faster growth, the development of better managerial skills, and benefits that accrue from local knowledge, minimizing business and financial risks, lower risk of failure, standardization of product and quality, help in choosing locations and other logistical activities, benefits from the franchisor's research and marketing programs, etc. In Serbia, franchising as a business concept is mostly present in the services sector and there is almost no activity in which it can't be successfully applied (restaurants, real estate chains, child care centers, cinemas, tailoring and hairdressing salons, sports services and learning foreign languages, dry cleaning, five grooming, rural tourism, etc).

This paper tried to explore franchising as a desirable business model for SMEs in Serbia, its development potential and limitations, as well as to point out the many possibilities franchising application in Serbia, and to indicate franchisees who seek its future partners among local SMEs.

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## ***SMALL AND MEDIUM ENTERPRISES IN THE DEVELOPMENT OF BUJANOVAC MUNICIPALITY***

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**Abstract:** This paper is based upon the researches conducted while creating the development strategy for Bujanovac municipality. The analysis of the current economic potential of Bujanovac municipality, as underdeveloped municipality on the territory of Southern Serbia, is conducted with all its specificities. The results of the research are given along with the suggestions of measures and instruments for advancement and development of small and medium enterprises, as well as the promotion of clusters and business incubators in the function of solving issues, faster development and economic stabilization in the municipality.

**Key words:** Small and Medium Enterprises, Clusters, Business Incubators

**JEL classification:** L26

**UDC** 334.713(497.11)(082)

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## **INTRODUCTION**

Small and medium enterprises and entrepreneurship represent the framework of market oriented economy in Serbia and they have – besides the undisputed role in bigger productive employment – wider social part in renewal of the middle class, widening of the base for democratization of society and the reduction of social differences with the balanced division of social wealth. (Kastratović, 2004).

These enterprises are no longer – as they were usually considered to be – the so-called small economy, whose basic role is employment of the unemployed on the labour market and the excess of employed (from the enterprises that are being restructured) and amortization of social tension. Such position of small and medium enterprises comes from their specific characteristics and great advantages they have, in relation to great enterprises. From the economic point of view it is relevant to point out that they represent the generator of economic growth; they achieve great efficiency in business making; they are the largest source of new jobs and employment; they represent the “path of restructuring of work force“; they have highly motivated owners, managers and employees; energetically low intensity; the prices of jobs 2 – 2.5 times lower than in the large enterprises and systems; because of them the export possibilities can be strengthened and import dependence can be lowered. From the technological point of view, the following fact is important, small and medium enterprises successfully adapt to technological discontinuities, they conquer new products fast in the process of diversification and demassification of production and they introduce technological innovation.

The Municipality of Bujanovac has enviable natural resources, and it is well known by the springs of mineral water, tobacco and plastic mass processing. These data tell us that the future pillars of economic development of the municipality are the industry for bottling the mineral water and agriculture, and because of the natural environment the huge potential lies in tourism. The most frequent problems that are faced by the underdeveloped regions are those of procedures and planning. Underdeveloped regions have to simplify the procedures connected to the investment projects but also to attract the potential investors by using the detailed analyses and projects. The investors always take the easier path. They would rather invest in legislatively, procedurally defined areas as well as planned, where the time frame of realization of investment activities is minimal. These parameters should represent the guidelines to the underdeveloped regions in respect of maximum preparation and readiness for potential investments. Basic guideline to all underdeveloped regions should be the following statement: “*Investors do not come. They are attracted.* “

## **THEORETICAL CONSIDERATION**

According to the data of the London Business School, small and medium enterprises have become dominant models in the developed economies, and they absorb 60% of the world’s employment. (Đurić, 2004). The sector of small and medium enterprises and independent shops in Serbia is very heterogeneous in respect of the business subject and

the way of doing business, number of employees, the amount of employed capital, legality of the status, aspirations of the owners and other characteristics. The largest number of business units are micro units without the permanently employed, with the low level of capital and frequent changes in business subject, content and manner of doing business, especially in the sector of services. Small number of enterprises in industry, construction, wholesale and financial services managed to establish themselves at the market and to come into the phase of intensive development, with higher chances for success despite all the outside limitations. The sector of SMEs and independent shops is characterised by: low economic strength of the units (low employed means and low intensity/dynamics of employment); unsatisfactory technological level (lack of modern equipment and low level of information technologies and transferred knowledge); undesirable structure in respect of the type of activities (they are mostly service activities); undesirable structure in respect of greatness (very few medium enterprise); direction towards narrow local markets; lack of cooperative connections and other forms of cooperation with the large enterprises ( they are not included into the network so the synergy is not happening); limited usage of other developmental potentials of the environment, as well as the free productive and business capacities.

Regardless of the achieved results in business, growth and development of small and medium enterprises and independent shops, there have been chronic limitations which disabled the growth of this sector of economy into strategic force and a very important factor of restructuring of our economy. In our earlier legal system there was an absence of special regulations which would regulate the legal position of SMEs and the shops, besides the regulations in the Law on accounting and the Law on revision, which gave to the SMEs and the shops certain benefits in bookkeeping, preparation of the accounting statements and the obligation of undergoing the revision.

Among the main limitations, there was the lack of financing source and developmental support, as well as the various forms of discriminations of small in relation to large enterprises. SMEs and the shops did not have enough of their own means for development. During the restrictive monetary policy and loan policy, they could not find other sources of financing, and the commercial banks gave no investment loans under favourable conditions. Tax and banking systems did not stimulate investments in production and business - banks were not able or prone to giving loans to SMEs. Entrepreneurs, who were starting a business, as the owners of very small enterprises, almost had no access to external sources of financing. They were not being given the loans easily, or the conditions of the loans were much worse than those given to large enterprises. Besides the lack of the means for financing the start up or expanding of the private business, the potential and the active entrepreneurs were not motivated enough to invest in the business. Entrepreneurs need simpler approaches to financial sources on their way to creating new jobs. (Kastratović, 2004).

The instruments of the tax system had a negative influence on the position of private entrepreneurs and SMEs. The tax policy applied for the private entrepreneurs was very different from the proclaimed support to the SMEs. Because of the high load on various grounds, a growing number of entrepreneurs closed the shops, but many did it only formally – they closed their shops with the tax authorities, and continued working in the grey zone of economy. The consequence of this practice was the decrease of the number of shops and tax payers, as well as the reduction in budget and funds income from these

sources – the number of closed shops was growing faster than the number of the newly registered ones. Incentives for new employments, chosen by the Republic Institute for Labour Market (RILM), were not enough for the serious investments in specific developmental programs for SMEs. Faster development of SMEs was limited by the slow realization of the privatization and restructuring of enterprises in social and state assets. Low level of quality and the applicability of the ideas in business plans that applied for obtaining the means of support with the institutions for financial help to SMEs, including the Republic Institute for Labour Market, was visible.

Development of SMEs is not “immune” to the appearance of “grey” economy as a degenerative economic factor that is present in transitional frameworks. The growth of “grey” economy is characteristic for economies in transition. Negative consequences of grey economy are: decrease of tax and other incomes to the state, creating the wrong image about the real domestic product, unfair competition with the regular activities, especially in the sector of SMEs, weakening of the business ethics, introducing new rules in business (which are incompatible with the existing ones), and quasi market institutions, creating of parallel economies. The general measures that can decrease the share of grey economy in the total economy are: liberalization of foreign trade, strengthening of financial discipline; functioning of the labour market; stimulating tax policy; establishing the market of capital and its adequate functioning; faster processes of privatization; incentives directed towards the sector of SMEs and private shops.

## ***AIM OF THIS PAPER***

The aim of this paper is a research done as a part of the project of the analysis of potential of Bujanovac municipality, as well as the promotion of clusters and business incubators, as a solution for a faster development and economic stabilization. The research has comprised defining and suggesting of necessary measures and instruments which would contribute to advancement of economic, infrastructure and institutional development of Bujanovac municipality.

## ***METHODS***

In this research we used a research method along with the functional help of bibliographic method, with the goal of quality presentation of the considered problematic.

## ***RESULTS OF THE RESEARCH***

Based upon the analysis of potential and possibilities of Bujanovac municipality, we did a *Swot* analysis, which defines all strengths and opportunities on one hand as well as weaknesses and threats on the other, in a clear and detailed manner.

*SWOT ANALYSIS OF THE SECTOR OF SMES*

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Sector of SMEs and services for newly founded and the existing enterprises			
Qualified and cheap work force Partly developed tertiary activities Existence of certain services for support to SMEs Reorganization of existing services Geographical position Human potential Existence of initiative within all three sectors Educational institutions Ability to recognize problems Readiness and willingness to change Readiness for additional education Professionalism Open to cooperation	Underdeveloped entrepreneurial spirit Outdated technology Brain drain Poor educational structure (not according to the needs of economy) Expensive loans Bureaucratic procedures of founding an enterprise Lack of information Inefficient legislation Slow privatization Centralization Negligence in relation to young Professionals are leaving Lack of local support to SMEs Uncooperativeness Poor obtaining of the information Intransparency in business activities Culture of labour	Vicinity of Kosovo (potential market) Increase in number of transit tourists Accumulated private capital that is not invested Donor activities Diaspora Economic resources Cooperation with other municipalities Customs cooperation Interregional cooperation Decentralization of power Media support	Bureaucracy Unavailability of information Lack of managerial and technical knowledge Migrations Unemployment and poverty

The sector of micro, small and medium enterprises in all the developed countries is a generator of economic growth. Preconditions for the development of this sector in Bujanovac exist, especially from the point of view of defined strategy and its basic business mission and the wider social mission. (Masic, 2007).

Strategic problems of development of this sector are unsatisfactory education of potential entrepreneurs, overly expensive sources of financing and absence of the state strategy especially in the field of support to micro enterprises and self-employment. It is crucial to begin the process of education of the existing and the potential entrepreneurs about management, marketing, creating a business plan, connecting with other entrepreneurs, who can become partners and together act in the third markets. It is also important to provide quality information at the right moment, which today can have a decisive influence on business of the enterprises.

Main precondition for the start of activities in this sector is bringing the necessary legislations that will provide possibilities of cheaper financing of the enterprises and creation of the favourable climate for entrepreneurs and family businesses (Law on micro loans, Law on funds dealing with micro loans). It is necessary to establish a Guarantee Fund at the level of the municipality which would be financed by the budget of Republic of Serbia and by the Municipality's budget.

### *INSTITUTIONAL INFRASTRUCTURE AND THE ELEMENTS OF THE STRATEGY OF SMES' DEVELOPMENT*

One of the main priorities in managing the economy of Serbia represents the realization of economic recovery and development based on strong private sector. Considering the earlier limitations, better conditions for development of small and medium enterprises and entrepreneurship (SMEE) are created. Many institutions are established with the goal of supporting and helping their development. There have been some changes to the law and regulations with the aim of removing the legal and administrative obstacles in business making. Significant are also the activities connected to solving the problems of financing SMEs.

Having in mind the analysis of the current state and issues of development of small and medium enterprises and entrepreneurship in the Republic of Serbia, we can emphasise the following elements of the „Strategy of development of small and medium enterprises and entrepreneurship” adapted by the Government of Republic of Serbia: prioritized development of small and medium enterprises and entrepreneurship (SMEE) in economic sectors capable of significantly encourage economic development, increase the employment and foreign currency inflow; strengthening of the institutional support and considering the interests of SMEE; removing the legal obstacles for business making of small and medium enterprises and private entrepreneurs with the creation of the new legal environment which will facilitate the development of SMEE sector; conducting the reforms of public services because of the more efficient support and reduction of administrative and bureaucratic obstacles important for SMEE; suggesting the measures for facilitating the approach of the sector of SMEE to financial sources; encouraging the selling of the products and services of the sector of SMEE at the domestic market by better connections with the large entrepreneurs, creating the conditions for its larger share in public procurement and larger penetration of consumer goods from this sector; by increasing the sector of export of SMEE; raising competitiveness in the sector of SMEE; strengthening of

ties between the educational system and scientific and research system and the sector of SMEE; preparing the SMEE for a digital age by developing the telecommunication infrastructure, by supporting the application of information and communication technologies in business; supporting the development of software industry and electronic business; decrease in the scope of “grey” economy; improving the statistical system of monitoring the SMEE.

From the point of view of SMEE’s contribution to economic growth we can emphasise certain economic sectors with the highest economic potential: processing of agricultural products, industrial production (especially the development of SMEE in the area of engineering and cooperation), tourism and electronic business (e-business).

### *INCREASE OF THE EFFICIENCY OF SMALL AND MEDIUM ENTERPRISES (SME) FROM THE POINT OF VIEW OF COMPETITIVENESS*

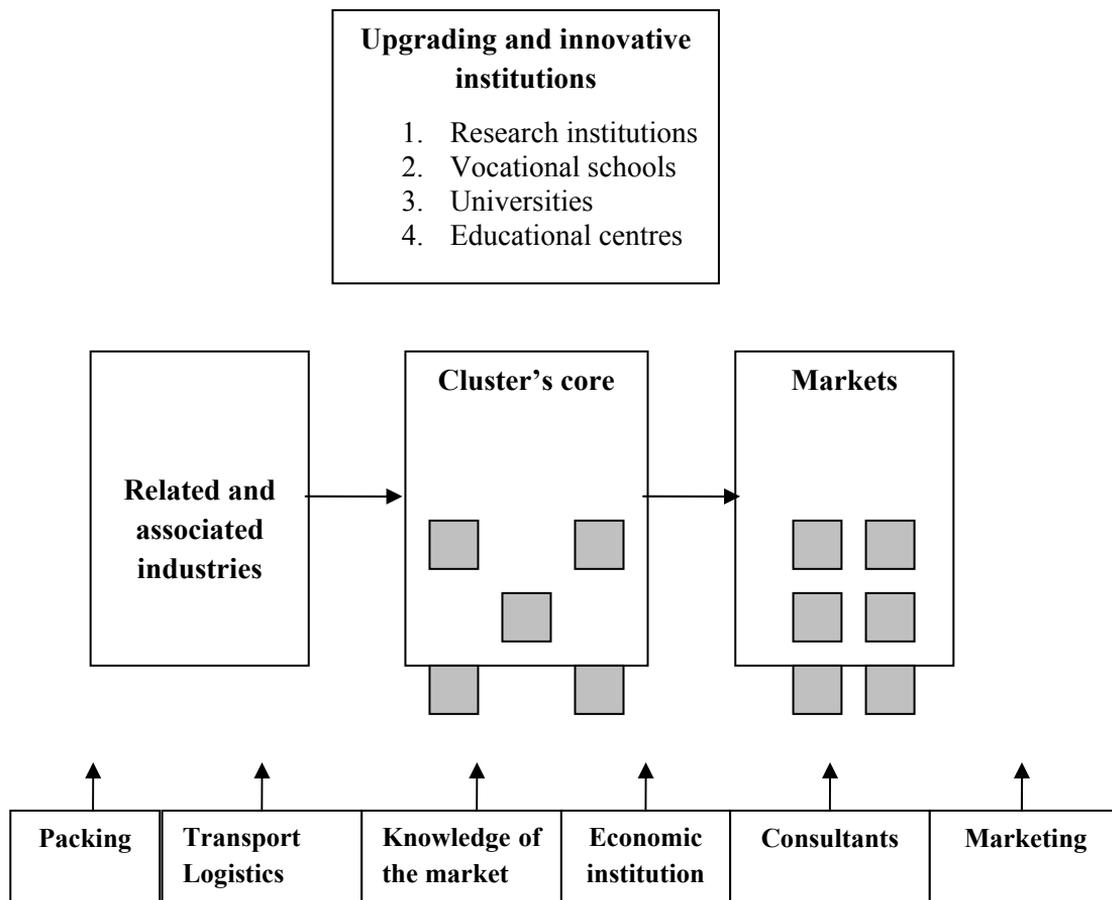
- Clusters (networking of SMEs) as a new chance for integrations and entering of the SMEs from Bujanovac and other economic entities to the European and world market
- Establishing the business incubators

CLUSTERS – (Networking of SMEs) represent the new chance for integrations and entering of the SMEs from Bujanovac and other economic entities to the European and world market. Regions which are starting to develop clusters are becoming more competitive at the national and global market, because of the coordination of the connected enterprises and companies within the cluster. Companies that were competing against each other before the clusters formation are now cooperating in order to offer innovative products and services, and in that way they build sustainable competitive advantage at the level of the entire region of the southern Serbia.

Clusters are a relatively new form of connecting SMEs (small and medium enterprises) and they are essential in order to connect SMEs from one area – region. *Clusters represent a special form of connecting and organizing an enterprise which will develop its competitiveness, productivity and innovation.* They enable connecting with other similar clusters in other European areas, as well as merging and acting together in business undertakings under the auspices of Europe. (Đurić, 2004:1).

Clusters are not just made of the enterprises; they are a geographical concentration of interconnected enterprises dealing in one area of business, but also from the vertically connected businesses, producers of complementary products, institutions that provide the trainings, information, research and other technical support. *Cluster connects the enterprises, financial institutions, Government, science and education and local government.*

State's interest in supporting this model of revival of domestic economy and development of SMEs is visible in the *pilot project for development of clusters defined by the Ministry of economy and Ministry of economic relations with foreign countries.* *Cluster of healthy food and cluster of waters* would be particularly interesting for the south of Serbia and Bujanovac.



*Scheme 1: The example of scheme of clusters of healthy food / healthy water*

Small and medium enterprises of Bujanovac can find their way out in industrial districts – clusters.

Here are some of the phases in implementation of clusters.

- We should have in mind that the SMEs we are talking about are unable to invest in business and information structure, or in qualified workers for marketing, development and informatics jobs. *This is why the goal of connecting is the creation of this common catalogue of finished products, services and materials in electronic and printed form, in Serbian, Albanian and English and the creation of the common website.*
- Then there is the analysis of domestic market with the proposition of organization of direct sale in order to avoid salesmen and establish a unique chain of supply of materials and services.
- The common bank should be chosen, because of business cooperation with the foreigners and the most important – start connecting the members.

- Then the faculties should be included, but only the people that are of high quality from the country and from abroad (they are hired when the need arises).
- Connecting of the engineers and other highly qualified workers from all the companies, and the site will inform them about the new characteristics in business.
- Informing has to be networked.
- Joining of knowledge and innovation in a common system.
- Localized studying and networking.

Small and medium enterprises and entrepreneurs with clusters have much higher chances to accumulate the technological abilities and innovation. With this they influence the more efficient development because of: collective efficiency of small industries within the cluster, encouraging the accumulation of the knowledge, building the regional and local development by creating the opportunities of collecting the capital and skills through common efficiency.

Small and medium enterprises and entrepreneurs can advance their efficiency through clusters by:

- Horizontal cooperation ( common satisfying of the need of a large buyer);
- Vertical cooperation and
- Intercompany cooperation.

It is considered that the clusters are one of the main reasons of economic success of certain regions in comparison to others. Clusters can be defined as “the critical mass at one location of connected industries or SMEs and institutions from the suppliers to the universities and government agencies that achieve competitiveness above average or the success in specific area of expertise. “

Clusters in Bujanovac can encourage competitiveness in three ways:

- *By an increase in productivity of companies operating in that area (companies can do business with less supplies because of the presence of local suppliers, quickly fix the technical breakdowns in production because of the presence of local services);*
- *By managing the creating and diffusion of innovation in industry, engineering, technique and the region;*
- *Stimulating the creation of new business within the cluster.*

Cluster in Bujanovac should be formed as a legal entity whose highest unit of authority will be the steering committee, which will solve the operational issues and prepare the suggestions of joint projects – business and put them forth to the Assembly, and all the members of the cluster will be the part of Assembly, which will meet every month.

*CREATING CLUSTERS IN BUJANOVAC*

<b>Name of the project</b>	<b>Founding of a cluster</b>
<b>Short description of the project</b>	A number of enterprises from the territory of Bujanovac and the surrounding areas, which are included in the cluster because of the joint appearance on the regional, national and global market and the promotion of their capacities.
<b>Basic assumptions and goals</b>	<ul style="list-style-type: none"> <li>• Promoting innovations and increase in competitiveness of SMEs on the territory of Bujanovac municipality, through opening the innovative business networks, which would enable cooperation, transfer of knowledge raising the competence of enterprises from Bujanovac.</li> <li>• The aim is to join enterprises and create joint catalogue of finished products, services and materials in electronic and printed form, in Serbian, Albanian and English language and the creation of the joint web site.</li> </ul>
<b>Institutions for implementation, owner of the project</b>	Entrepreneurs and other economic entities which exist on the territory of Bujanovac municipality, future municipality's agency for development and professional advisers and Faculties from the surrounding areas.
<b>Estimated time frame of the implementation</b>	<b>4years</b>
<b>Estimated financial arrangement for the investments</b>	
<b>Expected users (target groups)</b>	Market on the territory of Bujanovac municipality, southern Serbia, national and the market of the Western Balkans region.
<b>Expected benefits (expected gains or savings, new work places, type and level of improvement of the life quality etc.)</b>	<ul style="list-style-type: none"> <li>• Increase in the scope of cooperation between the member enterprises and most importantly,</li> <li>• Work on the joint promotion of all cluster member enterprises will identify the clusters as serious market factors.</li> <li>• The growth of productivity – access to specialized data, institutions</li> <li>• Greater flexibility in reacting to the market demand changes</li> <li>• For SMEs – combination of advantages of specialization, flexibility, the small scope with the capacities of large enterprises</li> <li>• Joint trainings, marketing and promotion</li> <li>• Forming of the support centre for the municipality's producers in marketing activities, development of products and professional education.</li> <li>• Establishing the cooperation between producers in Bujanovac municipality and the region.</li> <li>• Introducing new methods in product development.</li> <li>• Forming of brands for the producers from Bujanovac municipality and the region.</li> </ul>

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*BUSINESS INCUBATORS – PRECONDITION FOR THE DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES IN BUJANOVAC*

Business incubators are the instruments of the local economic development for the support to the newly founded enterprises in the first years of their growth and development, when they are most vulnerable. Business incubators *are defined as, business, service centres of support to small enterprises that are being established, giving them what they need the most in the early phase of development, in order for them to get over children's diseases of entrepreneurship, easily and with as little expense as possible.* Business incubators are the long-term local economic development and in order to establish them the partnership of a wider social community with the private sector is essential (public private partnership). The basic function of the business incubators *is to help the entrepreneurs to found a new enterprise, with new jobs, which will, at the same time, contribute to the local economic development.* (Đurić, 2004).

Business incubators provide the entrepreneurs with registered space at lower costs than the market costs and joint services in a building or a complex of buildings (secretarial services, telephone exchange, internet, the option of bookkeeping, financial consulting, marketing, legal services) they decrease the expenses and liberate them of worrying about everything connected to their basic work, in the period when they are most vulnerable. The period of incubation, from the establishing the business, should last for three to five years. This is also the time when business incubator should become economically sustainable; repay the initial investments, to make some profit, which will be invested in further developing of business in order to prevent the small eating the big, that the big does not go bankrupt by helping the small enterprises.

From the legal point of view, business incubator is joint-stock company. The initial means should be provided by the state and it would be the main stakeholder. This business incubator should be the product of public-private partnership. Other stakeholders would be agencies for economic development, for development of entrepreneurship, international organizations. This kind of incubator would definitely contribute to the revival of entrepreneurship and would lead to increase in self-employment which is the only formula for economic recovery of this economically underdeveloped town.

*BUSINESS INCUBATOR IN BUJANOVAC*

Name of the project	Establishing the business incubator
<b>Short description of the project</b>	Forming of business incubator and the beginning of public-private partnership as the foundation for the development of entrepreneurship and small enterprises
<b>Basic assumptions and goals</b>	<ul style="list-style-type: none"> <li>• Encouraging the development of small and medium enterprises through the development of business incubators</li> <li>• Development of competitiveness of municipality's start-up companies, small and medium enterprises</li> <li>• Increasing the inflow of foreign direct investments</li> <li>• Enabling the technological know-how transfer</li> <li>• Strengthening of the connections between industry and science</li> <li>• Encouraging the strengthening of entrepreneurial spirit in Bujanovac</li> <li>• Creating the local capacities of support oriented towards practical business and innovative business models</li> </ul>
<b>Institutions for implementation, owner of the project</b>	The state, private entrepreneurs, potential entrepreneurs, international organizations, local agencies for development of entrepreneurship
<b>Estimated time frame of the implementation</b>	<b>2 years</b>
<b>Estimated financial arrangement for the investments</b>	
<b>Expected users (target groups)</b>	<ul style="list-style-type: none"> <li>• <b>Direct users:</b>( start-up enterprises and small and medium enterprises; entrepreneurs and the ones who have the intention of becoming, university professors, assistants, students, researchers, unemployed);</li> <li>• <b>Indirect users:</b> (Municipality, Region, surrounding faculties including private ones, chambers of commerce, banks, other agencies and funds);</li> </ul>
<b>Expected benefits (expected gains or savings, new work places, type and level of improvement of the life quality etc.)</b>	<ul style="list-style-type: none"> <li>• Innovation of the industry</li> <li>• Creating new jobs</li> <li>• Investment incomes</li> <li>• Strengthening and the growth of the sector of small and medium enterprises</li> <li>• Development of human resources</li> <li>• Technology transfer</li> </ul>

## ***CONCLUSION***

Priority of the underdeveloped municipalities is the development of small and medium enterprises, as the incentive of economic activities and processes. Using the local area resources represents the condition of low budget planning of development with the support of the state as the encouraging factor. In order for the priorities to realize, significant progress is necessary in institutions and infrastructure, but also in the state's approach as the encouraging factor of development.

Procedural facilitations and developed infrastructure would attract new investments. Business incubators, as business and service centres of support to small enterprises that are being established, would provide a significant advisory and instructional support in the initial development phase. Bujanovac municipality has to use the advantages of clusters in the sense of direct connecting of companies, financial institutions, Government, science and education and local self-government.

In the countries of market economy and in some countries in transition, 90% of economic entities are represented by small and medium enterprises and independent shops. Universities and other scientific and educational institutions and associations are the main initiators of so-called developmental coalitions, which contribute most to the directing of development and the progress of doing business in small and medium enterprises on the local, regional and national level. It is also desirable for our country to project the whole concept of education in entrepreneurship, according to the society of market economy, which will be compatible with the practice and modern tendencies in Europe and the world. It is of significant importance to increase the level of creativity, abilities for problem solving and acquiring the practical skills and abilities. Priority should be given to the programs and forms of trainings for qualifying the young to start their own private business. Encouraging the export of SMEs means educating the owners, managers and employees in small and medium enterprises for a successful appearance at the foreign markets. The following will contribute to the increase in competitiveness and export performances of SMEs: obtaining the relevant information; research of foreign markets, especially the foreign competition; appropriate promotional activities; specially organized appearance on the international fairs and on-line connecting with the foreign buyers and partners over the Internet.

Recognising the significance of clusters is the precondition for enabling the connection of the enterprise from one area of activities, but also from the vertically connected activities, producers of complementary products, institutions that provide the trainings. This correspondence influences the competitiveness of SMEs at the local, regional and in some cases, global market. That would enable the increase in life standard of the population, to increase the number of employees and to establish the stronger connection to the neighbouring municipalities in the region.

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# ***THE IMPACT OF GLOBALIZATION ON GLOBAL BUSINESS DEVELOPMENT***

***Sasho Kozuharov***<sup>50</sup>  
***Natasha Ristovska***<sup>51</sup>

**Abstract:** The aim of this paper is to provide an understanding of the impact of the process of globalization on the world economy and on the business activities of global enterprises.

The global challenges research focuses on the drivers and dimensions of the trend of globalization. In addition, there is explanation of the social effects of market globalization and the effect of market globalization on the enterprise level. Analysis of the different types of risk for global business development is included. Furthermore, it elaborates the differences between the global and national business activities.

The paper examines the causes and motives for the global expansion of the business activities. The need of global enterprises to create and maintain competitive advantage in the global market is presented.

Finally, this paper highlights the key functional aspects and increasing importance of the application of the concept of global business development and entering new markets for successful realization of companies' strategic goals.

**Key words:** Globalization, Global Market, Global Enterprises, Global Business

**JEL classification:** F60, F23

**UDC** 339.9(082)

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## ***INTRODUCTION***

The global economy is significantly modifying. The world in which national economies were relatively self-organized entities, isolated from each other by trade and investment barriers, by distance, different time zones, languages and differences in government regulation, national culture and business systems is rapidly changing. Today, trade and investment barriers disappear, perceived distance is reduced due to advances in transportation and communication technology, material culture is becoming similar around the world and national economies are merging into interdependent global economic system. This process is known as globalization.

Globalization can be defined as a process of social, political, economic, cultural and technological integration among countries around the world. Globalization is different from internationalization. Internationalization is a process in which business crosses national and cultural borders, while globalization is a vision to create a unique world market entity or market without borders. Evidence of globalization can be seen in the increased levels of trade, capital flows and migration. Globalization is facilitated by the technological developments in transnational communications, transportation and travel. Thomas Friedman, in his book "The world is flat" identifies ten factors that accelerated the trend of globalization, including the fall of the Berlin Wall, starting business beyond national borders and execution of the enterprises activities through contracts with specialized external collaborators (Friedman, 2005, p. 48), whose combination dramatically intensifies the effect of increased global connectivity. Thus, in recent years, globalization has accelerated its growth, creating opportunities and challenges for global business and management.

Globalization is often portrayed as a new phenomenon that is associated with the post war period after the Second World War. However, globalization is not a novelty in the modern world. Its roots are still in ancient times. Globalization has accelerated its growth as a result of the volume of global trade which has dramatically increased over the last decade. During various periods, almost every civilization had contributed to the expansion of trade. Today, every nation and an increasing number of companies buy and sell goods on international markets. The large number of inventions and global development and progress encourage and maintain this activity.

## ***GLOBAL TRENDS AND THEIR IMPLICATIONS FOR BUSINESS***

There are two mega trends (Friedman, 1999, p. 8) that affect the business environment, the globalization of markets and technological progress. The globalization of markets refers to the gradual integration and increasing interdependence of national economies. Globalization allows companies to see the world as an integrated market. Market globalization is used to mark the emergence of global markets for standardized products and services, and the development of global companies that serve those markets. However, this term has a broader meaning, and also applies to interconnection of national economies and the growing interdependence

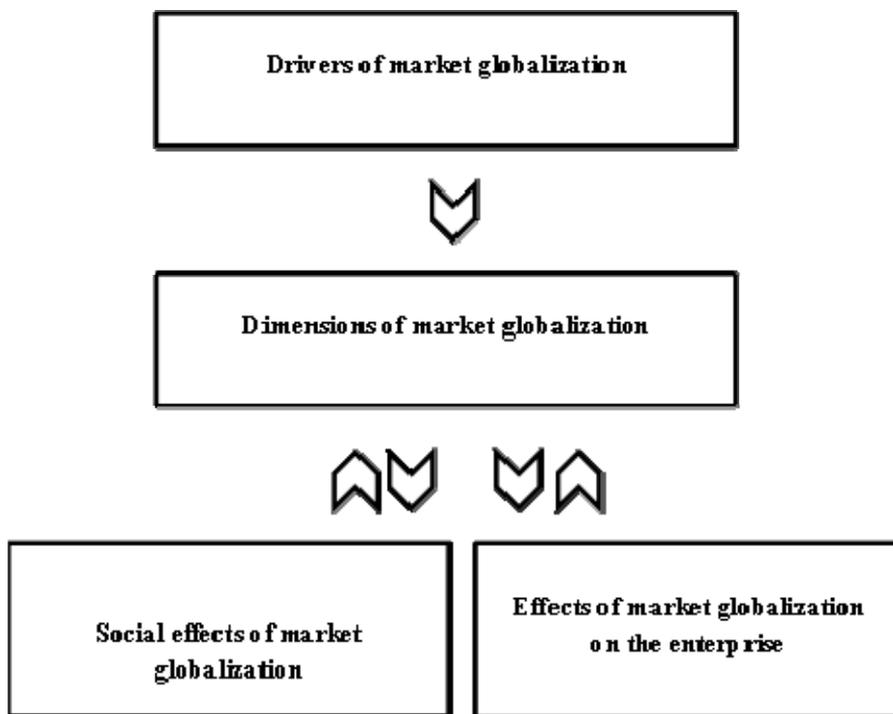
of buyers, manufacturers, suppliers and governments in different countries. Market globalization is manifested in the production and marketing of branded products and services worldwide. Reducing trade barriers and facilitating international business transactions as a result of the Internet and other technologies contribute to the gradual integration of national economies in a unified market. Current technological development is the world's second trend affecting the transformation of modern business. The development of information, production and transportation technologies, and the emergence of the Internet, facilitate and enable the rapid globalization of many companies. Modern technology promotes higher levels of international business activity than previously. For example, many software companies, gambling and entertainment companies effectuate only an online presence. Advances in transportation and communication technologies have helped many suppliers for express delivery services like DHL, UPS and FedEx to serve customers worldwide.

These two trends will enable enterprises to quickly engage in marketing activities and supply on a global scale. Companies are increasing their offerings worldwide. Many companies are supplying raw materials, components and service inputs from suppliers around the world. The increase in trade and foreign direct investment, together with the spread of technology, provide consumers much greater choice of products and services. The employment in internationally active companies enables higher living standards for people in the world. At the same time, preferences for certain products converge across the markets, as universal popularity of certain music, entertainment, electronics and food. Globalization creates opportunities for companies to increase their revenues with sales worldwide and reduce costs by locating production in countries where key inputs are cheaper. It allows businesses, large and small, from developed and developing countries, to expand globally. A company does not have to be as large as multinational giants to participate and benefit from the globalization of markets. Globalization helps spread values of liberalized economies, free trade and the respect of intellectual property rights between the international audiences.

## ***ORGANIZATIONAL FRAMEWORK OF MARKET GLOBALIZATION***

In Figure 1, the organizational framework of market globalization is presented. It determines (Cavusgil, Knight, and Riesenberger, 2008, p. 40): 1. Drivers or causes of globalization; 2. Numerous dimensions or manifestations of globalization; 3. Social effects or consequences of globalization and 4. The effects of globalization on the enterprise and the factors that drive the company to proactively globalize its operations.

The two-way arrows in Figure 1, show the interactive nature of the relationship between market globalization and its consequences. For example, in terms of increasing market globalization, enterprises are encouraged to respond to the challenge and take advantage of new opportunities. However, enterprises do not implement strategies for business expansion solely as a result of market globalization.



*Figure 1: Framework of market globalization*

*Source: (Cavusgil, Knight, and Riesenberger, 2008, p. 40)*

Companies start with globalization of their activities as a result of a number of internal factors (the need for growth, new customers, or to minimize dependence on the domestic market through geographic diversification). But often some unfavorable conditions in the domestic country, such as legislation or declining sales are forcing companies to begin global expansion.

Due to the intensity of global competition, many enterprises proactively follow globalization as a strategic step. Therefore, they take a more aggressive step towards identifying opportunities in foreign markets, partnering with foreign companies and improving their organizational capabilities to enhance the competitive advantage. Companies with such a proactive behavior tend to be more successful in the global competition than those companies whose involvement in global business is only a reactive behavior.

### *DRIVERS OF GLOBALIZATION*

From the economic aspect there are few factors that encourage the globalization or incentives of the process of globalization (Cavusgil, Knight and Riesenberger, 2008, p. 37):

**1.Reducing trade and investment barriers globally.** The tendency of governments to reduce trade and investment barriers accelerates the global economic integration. For example, tariffs on imported cars, industrial machines and many other

products are reduced almost to zero in many countries, encouraging free international trade of goods and services. Reducing trade barriers is strongly supported and endorsed by the World Trade Organization. The reduction of trade barriers is also closely associated with the creation of regional economic integration as a key dimension of globalization.

**2. Liberalization of markets and the creation of free markets.** The national policies in the early nineties stimulate free global trade and investment. China, India and Eastern Europe have become one of the most cost-effective locations for the production of goods and services worldwide. The privatization of industries that were previously owned by the state in these countries promotes economic efficiency and attracts huge inflow of foreign capital in the national economies.

**3. Industrialization, economic development and modernization.** Industrialization influenced new emerging markets in Asia, Latin America and Eastern Europe, to move from poorly developed producers dependent on cheap labor in sophisticated and competitive manufacturers and exporters of high quality products such as electronics, computers and airplanes. For example, Brazil has become a leading manufacturer of private jets, Czech Republic leads in the production of cars, while India is a leading supplier of computer software. Economic growth raises living standards and the level of wages in the fast-growing emerging economies. The most important indicator of economic growth is gross national income per capita. According to statistics of the World Bank in 2009, Norway, Denmark, Sweden, Finland, Switzerland, Austria, Holland, Belgium, France, Germany, UK, USA, Canada, Australia are the countries with the highest income, by contrast, the countries in Africa, India and some countries in Asia have the lowest incomes. However, those are areas that are characterized by low levels of market globalization. Adoption of modern technology, the improvement of living standards and the adoption of modern banking and legal practices increase the attractiveness of emerging markets as an investment target, and facilitate the flow of ideas, goods and services worldwide.

**4. Integration of global financial markets.** The integration of global financial markets allows companies that are globally active to increase their capital, to borrow and perform transactions in foreign currencies. Companies that provide financial services to their clients monitor the foreign markets. Cross-border transactions can easily be realized partly due to ease with which funds can be transferred between buyers and sellers through a network of international commercial banks. The globalization of the financial sector enables companies to develop and exercise their production and marketing activities worldwide. Also, many companies can easily pay their obligations to suppliers and to collect their receivables from customers worldwide.

**5. Progress in technology.** Technological innovations in several key areas such as communications (telecommunications, satellites, fiber optics, wireless technology and the Internet), information technology (software for global product development, software for automatic control in factories, intranet, extranet, decision making support with quick approach to key information, online purchases and sales), production (computer product design, robotics, control and management of production lines with microprocessor to reduce cost of production) and transport (reducing the time and cost of transportation using containers, jet planes) are important factors that facilitate global trade and investment, and perhaps the most important driver of globalization since

1980. These systems help create a mutually connected global network of customers, suppliers and intermediaries. They allow costs of businesses globalization to be simply available to all kinds of enterprises, hereby large numbers of small and medium enterprises globalize their activities in the last two decades. Technological innovations (Cavusgil, Knight, and Riesenberger, 2008, p. 40) have greatly facilitated the management of global operations. Businesses effectively connect with foreign partners and participants in the value chain. They quickly and easily transmit vital data and information necessary for their successful operation. Companies use information technology to enhance their productivity, for example in case of need by adjusting their products to foreign markets, thereby increasing their competitive advantage. Companies innovate in many ways through the activities of departments for research and development, with the design of new products, new production processes, new approach to marketing or a new way of organizing and training.

### *DIMENSIONS OF GLOBALIZATION*

In terms of the global business, market globalization can also be considered as: (1) result to economic, technological and political trends (2) driver of economic, political and social phenomena, and (3) driver and consequence of globalization of enterprises. The globalization of markets is multifaceted phenomenon with five major dimensions or manifestations. They are (Cavusgil, Knight, and Riesenberger, 2008, p. 35):

**1. *Integration and interdependence of national economies.*** Companies that are active internationally, organize their activities across countries through trade, investment, geographic dispersion of resources, and integration and coordination of activities in the value chain (sequence of activities adding value and realized by the company in the process of developing, producing, marketing and aftersales services for a particular product). The total of these companies enable increase of economic integration. Governments contribute to the integration in different ways. First, they significantly reduce barriers to international trade and investment. Second, they increase their harmonization of monetary and fiscal policies within economic integrations and trade blocks. Third, they create and oversee supranational institutions such as the World Bank, the International Monetary Fund and the World Trade Organization, who are struggling to further reduce trade and investment barriers.

**2. *Growth of regional economic integration.*** Closely related to the previous trend is the emergence of regional economic integration in the 1950s (such as NAFTA, APEC and Mercosur). These regional economic integrations incorporate groups of countries by reducing trade and investment barriers. In advanced integration as a common market, barriers to cross-border flow of factors of production are eliminated. European Union allows free trade between member states harmonizes fiscal and monetary policies and introduces common business rules.

**3. *Growth of global investment and financial flows.*** In the process of conducting international transactions, enterprises and government buy and sell large amounts of national currencies (euros, dollars and yen). Free movement of capital around the world or the globalization of capital, expands the economic activities globally and increases the interdependence of the world economies. Commercial and investment banking are a global industry. Developed networks of information and communication facilitate large volume of daily financial transactions, integrating the national markets.

However, the widespread integration can have negative effects, as in the case of the monetary crisis in 1997 in Thailand and Malaysia, which due to a strong association of countries quickly spread to South Korea, Indonesia and the Philippines, creating a prolonged recession in most of the East - Asian economies.

**4. Convergence of lifestyles and consumer preferences.** Throughout the world consumers are similar in the way they spend their time and money. Lifestyle and preferences change. Consumers in Tokyo, New York and Paris search for similar household products, clothing, cars and electronics. Teenagers all over the world are interested in products such as iPod, cell phones and jeans. Big brands have created their own followers worldwide. This trend is driven as a result of increased travel, movies, global media, and the internet, greater availability of various products, services and different lifestyles. The change of preferences also happens in the industrial markets, where professional buyers are supplied with raw materials and components, which are significantly standardized in terms of structure and design. The change of consumer preferences facilitates the marketing of standardized products and services worldwide, but leads to the loss of the traditional way of life and specific national and cultural values in different countries (Lasserre, 2003, p. 35).

**5. Globalization of production.** Intense global competition forces companies to cut production and marketing costs. Companies strive to reduce prices through economies of scale and standardization of the products they sell. They dislocate their production facilities and purchases in foreign locations to take advantage of national differences in the cost and quality of entries. Companies in the automotive and textile industry are relocating production to locations with lower labor costs such as China, Mexico and Eastern Europe. Globalization also occurs in the service sector, retail, banking, insurance and data processing.

### *SOCIAL EFFECTS OF MARKET GLOBALIZATION*

Despite the positive effects as reducing trade and investment barriers, increasing life standard, market globalization can cause and harmful social consequences. They are (Cavusgil, Knight, and Riesenberger, 2008, p. 44):

**1. Loss of national sovereignty.** Critics believe that globalization interfere with national sovereignty, the ability of the state to manage its own affairs without outside intervention. Globalization threatens the national sovereignty of a country in many ways. The activities of global companies can interfere with the independence of governments to control their economies, social structures and political systems. Some companies are larger than the economies of some countries. At the same time, even the largest companies are under pressure of market forces. In countries with high competition, a company cannot force consumers to buy its products or to force suppliers to supply them with raw materials and inputs. Resources controlled by consumers and suppliers are the result of free choice on the market. Businesses performance depends on companies' abilities and skills to win over customers collaborate with suppliers and fight the competition. In reality, market forces are affecting the enterprises. The gradual integration of the global economy and increased global competition, coupled with the privatization of industries in many countries, make some companies to be less powerful within their national markets (Wolf, 2004, pp. 80-89). Today, globalization has stimulated governments to implement sound

economic policies, and managers to manage their businesses more effectively. To minimize damage caused by globalization and to maximize the use of it, governments should strive to open and liberalized regimes: free entry and competition in the markets, consumer protection and respect of intellectual property rights, proper application of the law, the exchange based on market forces, and not on the political processes.

**2. Relocation of business activities and jobs.** The process of globalization creates many new jobs and opportunities throughout the world, but also leaves many people without work. For example, Ford, GM and Volkswagen, transferred thousands of jobs from their factories in Germany, at factories throughout Eastern Europe. This happened partly because of the reduction of working hours (35 hours per week) that made Germany less competitive, while Eastern Europe, is offering cheap labor. Recognizing this situation, the German government amends the laws relating to labor relations in order to adapt to global reality. These changes disrupted the way of life of tens of thousands of Germans. Globalization is linked to offshoring, or relocation of production and other value chain activities in cost-effective locations overseas where they can be performed cheaper by business units or independent suppliers. For example, in the global enterprise for accounting services Ernst & Young, most of the work activities are performed by accountants in the Philippines. Relocation of business activities resulted in job loss in developed economies. The first wave of relocation of activities began in the 1960s and 1970s, when American and European automobile manufacturers, shoes, electronics, textiles and toys manufacturers began with production in locations with cheap labor such as Mexico and Southeast Asia. The next wave began during the 1990s, with the relocation of jobs from the service sector, such as accounting, healthcare and banking services.

**3. The effects of poverty.** Globalization tends to reduce poverty, but also can extend the gap between rich and poor. Multinational companies (Radin and Calkins, 2006, pp. 261-69) are often criticized for providing low wages, exploitation of workers and children employment. The exploitation of children is a particular problem because it denies educational opportunities for them. The International Labour Organization estimates that there are about 250 million children working worldwide and many of them full-time. Nike was criticized for paying extremely low wages of workers in Asia and giving under average working conditions. Abuse of labor and work in unsuitable conditions are the biggest problems of the developing countries. Governments in many developing countries tend to improve working conditions over time. Critics insist on wage increases in less developed countries, but if the laws are increasing the level of the minimum wage that will reduce the number of vacancies, and the countries that attract investment due to low labor costs, an increase in wages, will reduce the attractiveness for foreign investment. Governments are responsible for ensuring the equitable sharing of the economic progress benefits, so that all citizens would have prosperity, improved living standards, improved social status and higher pay. Developing countries need to undertake more measures to reduce poverty, to improve the conditions for new investments, to liberalize markets, to promote trade and investment, to build stable state institutions, to invest in education and to provide opportunities for advancement.

**4. Effects on the environment.** Globalization can harm the environment by promoting increased production and increased economic activity resulting in pollution,

destruction of the environment and destruction of the ozone layer. Unfettered industrialization could adversely affect the national environments. Economic development, investment, stimulated development of numerous industries, are resulting in the construction of factories, infrastructure and modern houses and changing the previous pristine form of nature and environment. It is generally true that globalization and industrialization cause significant damage to the environment, but it tends to decrease over time. Evidence suggests that the destruction of the environment decreases with economic development, especially on long term. As globalization has stimulated the growth of life standards, people focus more on improving the environment. Over time, governments are promoting laws to improve environmental conditions. The evolution of companies' values is increasing the care and concern about corporate reputation, leading to reduction or elimination of business practices that pollute the environment. Many global companies take measures to protect the environment, often at the expense of their profits in order to increase social responsibility (Smith, 1992, p. 74).

**5. Effects of national culture.** Globalization is also associated with the loss of cultural values unique to each nation. Globalization makes strong pressure on national cultures. Market liberalization allows entry of many foreign companies, global brands, unknown products and new values. Consumers wear the same clothes, drive the same cars and listen to the same music. Information and communication technologies promote homogenization of world cultures. People around the world use the Internet, watch movies, television and receive information about the lifestyle in America and other developed countries. Global media have a pervasive effect on local cultures that are gradually moving towards universal norms.

However, the effect of cultural influences is in both directions (Cavusgil, Knight, and Riesenberger, 2008, p. 51). For example, a Japanese food company replaced junk food with selling sushi and other Japanese food in supermarkets across America. Also, Chinese restaurants and Chinese tradition is a kind of way of life in other parts of the world outside China.

Cultural anthropologists note that cultural values are changing at a slow pace. Although people in different countries are similar, they retain traditional attitudes, values and beliefs that are associated with the history and culture of their country. Although some tangible values become universal, the behavior and mindset remain stable over time. Religious and linguistic differences are very strong beyond national borders. As globalization standardize superficial aspects of life across national cultures, people perform resistance of this trend by insisting on the national identity and taking steps to protect themselves. This is especially true for Belgium, Canada and France, where the governments adopted laws to protect the national language and culture.

### *EFFECTS OF MARKET GLOBALIZATION ON THE ENTERPRISE*

The market globalization opened countless new business opportunities for global enterprises. At the same time, globalization implies that companies must adapt to new risks and intense rivalry by foreign competitors. Globalization results in more demanding consumers requiring the best offers from sellers worldwide. Purely domestic focus is no longer viable for companies in multiple industries. International

companies have to spread their activities in order to capitalize on new opportunities and reduce the risk of potential hazards. Managers must accept increasingly global orientation, rather than to focus locally. The global expansion of businesses can take the form of global supply, export or investment in key markets abroad. More proactive companies require simultaneous presence in all major trading regions, especially in Asia, Europe and North America. They concentrate their activities in those countries where they can achieve and maintain competitive advantage.

The most direct implication of globalization is on the companies' value chain. Market globalization is forcing companies to organize their supply, production, marketing and other value added activities globally. In the typical value chain, the company conducts research and development, purchases inputs and assembles or manufactures a product or service. Then, the enterprise is undertaking marketing activities as determination of prices, promotion and sales, followed by the distribution of the product and after sale services. The value chain varies in its complexity across industries and production categories. The concept of value chain is useful in global business because it helps to clarify the location of execution for each value chain activity.

## ***GLOBAL ENTERPRISES***

Global enterprises (Cavusgil, Knight, and Riesenberger, 2008, p. 13) are historically most important types of focal companies. The global company is a large enterprise with significant resources, which performs various business activities through a network of business units and affiliates located in several countries. One of the hallmarks of global companies is that they tend to perform research and development, supply, production and marketing activities anywhere in the world where there is greater economic benefit. Besides the headquarter in the home country, usually global companies have worldwide network of business units or subsidiaries. They work with a number of independent suppliers and business partners abroad.

### *GLOBAL BUSINESS VS. NATIONAL BUSINESS*

The globalization increasing its speed, frequency and scale enables businesses from various industries to achieve access to consumers in the global market. Managers develop strategies for globalization to transform their organizations into globally competitive enterprises. With the increasing involvement of enterprises in cross-border trade and investment, managers should be aware that the task of managing global business differs from managing a domestic business.

Overall, the differences stem from the simple fact that countries are different in terms of their cultures, their political, economic and legal systems, and the level of economic development. Despite the trend of creating a global village and the trend of market and production globalization, many of the differences are profound and lasting.

In general, the management of international business is different from managing a purely domestic business for several reasons (Hill, 2008, p.16): (1) countries are different, (2) the problems that global manager is facing are numerous and complex than those faced by the manager in a domestic business and (3) global enterprises must

find ways to work within the limits imposed by government intervention in the system of global trade and investment, and (4) international transactions involve converting money in different currencies.

**1. Differences between countries influence global business practices to vary from country to country.**

Placing the product on the market in Brazil requires a different approach compared to the German market; managing the American workers requires different skills from those needed to manage with Japanese workers; maintaining close relations with the government is perhaps the most important in Mexico, but irrelevant in Great Britain; business strategy pursued in Canada may not work in South Korea, etc. Global managers must not only be sensitive to these differences, they must also adopt appropriate policies and strategies to cope with them.

**2. Another characteristic that differ global business from domestic business incorporates the increasing complexity in managing the global business.**

Despite the problems that arise from differences between countries, global business manager faces many other problems that the manager of the home business has never faced. Global managers must decide where in the world will set production activities to minimize costs and maximize value. Then, they must determine the best way to coordinate and control their globally distributed manufacturing operations. They have to decide on which foreign markets to enter and which to avoid. Also, they should choose and define the most appropriate the strategy to enter in particular foreign country, through exporting their products abroad, through licensing, through a joint venture with a local company, or Greenfield investment. The choice of model for foreign market entry is critical, because it has significant implications for long-term position of the company.

**3. Performing business transactions across national borders requires understanding the rules of global trade and investment.**

Global enterprises and their managers also have to deal with government restrictions in global trade and investment. They must find ways to work within the limits imposed by specific government interventions. Although many states, mainly stand for free trade, they often interfere with the regulation of cross-border trade and investment. Global managers must develop strategies and policies to deal with such interventions.

**4. Cross-border transactions involve changing money in foreign currency and vice versa.**

Because exchange rates vary in response to changing economic conditions, global business must develop policies to deal with fluctuations in exchange rates. Companies that adopt the wrong policies can lose large sums of money, while undertaking the right policies can increase the profitability of their international transactions.

Companies that are involved only in domestic business are working in business environment characterized by unique economic conditions, political and legal system and national culture. Companies that are involved in global business deal with unfamiliar surroundings in the global environment and meet with many factors that cannot be controlled. These factors impose new types of risk to global companies.

## *RISKS FOR GLOBALIZATION OF BUSINESS ACTIVITIES*

Companies that globalize their activities meet the four main types of risk: cross-cultural risk, host country risk, financial risk and commercial risk. Enterprises need to cope well with these risks to avoid financial losses and failure.

**Cross-cultural risk** refers to the situation where the wrong communication due to cultural differences is questioning some human values. Cross-cultural risk appears due to differences in language, lifestyle, mindset, customs and religion. The values that are unique to one culture are long lasting and are transmitted from one generation to another. These values affect the way of thinking and working style of employees and the buying habits of consumers. The characteristics of foreign consumers differ from the characteristics of the buyers in the domestic market. Language is another important dimension of culture. In order to facilitate communication, language is a mirror of the value system of the people and their living conditions. When translating from one language to another, it is often difficult to find words that express the same meaning. These challenges prevent effective communication and cause misunderstanding. Miscommunication due to cultural differences can lead to inappropriate and ineffective strategies and business relationships with customers.

**The risk of the host country or political risk** refers to the potential opposite effects on company's activity and its profitability as a result of certain political, legal and economic changes in the foreign country. The risk of the host country includes the possible intervention of the state in the business activities of foreign companies by prohibiting the approach to the market, by imposing bureaucratic procedures for business transactions, as well as limiting the amount of income earned from activities in the host country that foreign companies can return to the home country. The degree of state intervention in commercial activities varies from country to country. For example, Singapore and Ireland are characterized by significant economic freedom or fairly liberal economic environment, in contrast to China and Russia, where the government regularly intervenes in business activities. The risk of the host country includes laws and regulations that could potentially hinder the activities of the enterprises and their performance. Important legal dimensions are: property rights, the protection of intellectual property, product liability and taxation policy. Countries may have potentially adverse economic conditions due to high inflation, national debt and deficit in the trade balance (Miles et al., 2005, pp. 99-119).

**Currency risk or financial risk** refers to the risk of exchange rate fluctuations. Fluctuation is normal for exchange rates or the value of one currency in terms of another. Currency risk is increasing as international transactions are often carried out in more than one national currency. When currencies fluctuate significantly, the value of the assets of the company, earnings and operating income may decline. The cost of imported parts or components used in the production of final products can dramatically increase if the value of the currency in which imported parts are expressed is rising. Inflation and other economic conditions that manifest in one country can cause immediate effects on exchange rates due to the increased connectivity of national economies.

**Commercial risk** refers to the potential loss or failure of the enterprise as a result of weak or poorly developed or implemented business strategies, tactics and procedures. Managers may make inappropriate decisions and make wrong choices in various areas, as selection of business partners, the time to enter the foreign market, the pricing policy, the

creation of productive characteristics and promotional campaign. Although such failures are encountered also in the domestic businesses, the consequences are usually more expensive when business activities are carried out abroad.

The company is constantly facing all four types of risk (Cavusgil, Knight, and Riesenberger, 2008, p. 12). While these risks cannot be avoided, it can be anticipated and managed. Experienced global enterprises conduct research to anticipate the potential risks, predict their implications and implement proactive actions to reduce their effects. Some international risks can be extremely challenging.

### *REASONS FOR GLOBAL BUSINESS EXPANSION*

There are many reasons why companies implement international strategies. They have more than one motive for global expansion. The motives may be strategic in nature or reactive. Strategic or proactive motive is using opportunities in foreign markets or acquiring new knowledge. Reactive motive is the need to meet key customers whose number increases abroad. There are nine specific motives for international expansion of companies' activities (Cavusgil, Knight, and Riesenberger, 2008, p. 18):

#### **1.Looking for opportunities for growth through market diversification.**

Significant market potential exists outside the home country. Many large and small companies such as Gillette, Siemens, Sony and Biogen execute more than half of its sales abroad. With the diversification of foreign markets, companies generate sales and profit opportunities that cannot be exercised in the home country. International activities may also extend the life cycle of a product or service that reached its maturity stage in the home country or to maintain their market value.

**2.Earning higher margins and higher profits.** For many products or services, market growth in developed economies is slow or insignificant. Competition is often strong, forcing enterprises to cope with small profit margins. Weaker competition, combined with strong market demand implies higher margins. For example, compared to the domestic market, manufacturers of baths elements, American Standard and Toto ( Japan) found more favorable competitive environment in emerging countries such as Indonesia, Mexico and Vietnam.

**3.Gaining new ideas for products, services and business methods.** Global market is characterized by strong competitors and complicated consumers with great requirements and different needs. The unique foreign environment exposes enterprises to new ideas for products, processes and business methods. The experience of doing business abroad helps enterprises to acquire new knowledge to enhance organizational effectiveness and efficiency. For example, just in time method was perfected by Toyota, and then adopted by other manufacturers in the world.

**4.Better service to key customers relocating abroad.** In a global economy, many companies began to operate internationally in order to serve better their customers who have moved - migrated to foreign markets. For example, when Toyota opened its first factory in the UK, many Japanese auto parts suppliers followed, locating their activities on the same place as Toyota.

**5.Location near to sources of supply, advantages of global supply and benefit from flexibility in the supply.** Companies in extractive industries such as oil, mining and forestry, locate their international activities near the necessary raw materials. Also, some companies are expanding their international activities in order to achieve greater

flexibility and diverse supply base. For example, Dell computers carry out activities in Asia, Europe and America, which allows management to quickly switch production from one region to another. Compared with the less agile rivals, this flexibility enables the Dell competitive advantage and superior competitive positioning. In this way companies can skillfully cope with fluctuations in foreign exchange rates.

**6. Access to cheaper and high quality factors of production.** The globalization of business activities allows businesses access to capital, technology, managerial skills, labor and land, with lower costs, higher quality and greater overall value in different locations worldwide (Luthans and Doh, 2009, p. 24). For example, PC manufacturers from Taiwan established business units in the U.S. for access to cheaper capital. USA hosts numerous capital sources in the sector of high technology, such as stock markets and interest rates, which attract numerous foreign companies seeking funds. Most often, companies invest abroad seeking for skilled and cheap labor. For example, the Japanese company Canon has relocated most of its production in China to profit from cheap and productive work force.

**7. Developing economies of scale in the supply, production, marketing, and research and development.** Economy of scale refers to reducing the cost of production and marketing per unit of production while producing large quantities of products. Through global spread of activities, enterprises significantly increase customer base and thus increase the quantity of products they produce. With increased production, the costs per unit of final product are decreasing. The economy of scale is also used in research and development, supply, marketing, distribution and post-sale services.

**8. Effective opposition to global competitors and preventing competition in the domestic market.** Global competition is significant and is increasing by global competitors that win the world market. Companies can strengthen their competitive position by opposing the competitors in the global market or by preventing the competitors' entry in the domestic market in order to destabilize and prevent their development. Therefore, companies are entering in the global business from defensive reasons, to protect themselves from domestic companies that can achieve competitive advantage in foreign markets and then use that advantage on the domestic market.

**9. Investing in potentially profitable relations with a foreign partner.** Companies often have long-term strategic reasons for ventures abroad. Joint ventures or project-based alliances with key international players may lead to the development of new products, early positioning of key markets in the future, or other long-term opportunities for profit. For example, Black and Decker entered into a joint venture with Bajaj, India's retail enterprise in order to be well positioned for the expected sales on the large Indian market. French computer company Groupe Bull partnered with Toshiba in Japan to gain insight into the development of new-generation information technology.

Generally, companies are internationally active to increase their competitive advantage and to find opportunities for growth and profit.

## ***CONCLUSION***

Based on the theoretical discussion of the challenges of globalization and its implications in the development of global business, we can formulate the following conclusions:

Globalization can be defined as a process in which barriers to cross-border trade and investment disappear; perceived distance is reduced due to advances in transportation and communications technology; material culture is starting to be similar around the world and national economies are merging into interdependent global economic system. Proponents of globalization believe that everyone can benefit from globalization, through lower commodity prices, the availability of different products, better jobs and easier access to modern technology. Supporters believe that globalization helps the developing countries reach faster the level of industrialized countries through increased employment and technological advances. Critics however believe that globalization affects national sovereignty and allows rich countries to transfer domestic jobs across borders where labor costs are lower.

Globalization is the future of the business sector. All companies will engage in this process, if they properly investigate the market, they can expect increased growth and development, and companies which decide not to keep pace with globalization, will suffer losses. The organizational framework of market globalization includes the drivers or causes of globalization, numerous dimensions or manifestations of globalization, social effects and consequences of globalization and the effects of globalization on companies or factors that encourage companies to proactively globalize.

Managers develop strategies for globalization to transform their organizations into globally competitive enterprises. Managing an international business is different from managing a purely domestic business because countries are different in terms of their cultures, their political, economic and legal systems, and the level of economic development; the global manager is facing more complex problems than managers in domestic business; global enterprises must find ways to work within the limits imposed by government intervention in the system of global trade and investment; and international transactions involve converting money into different currencies.

Companies that globalize their operations encounter with four types of risk: cross-cultural risk, host country risk, financial risk and commercial risk. Key motives for globalization of enterprises' activities are: looking for opportunities for growth through market diversification, earning higher margins and achieve greater profits, gaining new ideas for products, services and business methods; better service to key customers who relocated abroad; near location to the sources of supply, advantages of global supply and flexibility in the supply of products, access to cheaper and high quality factors of production; developing economies of scale in the supply, production, marketing, and research and development; effectively resist global competitors and prevent the competition in the domestic market, investing in potentially profitable relations with a foreign partner.

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## **GLOBALIZATION - SERBIAN CASE**

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**Abstract:** The main purpose of this paper is to analyze globalization as a term and a social process, its qualities, as well as challenging its methods by a large number of national economies in the world through international economic organizations, with particular reference to Serbia and the influence of growth of entrepreneurship and employment. The methods used in writing of this paper are desk researches, as well as models of analyses of actions of the international economic organizations in globalization, financial data and indicators of international financial, trade, banking organizations and use in practice.

A significant role in the process of globalization belongs to economic connections and in that respect to establishing of economic and political organizations and international law. In the scientific analysis of this issue, national and economic specifics of the process accompanying globalization must not be neglected, since they are not resistance to globalization, but are more significant for the analysis. In the research and analysis of the processes accompanying globalization one should bear in mind that their essence is economic globalization which influences employment and development of small, medium and large enterprises. This paper is a contribution to the investigation of the subject since it presents economic globalization in which in the planetary setting the rule of international economic organizations which changes the positions of national economies arises.

**Key words:** Globalization, International Organizations, Single Economic Space, Capital

**JEL classification:** F60, F63, F69

**UDC** 339.9(497.11)(082)

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## **INTRODUCTION**

Globalization as a term in any respect is of recent date. It appeared in the middle of the 20<sup>th</sup> century, and it is especially frequent in scientific and political considerations from the end of 1980s. This term is frequently understood as intention of creating a new world order in which the USA have a leading role. Because of that there is a wrong impression that these two processes intertwine or are parallel.

Perceptions of globalization as a social process which intertwines with the new world order so that they together are one single process are not scientifically based, and they are ideologically limited, with probably pragmatic goals. Sociology as the most general science on social processes must respond to these challenges, primarily from civilizational aspect, without neglecting that the word globalization above all is about uniting mankind and creation of world society. The fact is that mankind has turned into an entirety in which processes which determine the word globalization take place.

A significant role in that process belongs to economic and technological connections, and in that respect establishing of economic and political organizations and international law, which all leads to uniting, i.e. establishing of world society. However, in scientific considerations of this issue one should never neglect national and economic specifics which are not resistance to globalization, but another benefit. Namely, in the research and investigation of the processes which accompany globalization one should bear in mind that their basis is economic globalization, the essence of which is transfer of capital beyond borders of one state in search of new markets and bigger profit by international and multinational corporations, basically without force, by the power of money. Globalization in its essence is a process by which globally the rule of international economic corporations appears, which leads to changes in the positions of national countries, too and appearance of “global society” in a way in which some positive changes occur, too, such as intertwining of cultures and creation of the atmosphere of affirmation of human rights etc.

### *DOMINANT IDEAS AND ATTITUDES OF THE RESEARCH AREA*

This paper will deal with creation of a unique economic space which is followed by creation of political organizations of global character (“as bodies of international community”), which is a precondition for sovereignty of national countries and harmonizing their legal systems with the “rules” of international community in order to use the advantages of economic globalization. The Republic of Serbia is facing this problem, too, as it will be demonstrated.

Apart from the internal affairs, the system of rapid, new, frequently root strategic-global changes on a wider, planetary level, particularly characterizes that process. This paper will demonstrate some small and economically underdeveloped countries such as ours in the present conditions which cannot directly influence and even less change strategic decisions which have global character. Their rational approach is about adaptability and understanding of the essence of so called system of the controlled economic development of the world and own country’s participation in it according to the possibilities and reality of relationships in international community. It is necessary to invest maximum effort to find economically most useful position in protection of the

country's and common international interest, which if properly identified, is in function of national economic development. In that respect this paper particularly stresses understanding of global strategic focus of the leading forces in the world, or so called "club of the powerful", which on the ground of minimum mutual interest define their interests, as well as maps of their own, and the development of the rest of the world.

One delicate question poses itself – discovering of adequate measure of involvement and support to building common planetary flows, with simultaneous willingness to adapt quickly, and the necessary need for protection of the minimum existential national interests. In order to choose the way and measure of participation in those developments, the interest and needs for continuous acquiring information, everyday comparison, and on that basis adequate analysis for the necessary elements of national strategy are undoubtedly present. Globalization is a social process of establishing connections based on economic and technological connections of specific societies with many inconsistencies into relations of interdependence and cultural connections based on new information technologies and means of communication in order to create one united world society.

### *RESEARCH RATIONALE AND METHODS*

The subject of our research is *economic component* of globalization – economic globalization. It is conditioned by technological globalization which it encourages and enables, so that the two of them intertwine and define other components of globalization as a unique process. From economic aspect globalization can be understood in a broad and narrow sense. In the *broad sense* it is connecting of national economies into world economy through world market. In the narrow sense it is a microeconomic process carried out by small enterprises through cross-border cooperation achieved through non-material forms of capital (finances, technology, knowledge, property and control of assets). *Economic globalization of the world both in broad and narrow sense is in a way achieving important economic processes of the world universalization.*

International community is not a completely defined notion. Most frequently it denotes all the countries in the world, but also the entire human society – mankind. Undoubtedly, international community is not an entity, and consequently not the subject to international commercial law. It is not a legal entity. However, international community in current circumstances and events becomes a more real notion. It is a legal frame in which, among other things, international economic relationships are established, the legal framework is a subject of international commercial law.

It is a fact that all the important strategic decisions of future will be based and adopted on planetary level. These issues are particularly of importance when speaking about World Trade Organization in the process of globalization of international commercial relationships.

This paper is based on many analyses and researches, findings and literature from Serbia and from the world. We used the following methods: logical investigation, general methods of research compatible with economic and social sciences with empirical and theoretical approaches, method of deduction, comparative method, interdisciplinary approach, subjective methods and statistical data processing.

## **LITERATURE REVIEW**

In scientific, academic and economic researches and discussions on the phenomenon and the notions in contemporary society we find the word globalization for the first time in the period between the middle of the twentieth century and eighties in the twentieth century.

There are intentions to associate globalization as a process with intentions to establish a new world order, as well domination of the USA. Hence the impression that these two processes overlap, i.e. that globalization is accompanied with establishing of new world order and dominant role of the USA. Many valuations of globalization, particularly of its association with the new economic and political world order which see them as a single process, are not scientifically based and they can be perceived as a result of superficial and uncritical valuations. Explanation of valuations as these can be sought in justification of political behavior or circumstances of a specific country.

However, definition of the term is more complex than it seems at first. Scientific approach and research are preconditions for proper understanding and appropriate conclusions on these phenomena as they could influence destinies of some nations and countries in terms of their survival, preserving specificity, identity and integrity.

The changes are obvious. Science should be evaluating the changes from civilizational and economic aspect. We should bear in mind that there are no generally accepted definitions of civilization and that there are different opinions on whether there is only one civilization or there were several civilizations which encountered each other and were in conflicts, as well as how much they influence the status of economy of those different civilizations.

One of the most thorough analyses in respect to definition of civilization was provided by Friedrich Engels who started from the position that mankind was going through three stages: barbarism as precivilization, land cultivation - agricultural civilization, and production of machines as industrial civilization. According to Engels, civilization is "a stage in development of society in which division of labor, exchange between individuals originating in it and production of goods which unites both processes reach full development and cause revolution of the whole previous society". (Engels, 1976)

A step further in the research of perfect civilizations was made by English scientist Arnold J. Toynbee with epochal piece "A Study of History", (Toynbee, 1979). In this work Toynbee describes the rise, development and fall of civilizations and relationships between contemporary civilizations.

Sociologist and lawyer Dr. Radomir Lukić (Lukić, 1976), analyzed Toybee's work "A Study of History" and found it to be monumental, but also naïve in some opinions on the other hand. Professor Lukić deemed insufficient economic factors, i.e. unexplained correlation of economic circumstances and works of mind naïve.

In respect to the above mentioned authors, famous Serbian sociologist and lawyer Dr Danilo Ž. Marković defined civilization as "historical-anthropological, sociocultural and hystoric type of organization of society in some region" (Marković, 2001).

In introduction of this paper we have mentioned that the term "globalization" will be in focus and that it will be approached with previous analysis of the phenomena which logically precede it. "The term globalization is used most often and in its widest

sense to designate the process of creation of unique economic and political space on our planet, i.e. to denote the process of connecting and explanation of contemporary societies with many contradictions in a certain way to the “world society” (Marković, 2001).

“Globalization is a global phenomenon (Knezevic et al.,2013). The world becomes a global market economy center in which ideas and products are available everywhere and at the same time” (Čarapić, 2001).

Globalism focuses on a man – citizen of the world, ignoring the state and state borders. This fact explains mistaking with the term “international”, which itself denotes states and borders. For that reason the process of globalization is now determined as globalization of production and finances which are the basis of economic globalization. Previously mentioned facts indicate that apart from sociological definition of globalization there are technological, economic and political definitions, which intertwine. Naturally, in our focus in this paper will mostly be economic globalization so that can be separated from the context of globalization in its entirety (Petkovic et al.,2013).

## ***ECONOMIC ASPECTS OF GLOBALIZATION***

From the viewpoint of economy, we could say in the beginning that there are two aspects – wide and narrow one. In the broad sense, globalization is perceived as the process originating in the world market form connecting of national economies. However, there is also a different situation when legal entities from various countries directly contact each other, make over border business deals regardless of cooperation between countries. The process perceived this way could be labeled as “microeconomic”. Economic globalization of the world whether in the broad or narrow sense is in a way achieving important economic processes of world universalization” (Čarapić, 2001).

Sudden increase of capital and its concentration (asymmetric, author’s note) resulted in universalization of the world, i.e. globalization, particularly economic one. The tendency of simultaneous increase of capital with its more rounded concentrations due to many implications is reasonably acknowledged as determinant of relevant relationships in the modern world” (Mihajlović, 1999).

“We witness a process of intertwining and connecting of the world, deepening on its increasingly wider interdependence, reduction to complete elimination, the possibility of national or interstate alienating, isolation or autarchic survival. Globalization of the world, whether silent or turbulent, violent or natural, was becoming more and more inevitable and unstoppable, and as it was approaching our times, faster and more comprehensive” (Popov, 1999).

In economic terms, there are three relevant processes on macro level which prove that it is a global economic process:

- Absolute increase in world production, mainly caused by new technologies and
- Rise of new Asian economies in the market based on transfer of capital from the developed countries, aided by cheap labor in Asia,
- Significant development of world markets.

This introduces the problem of supporting state's production in monetary terms since central banks frequently lose control over the currency fluctuations which could cause local inflation, and world speculators could profit from it (Vujadin et al., 2013).

Study of economic globalization is very complex since apart from the economic structures it is frequently connected to state politics or government activities in some countries.

Political aspect of globalization frequently leads us to a unique political space which is heterogeneous and full of contradictions. This unique political space is determined by technological and economic globalization. The world, actually, in a way turns into a unique economic organism. This process is derived from prestructuring of economic relationships and rapid change in market structure. (Pečulić, 2002).

Regardless of the development of globalization process, there is one truth which is unstoppable, the process of integrations continues, and everybody is aware that it is about interdependence, despite diversity, opposition and disagreement. There is no longer a possibility for someone to be alone and independent of others. Globalization is enabled by the development of production forces, achieved by integration of scientific and technical accomplishments which appeared in the beginning of the twentieth century. This integration displayed supremacy of scientific over empirical basis of technology, and causal relationship of science and production led to the accelerated and wider changes, denoted as scientific and technical progress. (Marković, 2001)

According to many contemporary authors, these new technologies lead to significant changes in the position of a man in his workplace and to the possibility for "national economies to attain the shape which enables fitting into global economy" (Fukujama, 1997).

Between some societies various types of cooperation are established, transnational activities and multinational cooperation are frequently targeted. Global projects and programs encouraged by various international organizations are frequently involved. These tendencies are certainly accompanied by a new way of managing resources and transnational companies with all the specificities. However, one problem poses itself again regarding global projects- the one of violation or endangering somebody's national identity or cultural specificities.

Still, these possible negative tendencies should not jeopardize the process of globalization even if they promote dominance of one center. Globalization is, actually, a very complex process in development of human society and from the aspect of overall development of society and man it is a positive and progressive process (Pečujlić, 2002). Once again, we conclude from writings of the contemporary theoreticians that negative effects of the process cannot be a reason to dispute globalization, and by no means to qualify it as an anti-civilization act.

## *MANIFESTATIONS OF GLOBALIZATION*

World globalization process in terms of creation of modern, safe, secure and planetary society is increasingly more present and acceptable for the largest number of countries and international organizations. In this part globalization will be presented in three fields:

1. Economic process of globalization
2. Political process of globalization
3. Cultural process of globalization.

Global development and terms of world economy are for the most part imposed by united world multinational companies since they dominate world economy, economy and politics nowadays. Globalization is a contradictory process which unites and at the same time divides, and develops under the influence of various business cultures. Locally and globally it is in permanent interaction and significantly determines behavior in national and international relationships. Accordingly, the relationship of global and local is a significant factor for development or stagnation of an economy depending on the aspect it is observed from.

The achieved new process of regional connecting, uniting and development in the world accelerated establishing and development of the process of world globalization. The basis for development of globalization process are: free trade zone, customs union, economic union as the highest degree of economic cooperation, and political and cultural cooperation etc.

In all the relevant institutions nowadays the need for accelerated globalization process is recognized, along with long term sustainability of optimal relationship between the rich and poor countries. Serbia as an independent country in its process of transition and in the process of preparation for the admission to the EU is directly and indirectly involved into the process of globalization. Globalization is a planetary process of connecting and uniting of states, national economies and international organizations. Globalization process mostly develops and is manifested through economic, political and cultural process.

## *ECONOMIC PROCESS OF GLOBALIZATION*

Economic globalization denotes above all creation of common, united market according to the principle all the world is one market, which requires clear rules in order to encourage sound business competition and economic development. Anti-globalists claim that big transnational companies use their economic supremacy to disable rise of competition which could take over the market from them.

Still, globalization is far more complex process than this neoclassical notion and it should encompass new approaches with clear stress on social, cultural and human aspect of development. Accordingly, globalization becomes complex process with all these dimensions and positive and negative effects and influences starting from the local to the global level. Globalization is evolutionary, high intensity process which cannot be stopped. From the economic aspect, globalization directly influences globalist and globalized economies through direct foreign investments by enabling transnational companies to reach new markets through investments, while local and national companies are provided with the necessary capital.

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### *TRANSITION AND GLOBALIZATION*

Transition occurred as the result of supremacy of economic policy of the West over the policy of the Eastern Bloc. Better and more efficient management of business flows, development of technology and the very concept of ownership of western economic forces made other side far more inferior. Economic supremacy on these bases gave the right to the western countries to initiate and conduct further economic flows and change the world according to their opinions. It is definitely the best for them, while the other side has to accept what is offered. Unfortunately, it is a fact which is hard to dispute since capital and military power are in hands of that side. Small countries which are inferior in the military domain are forced to borrow power from stronger countries or their economic support in order to accomplish their goals at least to some extent. Since the power, the first and the second one, is in possession of one side, the outcome is obvious, to accept what is offered or to be ruined. According to that, we should avoid illusion of generous help from the west and accept the fact that their basic aim is achieving their interests. The fact that developed countries, technologically powerful, with great potentials for production and quality goods, need market which can absorb their production surpluses supports this view. There are no better destinations for this than undeveloped countries with discredited technology and pronounced need for quality goods. Exactly because of that the west persistently insists on liberalization of the trade which tends to shut down production potentials of countries in transition. Under pretense of globalization, all the economies are allegedly enabled to operate under the same conditions worldwide, but it is a mockery since the possibility of undeveloped countries to compete is equal to utopia. There is another motive for developed countries to offer potential models of globalizing and entering into economic flows, and it is cheap, high qualified labor and cheap raw materials (an example is "Sartid" from Smederevo, and workers who extorted one dollar wage for one hour of work of gross income in the factory. At the same time American company which is majority owner of this company in the similar systems in USA and Germany was paying 12-14 dollars per hour). It is obvious that unstable economies of countries in transition primarily need capital.

### *GLOBAL AND LOCAL ECONOMY*

Economic globalization so far vastly and as a rule intensely aided by military threats of the rich western countries ruthlessly destroys national economies and subdues them

to their multinational companies. Transatlantic influences very successfully destroy Asian-Pacific economies even though they generously supported them while it was endangering Russian economy (the case of Asian Tigers). European Monetary Union as one of the last phases of uniting Europe and introduction of unique currency were not well accepted exactly from those who spoke in favor of benefits of globalization. The example is Great Britain. Globalization is the ongoing process which launches a *new economy*. Apart from the promised blessings, this process increases poverty more than ever. Last events in Mediterranean countries are the sufficient example.

In European and Middle Asian countries, the economies of which were in transition, the number of people living on less than one dollar a day increased over twenty times. After aggravation of situation in poor countries, the rich countries mostly withdraw, regardless of strengthening of their own economies, while aid for the developing countries drops from one third to one quarter of one percent of their Gross National Product. It is also estimated that trade limits of the developed countries caused annual losses of undeveloped ones which are twice bigger than the amount of aid.

### *EFFECTS OF GLOBALIZATION*

Globalization is a paradox since it promises improvement of economy and strengthening of human rights and freedoms, while on the other hand it imposes general and global standards, establishing a kind of imperialism. Nobel Prize winner for economy Joseph Stiglitz and the leading economist of the World Bank says that: "Critics of globalization accuse western countries for hypocrisy and they are right doing it". According to him, they still frequently predict its good effects. Stiglitz proposes thorough change of work of the International Monetary Fund, the World Bank and the World Trade Organization since consequences of actions of these international organizations are more far-reaching than necessary.

"Small Tigers" (Malaysia, Thailand, South Korea, Philippines) are the obvious examples of economic miracle which was not previously recorded in any country. These countries were mainly oriented towards export, which enabled continuous economic growth higher than 7% annually. Privileged position in trade obtained from the USA with the aim to destroy Russian economy lasted for about two and a half decades. In that period economic growth in Korea was based on savings in domestic economy, and companies were managed mainly by managers from the country. This country in such circumstances did not need financing from the West. Under the pressure of globalization and the USA, Korea had to open and liberalize its financial market and allow approach of global capital. From that moment, at the very end of the twentieth century, "Small Tigers" went into economic depression.

#### **Negative and positive effects of globalization are:**

##### *Negative effects*

- Globalizations causes many economic discrepancies
- Great drain of capital from national economies, which extremely negatively influences stability of domestic currency, frequently causing its crash (South-East Asia)
  - Domestic currency is replaced with foreign
  - There are double standards of human rights according to the needs of foreign policies of powerful countries
  - Various kinds of crimes and diseases are internationalized, which are more difficult to control in these conditions
  - Unlimited and uncontrolled use of natural resources and environment negatively influences sustainable development

- There are great contradictions, developed countries are developing faster, while undeveloped ones stagnate, which is not a proclaimed aim of globalization (decreasing the differences between developed and undeveloped).

### *Positive effects*

- Direct foreign investments are obtained which increase income of the local economies and the number of the employed
- New communication and information technologies help spread the knowledge on new scientific fields and disciplines
- Human rights and public responsibilities become more important
- Security and safety from international terrorism
- Possibility of efficient ecological protection
- Optimal use and exploitation of natural resources
- Protection from epidemics
- World peace etc.

In order to achieve positive effects of globalization, since the process is in rather advanced stage without providing the expected results, it is necessary to make use of it as much as possible in order to increase chances for the undeveloped. For that purpose it is necessary to improve undeveloped markets, as well as to improve all the social effects.

### *POSSIBLE EFFECTS OF GLOBALIZATION PROCESS*

Globalization can influence positively and negatively development of international trade relationships and the effect of foreign investments. Insisting on consistent enforcement of some proclaimed principles on planetary level, particularly from the aspect of economic and all other powers, brings along the danger of turning rigid sticking to principles into a kind of actions of the club of powerful without principles at the expense of weaker nations, with erosion of institutional forms of organizing nations as country unions. Development of the process will depend on its participants and power relations in the world. Those relations will have decisive influence on contemporary regulations. Subjects, proclaimants of new ideas who bring them into practice on national, global and international level will appear at the same time. Expression of those changes will be evident in the new phase of corporative building of trade societies, searching for the appropriate forms and methods of regulations in the field of world economic order. A new generation of contracts, conventions, laws will appear as a reflection of respect of interests of participants of the world order in circumstances of global reformation of the entire planet.

Global entrepreneurs, including states, are able to influence and disable every national economy by influencing its economic and financial infrastructure. All this consequently causes the decrease in industrial production, social tensions and unemployment, with the warning that it is possible to take over the whole national income without force and arms, which is a geo-economical offence against which there are no mechanisms of protections.

## ***ECONOMIC GLOBALIZATION AND HUMAN RESOURCES***

The world “global” denotes entire, total. Global economy is accordingly the world economy. The term “world” is dialectically understood, “It does not denote one and the only, entire subject, one and the only closed system, but a structure which is one as much as it is multiple, different as much as it is same, one whole and divided”, (Rus,1969). Here the term “world” does not relate to the world in general, reality totality, but one of its segments – human world. In terms of space, human world is a habitat for human beings, the frame of their historic existence. Global or world economy is consequently the economy observed in its entirety as a planetary economy. Global economy implies consequently plurality and heterogeneity. Globalization as the world historical process is about “spreading, deepening and acceleration of world interdependence in all aspects of modern social life”, Held (2003). Globalization is an idea realization process of homogeneity of the world. If economic globalization is perceived as an objective process, as an objectivity, economic reality in the established relation cause-effect, it can really be investigated as the determinant of activities of *homo oeconomicus*. If on the other hand globalizing economic process is not perceived in other way - as the result of activities of *homo oeconomicus*, achieving its ideas and goals in and through the process of economic practices, then human economic activity in all its dimensions appears as constitutive for economic globalization itself.

At first sight, it may seem that these two approaches to the problem of economic globalization and human refinement in the sphere of economy exclude each other, but **they do not**.

The term globalization relates to the process of condensing of the world and strengthening awareness of the world as a whole, in which economies, politics, culture and ideology of some countries permeate each other, Robertson (2003). This process shows that closed spaces, isolated from other parts of the world, are no longer possible, and that historic movement is headed towards appearance of one, world society.

Mass production for mass consumption, this “eternally circular intersection”, is a precondition of survival of every contemporary economy. The subject of our research is economic component of globalization – economic globalization. Its precondition is technological globalization which it encourages and enables, so that they in a way intertwine and define other components of globalization as a unique process. From the economic aspect of globalization as a unique process, it is explained in broader and narrower sense. In the broader sense it is connecting of national economies into a world economy through world market. In the narrower sense it is microeconomic process which is realized by enterprises through over-border cooperation and non-material capital (finances, technology, knowledge, property of control of assets). World economic globalization, whether in the broader or the narrower sense, is achieving important economic processes of world universalization (Babić, 1999).

It is achieved as the consequence of increasing capital and its concentration, and without the possibility to multiply as it is burdened with its own load.

Since capital is the key element of production, some countries compete to attract it, which imposes obligation to tax investing. However, speaking about globalization as rules in the development of society and accepting the position that it is not as it may appear a natural occurrence, but the process which was created by man, those who

make rules are most often players or institutions leaning towards the USA or sponsored by this country and supported by various allies“ (Masner, 2003).

In this respect Washington consensus is the most illustrative.

Global economy implies poverty. It is obvious that nowadays in the world there is increasingly more prominent inequality in distribution of capital and growing poverty in global economy. It is estimated that at the end of the twentieth century out of 84 developing countries 54 of them experienced decrease in gross domestic product. In fourteen countries that decrease was by around 35%. According to the data of the annual report of the United Nations Development Program, more than 1.2 billion of people (somewhat less than a quarter of world population) lives in absolute poverty, i.e. have incomes of less than one dollar a day. At the same time 2.8 billion live on just twice that much, i.e. two dollars a day (UNDP, 2001). According to the report of the World Bank, at the end of the twentieth century a group of poor countries to which 85% of world population belongs owns only 21.5% of the world capital, while a group of rich countries in which 14.8% of world population lives owns around 75.5% of the world capital. According to the report of the World Bank, African continent is the only continent on which in the last quarter of the twentieth century production of food was reduced (World Development Report, 2002). On this continent, too, average family spends less in the beginning of the twenty-first century than it used to in the beginning of the fourth quarter of the twentieth century.

### *THE ROLE OF FOREIGN INVESTMENTS*

Foreign investments are the key part of new globalization. According to the Washington Consensus, growth is achieved through liberalization, “liberalizing” of markets. Privatization, liberalization and micro stability should provide favorable environment for attracting investments, including investments from abroad. These investments generate growth. Foreign business brings with itself technical expertise and approach to foreign markets, creating new possibilities for employment. Foreign companies also have approach to the sources of financing, which is particularly important in those developing countries in which financial institutions are weak. Foreign direct investments played a significant role in many (but not all) of the successful development stories in countries such as Singapore and Malaysia, and even China. There are some negative aspects, particularly when foreign business enters a country and frequently destroys domestic competition undermining ambitions of small businesses which hoped to develop a domestic industry. There are many examples for this. Producers of non-alcoholic beverages worldwide were defeated when Coca-Cola or Pepsi entered their home markets.

**Banking** is another area in which foreign companies frequently suppress local companies. Big American banks can provide investors with higher safety than local banks (except if local government provides insurance of their deposits). USA government insisted on opening financial markets in the developing countries. The events of 2008 clearly indicate what the USA government can do to support its banks. Advantages are clear: more intense competition can provide better services. Greater financial strength of foreign banks can improve financial stability. But the threat of foreign banks to local banking sector is very real.

There are some additional problems concerning foreign banks. Domestic banks are sensitive to subtle forms of influences of central bank, for example to expand loan business when economy requires stimulus, and to decrease it when needed. It is a lot less possible that banks would react to such signals. Domestic banks will be much more willing to respond to pressure in order to fill in the gaps in loan system, i.e. to finance minorities and undeveloped areas which are not serviced properly.

**Finances**, however, are not the only field in which foreign direct investments are a “mixed blessing”. In some cases new investors convinced governments (frequently by bribery) to grant them special privileges, such as customs protection, for example. In many cases governments of the USA, France, and other developed industrial countries intended to influence decisions in developing countries, reinforcing the belief in those countries that it was completely justified for the governments to interfere and receive payments from private sector in some cases. In some cases the role of government appeared to be harmless.

### *GLOBALIZATION IS A POWERFUL PROCESS*

It is extremely difficult for facts to reach the minds of those who make crucial decisions on destiny and future. Globalization has not provided solutions which in their essence are not different from the fatal measures in a long run. Economic growth itself has not solved the problem of poverty, the one of ecological safety, and has not created strong social structures which could provide the necessary help to socially endangered population. Ecological safety is everywhere and without exception endangered. In economic respect, the task of enabling world economic stability before and above all other institutions was given to IMF. The intention was to avoid inducing global recession like the one which occurred in 1930s at any cost. We should remind ourselves that capitalism at the time faced the worst crisis since its beginnings. During the crisis unemployment was terrifying. In America, one quarter of workers were left without jobs.

During the extreme disturbances monetary policy which is very efficient in normal circumstances does not provide the expected effects. What is more, the consequences of its restrictiveness just aggravate the problems. In case of decreased aggregate demand as the cause of the crisis, its increase should be acted upon by non-economic means, the means in hands of the state. Based on these economic axioms IMF was assigned with helping economies in recession. Decreasing of economic activity, it was clear to all the economist, cannot be limited to only one country.

**Two faces of globalization.** Globalization can influence positively and adversely development of international relations in general, and particularly trade relations. Insisting on strict abiding to some proclaimed principles on planetary level, particularly from the aspect of economic and other powers, brings along the danger of *strict adherence to principles turning into a sort of loose law-abiding of the club of the powerful at expense of the weak nations and erosion of institutional forms of organizing nations as unions of states*. Further development of the process will depend on its participants and power relationships in the world. Several aspects should be considered in that respect.

**First**, in the process of international division of labor, parallel with international, there is an inter-clan, inter-corporative order. *Geopolitical and geo-economic*

*relationships in the world strongly influence transformation of the essence of economic role of the state as the subject of those relationships, automatically changing characteristics of its political and economic sovereignty.*

*Second*, the world witnesses building of gigantic production systems based on high information technologies (“The internet economy”), as well as on unions of world cities. Trans-border financial flows are established, which transforms the model of national legal regimes essentially. In any case, the stadium of building new national foreign trade doctrines gradually approaches.

*The third* aspect of globalization process consists of series of complex relationships originating in geo-trade and economic conflicts of interests, which at the end of the twentieth century and the beginning of the twenty-first century present themselves as special economic wars. Global entrepreneurs, including states, are capable of influencing and disabling every national economy by attacks with the aim to destroy economy and financial infrastructure. All this causes decrease in industrial production, social tension and unemployment.

*Fourth*, globalization confirms the fact that legal system has for centuries been the reflection of the right of the stronger. To that end we observe more frequently violation of the legal principle of protection of the weaker party. In globalization, legal institutes become expression of political fight for the ruling position in a long run in various relationships including economy, finances, industry, social sphere, military, etc.

## ***POSITION OF SERBIAN ECONOMY IN GLOBAL ECONOMY***

One question poses itself- whether so far the preconditions which will take Serbia with least expenses and distress through economic transition, and which will make external and internal economic relationships more favorable in order to attract the necessary investments, jobs, capital, higher standard, and better infrastructure, have been fulfilled. Promises that reforms will quickly provide sudden and permanent progress, new jobs, higher standard and self-sustaining growth have simply not come true. In the course of past ten years public was much more occupied with political than economic issues and development in general. Economic and existential problems in Serbia have completely been in the shadow of the Hague processes and Kosovo status.

Regardless of all dilemmas and puzzles regarding results so far, Serbia made progress which can be proven by facts and data. However, we have to look back on perceptions of others regarding transition and its results. Apart from positive evaluations of the World Bank we should analyze another evaluation of our economic structure and its position. When evaluating economic denominators we should by no means neglect “Standard & Poor’s” rating of Serbia. This agency reports “good macroeconomic prospects”, as well as the “possibility of progress in the process of European integration”. On the other hand, according to the same respectable agency, weaknesses of Serbian economy are “vulnerability of high deficit in international payments”, mistakes in privatization and “unfinished privatization and restructuring of public companies”, i.e. “insufficiently competitive export”. What are the chances for this prognosis to come true? Serbia has better chances than the rest of the countries from the region for direct investments because of the bigger market, good natural and

mineral resources, favorable position relative to the European Union market, as well as quite qualified labor force. It is assumed that economic growth rate will keep rising.

*Table 1: Selected indicators and parameters according to the data of NBS and Ministry of Finance of the Republic of Serbia*

	2008	2009	2010	2011	2012
GDP in millions of EUR	32,668	28,883	29,024	32,994	29,932*
GDP, p/c EUR	4,445	3,945	3,981	4,543	4,012*
Real growth of GDP in %	3.8	-3.5	1.0	1.9	-1.7*
Public debt of Serbia – internal and external in millions of EUR in % of GDP	8.8	9.8	23.0	14.5	14.6**
	29.2	34.7	44.5	48.2	59.3**
Employed in thousands	1,990	1,857	1,776	1,739	1,723***
Unemployed in thousands	795	730	730	745	761***
Deficit of the republic budget (in % GDP)	-1.7	-3.4	-3.7	-4.2	-5.7**
External debt of Sarbia in % GDP	66.6	77.7	84.9	77.5	77.6**

*Source: National Bank of Serbia\*\*, Ministry of Finance of the Republic of Serbia\*, Statistical Office of the Republic of Serbia\*\*\**

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*GLOBALIZATION AND TRANSITION IN SERBIA  
IN THE LIGHT OF REGIONAL DIVISION*

This part of paper opens many questions regarding the influence of globalization and regionalization on economy trends in Serbia. Are we on the right way? Do we have the real reforms in Serbia or something else? Should government manage the trends firmly? Is the distance between Europe or world and us now bigger or smaller than some time ago? If we are going to criticize our reality moderately, we are under the impression that previous policies were those of the marginalized reforms, and that they slowed down our journey towards Europe, if that journey was intended at all. Serbia officially and declaratively after the year 2000 chose European way, after all. Of course, the country did not make the decision alone. At this point Serbia is still far away from European Union, but it is reintegrated into international community, above all due to some form of transition in economy, change in the way of thinking in general, promotion of market laws, reformation of justice system, liberalization on many levels, establishing of new and renewal of old relationships. Serbia is free now and fighting fiercely to return to the economic map of Europe and world, as well as business map, even though it is still under unbelievable international pressures, particularly in respect to the status of Kosovo. In this whirl of managing and burdened with external pressures, we sometimes wonder whether we are headed in the right direction or we are inert so that the flows are carrying us. We have to neglect all the gloomy perceptions of Serbia and those in Serbia, it is the only country we have, and it appears that we are doing better, but the level of improvement is very hard to evaluate for anyone. Serbian economy records a slight growth in the past ten years. There are significant events on international plan, the events in the IMF. There are some bad episodes as well. Wages are still growing faster than productivity, we witness a large trade deficit, and privatization of public capital rarely goes without affairs. Overrated dinar results in turning to spending instead to sound investments. We definitely lack the right strategy for increasing export and total economic development of the country. We also do not have an authentic plan for establishing macroeconomic stability.

*NATIONAL DEVELOPMENT STRATEGY OF SERBIA*

In Serbia, the agreement of the relevant structures is for the most part reached that the country should be prepared in any respect to assume full membership of the EU in the coming years. National strategy has to be formulated to ensure competitive qualities of Serbian economy and to adapt to the environment of strong economies of the EU member countries.

Serbia is certainly not a young country which should start from nothing. It has potentials, economy as it is and history. If we look back to the close past, we have had five years of transitional activities, a small economic growth, started reforms, many reformatory laws and other legal documents adopted. Macroeconomic and other strategic goals and mechanisms for their enforcement have been defined by the current Government.

There are not many reasons for too big pessimism, even though, objectively, the situation is difficult. We do not have to start from nothing, which gives us hope that we

can reach our goal. National strategy has to be objective. The strategy has to clearly define several positions and goals:

- a) To determine the position of Serbia according to all the relevant parameters objectively
- b) We have to see the expected results regarding development and reforms as they are, as well as to define the profile of Serbia we want to see in 2013
- c) It is necessary to recognize the greatest obstacles to development (in the area of human, material, natural and institutional resources)
- d) We have to define priorities in further development and transitional processes which will neutralize possible obstacles of economic growth
- e) All the above mentioned has to be done with full political and any other responsibility.

All the questions listed and potential right answers to them will be of no importance if the right, competent experts of the appropriate profiles, and of course institutions are not involved.

There are two possible scenarios of economic growth: the realistic one which predicts a possible GDP growth in rate of 5%, and the optimistic one which sees the same phenomenon by two percent higher (7%). Macroeconomic projections will determine quantities and types of material and human resources in order to achieve the desired economic growth rate and obligatory maintenance of macroeconomic balance.

It is necessary to project the expected changes in sectors of GDP creation (agriculture, industry, services) which can allocate some human and material resources.

## ***DISCUSSION AND CONCLUSIONS***

Globalization is the word which marked the last decade, it belongs to the most used and the most abused ones – it is deserving and guilty of everything. It does not have only economic dimension, but it covers all the segments of life with unpredictable economic, social, cultural and political, ecological and legal consequences. Global criminal and terrorism are also its components. In economic sense, it is an approach to work, capital and raw materials in all markets, and production for all those markets should enable allocative efficiency, decrease of transaction expenses and increase of trade based on comparative advantages. Advocates of globalization claim that globalization in a long run is useful for everybody since it increases competition, decreases provincialism, racism and ignorance, it enables equalization of income of the developed and the undeveloped. Critics and skeptics warn of a globalization trap, they are cautious in estimations of efficiency, and they point out negative social effects, above all differentiating within some countries and stress the differences between them. Incessant “increase” in efficiency which should secure survival of companies in competition they themselves create are reflected in constant battles for market shares, bankruptcies, integrations and acquisitions, which turn into “economic cannibalism”, while most countries, especially the small ones, completely lose control over economy.

Knowledge by definition belonged to those who came from international financial institutions and who requested even theoretically disputable textbook solutions to be enforced in transitional countries, the solution they would have not used in their own

countries. Many of them knew about the countries they came to only what they read in tourist guides on the way from the airport to the hotel. When they were warned by rare economists from the country of the consequences of privatization without clear rules, macroeconomic stabilization, wrong estimates of economy and introduction of markets without institutions, those economists were mocked because of their homesickness and ignorance. International organizations still do not admit negative role in transition, claiming that there was no unsuccessful transition since the countries have not enforced everything they were suggested to. Measures of transition successfulness are neoclassic market economy model indicators: economic liberalization rate, private sector share in social product, share of foreign capital, existence of financial institutions and financial market depth. Economic growth and social effects of changes are completely neglected.

Widening of gap between developed countries and developing ones grew so much that it becomes not just an economic issue, but also one of dangerous sources of tensions and conflicts in modern world. In the existing system of international economic relationships exceptional expansion of development of the developed countries was enabled. On the other side we see undeveloped countries, and the gap between them is in astonishing proportion - 1:23. Data on global income (gross national product) show that nearly 16% of the world population makes around 74% of the world income, while developing countries with nearly 70% of the world population participate with around 15.5% of the income.

One of the reasons for concern is influence of globalization on democracy. Globalization, as it is claims, frequently exchanges old dictatorships of national elites with new dictatorships of international finances. Those countries are told that if they do not act in accordance with certain conditions, the IMF or capital markets will refuse to approve loans to them. Those countries are basically forced to give up a part of their sovereignty, to let capricious markets (including speculates whose sole interests are of short-term nature, not long-term development of a country and improving of population standard of living) discipline them, telling them what they should and should not do. When globalization is implemented as it has been implemented so far, it is an obstacle for exercising of human rights. It is not strange that it will be faced with resistance, particularly from those who feel that their rights are endangered.

Globalization has helped hundreds of millions to achieve a higher level of living standard, even above the one they or many economists until recently could dream about. Globalization of economy was useful to the countries that used its advantages to look for new markets for export and to attract foreign investments. But for millions of people globalization did not work. Many of them got into difficult economic situation since they watched their business fail and their lives become insecure. They felt that they could do nothing against the forces which were beyond their control.

Globalization is in the best interest of many poor in the world. In many parts of the world it has bad influence on the environment. It contributes to the stability of global economy. For some, there is an easy answer: abandon globalization. It cannot be done and it is not good to be done. Globalization brought along improvement in healthcare for population, as well as a more active global civil society which fights for the democratic causes and social justice. The problem is not in globalization, but in the management of it.

Misunderstanding of macro trends of development in the beginning of little and small transition in the last decade of the last millennium brought Serbia into a deep economic crisis and made its strategic position significantly worse. Position of Serbia nowadays is more difficult particularly because of the fact that the country does not have ultimate resources at disposal nor strategic technologies, while knowledge is on a low level because of the human capital flight and political manipulation with technocrats. The last bastions are agriculture, tourism, services and small and medium enterprises' business.

Regardless of low performances and bad distribution of situational variables, further economic decay of Serbia must not be allowed. Serbia has to be strong in order to survive. The basic aim of this paper is theoretical contribution to attempts to make Serbia a strong country.

It is normal that in the new circumstances financial system has a new role, too. Financial system without sound economy is a "car without engine", it can go only down. However, under the assumption that things in real sector improve in terms of creation of competitive economy, financial system can make an important contribution to growth of competition in better conditions for financing of the existing economy.

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## ***AGGLOMERATION ECONOMY: OPPORTUNITIES AND CHALLENGES FOR ALBANIA***

*Orsiola Kurti*<sup>55</sup>

**Abstract:** Clusters have centred the development discourse in the recent years and they have also been incorporated in the economic agendas of both developed and developing countries. In the recent decades, there was a promotion of policies aiming to support small and medium enterprises (SMEs), as one of the core units of cluster formation.

The benefits of agglomeration economies were identified early on by Alfred Marshall in the year 1919. Since the publication of Michael Porter's "The Competitive Advantage of Nations" in 1990, literature on clusters and potential impact in economic development and competitiveness has grown significantly. Clustering as an economic policy concern has become fashionable, stimulated especially by the success of the industrial districts of the so-called 'Third Italy' (Pitelis et al, 2006).

This paper argues that cluster development policies in developing countries are feasible to the extent that they are based not only in the common will of replicating successful models from developed countries, but they also consider local contexts in terms of economic situation, local and regional entrepreneurial initiatives, capital and human resources and social structures. Based on the extensive literature review and analysis of secondary sources on clustering worldwide, this paper will take an eclectic approach to investigate the feasibility of cluster development. One of the most comprehensive and systemic approaches of clustering for developing countries adopted in this research paper is put forward by Mario Davide Parilli (2007). His eclectic approach takes into consideration the spontaneous approach, the policy inducement approach and the social approach. To illustrate this, the paper will further investigate on two case studies, starting with an analysis of the Albanian economy in relation to clusters and some lessons learned from Italian industrial districts. Finally, the paper will conclude with some policy implications based on the eclectic approach in order to enhance growth and competitiveness of local economies in Albania.

**Key words:** Cluster Development, Agglomeration Economy, Spontaneous Approach, Policy Inducement, Social Approach

**JEL** classification: L26, Z13

**UDC** 334.758(496.5)(082)

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## **INTRODUCTION**

Development of clusters in both developed and developing countries have become popular in academic and research institutions as well as a vision guiding tool for policy-makers. Clusters have received special attention and have been inserted in economic development agendas. In the recent decades, policies were promoted to support small and medium enterprises (SMEs), as one of the core units of cluster formation. "Creating and supporting clusters would help small firms to overcome production and marketing obstacles they generally face, and allow them to compete with large firms and in sophisticated distant markets" (Oliveira, J, 2008:1).

The benefits of industry clustering were identified early on by Alfred Marshall in the year 1919. According to Marshall "these arise from localization economies: namely, the availability of common buyers and suppliers, the formation of a specialized or skilled labor pool, and the informal transfer of knowledge" (Chakravorty, S et al, 2005: 331). Since the publication in 1990 of "The Competitive Advantage of Nations" of Michael Porter, literature on clusters and potential impact in economic development and competitiveness has grown significantly. Many journals and articles from various disciplines: economy, geography, sociology, planning have in their focus establishment and development of economic clusters, causes of agglomeration such as localization of economies, proximity with other firms and/or consumers and effects in economic growth, regional inequality and industrial restructuring.

Clustering as an economic policy concern has become fashionable, stimulated especially by the success of the industrial districts of the so-called 'Third Italy' (Pitelis et al, 2006). Other successful experiences are financial services in New York (Wall Street), medical devices in Boston and IT in Austin, Texas and Silicon Valley. Based on these success stories there is currently a widely held view that 'clusters' are fundamental for ensuring economic success for localities in a global economy.

Clusters' development demand an active interaction and cooperation among entrepreneurs, businesses, international organizations, public local and national authorities, NGOs and communities as crucial actors to dynamize local economies. Many international organizations are implementing cluster development projects and assisting federal and local governments to revitalize clusters in developing countries, especially in Latin America and Central and Eastern Europe. UNIDO (United Nations Industrial Development Organization) has set up its program "Clusters and Networks Development Program" (2001) to encourage establishing and building clusters and networks in developing and transition economies worldwide through offering technical assistance, institutional capacity building and policy advice.

As cluster building is now among the most important economic development activities in OECD countries and beyond, OECD (Organization for Economic Cooperation and Development) has published many books on clusters development and has paid a great interest in its program of Local Economic and Employment Program (LEED: 2005).

This paper aims to argue that policies that tend to enhance cluster development among developing countries are feasible to the extent that they are based not only in the common will of replicating successful models from developed countries, but they

consider local contexts in terms of economic situation, local and regional entrepreneurial initiatives, capital and human resources and social structures.

Each region would wish to have its own Silicon Valley, but this will result in a market failure, if policies do not reflect existing economic traditions and features, formal rules and informal norms. As a strong correlation exists between clusters and industry concentrations, emerging clusters in developing countries could be supported taking into consideration all components of the theoretical approaches that will be explained in the essay: spontaneous elements, policy inducement of local governments and supporting institutions and the social approach, in order to enhance growth and competitiveness of local economies. The adoption of this eclectic approach would facilitate the process.

The methodology used consists in an extensive literature review and analysis of secondary sources on clustering worldwide. One of the most comprehensive and systemic approaches of clustering for developing countries, and the one I will be using, is put forward by Mario Davide Parilli (2007). Appendix 1 presents all its comprising elements of the approach. Parilli tries to investigate the most important theoretical approaches to SME clustering in order to identify the most important variables for better understanding this economic reality and its development process and how these different perspectives can orient the development policy framework. Each approach will be analyzed in this essay in order to show the importance of each of them. A combination of these approaches, called as the eclectic approach while drafting policies to enhance development of emerging clusters in developing countries, could be taken into consideration by policy-makers. The paper will also try to give a brief overview of the actual situation of Albanian economy in relation to clusters and some lessons learned from Italian industrial districts.

## ***DEFINITIONS OF CLUSTERS***

Different authors have presented a variety of definitions for clusters related to the features they attach to them. Michael Porter (1990) have described clusters as "geographically proximate group of interconnected companies, suppliers, service providers and associated institutions in a particular field linked by externalities of various types". Porter explains cluster with his theoretical model called "the competitive diamond". The central part of this diamond is a "dynamic local context" that is interconnected with the four components (Appendix 2): Firm Rivalry", Demand Conditions, Supporting Industries and Input Conditions. The interconnection between the above components generates the "competitive advantage" of the cluster.

OECD (2005) refers to clusters as "local concentrations of horizontally or vertically linked firms that specialize in related lines of business together with supporting organizations". Clusters are also known as industrial districts, local production systems, learning regions or new industrial spaces. These concepts highlight different cluster aspects, their main theoretical building blocks, namely agglomeration economies, endogenous development theory and systems of innovation overlap (Moulaert and Sekia, 2003).

Parilli (2007) based on an extensive literature provides a variety of typologies of clusters:

1) 'Marshallian/Italian industrial districts', in which we find only SMEs that operate in a dense network of relations amongst firms and between firms and institutions;

(2) 'hub-and-spoke clusters', in which one or a few large firms locally based lead a network of subcontractors;

(3) 'satellite clusters', in which agglomerations of firms are led by large firms operating outside the clusters;

(4) 'state-anchored clusters', in which agglomerations of firms are led by state enterprises or institutions.

Developing countries needs to be determined, so that we can approach the feasibility of clusters' development in these countries. Sanford and Sandhu (2003) in their book on developing countries set four criteria to rank and assess countries' level of development: (1) per capita income, (2) economic and social structure, (3) social conditions and (4) the prevailing level of economic and political freedom. The level of per capita income is usually used by economists and they measure it through the foreign exchange conversion method and the PPP (purchasing power parity).

The World Bank and the United Nations publish annual data calculating per capita income levels for most countries using both methods. The UN Statistical Yearbook divides the world into two groups: countries in North America, Europe and the former U.S.S.R, Japan, Australia and New Zealand, which are said to be developed and all others are developing. This division obscures differences among countries. Another classification of World Bank divides them as Least Developed Countries (LDC), Low Income Countries (LICs), Lower Middle-Income Countries (LMICs), Upper Middle-Income Countries (UMICs) and High Income Countries (HICs) (ibid). Developing countries would be considered those that have a lower annual GNP per capita level than \$9,360 referring to East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa and South Asia and Sub-Saharan Africa.

## ***THE SPONTANEOUS APPROACH TO SME CLUSTER DEVELOPMENT***

Over the past 20 years, this approach enjoyed widespread recognition within academia and the relevant international agencies. This trend was also linked with the third democratization wave concept of Samuel Huntington. Countries that have lived under totalitarian regimes build their economy upon the basis of the inevitability of market liberalization. Economists and sociologists recognize the prime role of the market in the development of these SME networks. "The answer is unequivocal ... effective demand has been the transforming force', the driver behind the dynamics of growth at the cluster level" (Parrilli, 2007).

Michael Porter (2007) argues that "clusters emerge spontaneously based on market forces, and the process of cluster formation will occur naturally as new firms form, suppliers develop, infrastructure investments respond to local needs, specialized

institutions grow, and established firms elsewhere locate operations in growing cluster concentrations".

This approach can be illustrated with the Italian experience of clusters. Bianchi et al (1997) note that Italy has shown that in order to have a highly developed economy, it is not necessarily true that it must be based on large firms. In manufacturing sectors, Italy registers the highest EU percentage of SMEs, but Italian small firms agglomerated in clusters that are internationally successful tend to export high-quality goods. These are usually consumer goods, often connected to fashion industries, or other products valued for high-quality design, seen to be typically Italian. Italian SMEs are also strong exporters of agro industrial and food products. Within this approach 'joint actions' (for example, credit and export consortia, production and commercialization cooperatives) and 'external economies' (such as, free availability of skilled labor and information flows about innovations) - the two determinants of 'collective efficiency' - explain the competitiveness of these local production systems (Schmitz: 1995).

Within this theoretical stream the most fruitful and relevant policy level refers to the support action of local economic institutions and not to that of national or international agencies. In particular, it is "agreed that local policy should prioritize the delivery of real services to local producers as a way of enhancing the economic efficiency of the local system" (Parilli, 2007:61). This approach supports the market paradigm and does not attempt to develop clusters from scratch.

## ***THE POLICY-INDUCEMENT APPROACH TO SME CLUSTER DEVELOPMENT***

Theorists of this approach explain that SMEs while trying to agglomerate in clusters may encounter difficulties in the market chain. It is here that agents such as the local or national government or international organizations intervene in the market with laws and strategies in order to secure an effective local development.

The economic development may not be sustainable over the long term, as SME policies may generate low-skill/low-paid informal jobs often under poor working conditions in businesses that produce poor quality products, do not pay taxes and do not respect environmental regulations. Oliveira (2008) states that "competition from elsewhere or a weak position in a value chain can exacerbate the already poor business conditions making SMEs lose the little profit they had or reducing the already low salaries, leading to a "race to the bottom" situation". This author suggests that in order to avoid this situation clusters and their businesses should upgrade products, processes, functions and markets through continuous innovation, but upgrading opportunities for local firms and clusters depend strongly on the type of governance and other stakeholders involved.

Building up an efficient set of business associations and real services is important, but needs to be complemented with national and international institutions, rules and policies that favour the development of SMEs and their local production systems (Parilli, 2007).

## ***THE SOCIAL APPROACH TO SME CLUSTER DEVELOPMENT***

Many scholars of cluster development have tried to include in the understanding of the social approach the social embeddedness as essential in understanding their functioning. Other economists and sociologists have focused their attention in the different levels of trust that exists among SMEs in a cluster and how this impacts economic action.

Mark Granovetter (1985) has studied the problem of embeddedness and argues that "the economic behavior and institutions to be analyzed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding". He considers "the social embedding of economic action' and the context that lies "behind the market, where real societies exist".

Particular national societies and social features are analyzed, such as the Japanese 'goodwill', that takes the form of 'obligational contracting' and 'welfare corporatism' (Dore, 1983), or the Italian 'city-states' that take the form of 'merchant guilds' (Platteau, 1994). These examples illustrate national and local contexts that construct social ties and behavioral rules that are likely to support the development of clusters.

In addition, the level of trust must be taken into consideration while drafting policies of SME clusters. Some theorists (Becattini, 1990; Lorenz, 1992) underline the concept of trust as a facilitator of economic transactions. Trust allows firms to reduce their operating costs and creates what is known as the cluster's 'collective efficiency' .

These scholars highlight the role of the local social environment in the creation of an 'ascribed' type of trust, which turns out to be a key aspect of the spontaneous growth of the cluster in its first phase of development. This view links the creation of trust to the social environment of small town clusters, in which people create their own norms of behavior and interaction (Parilli 2007). Parilli (2007) notes that the shift to an 'earned-type' of trust, which is also called "calculative trust" provides the foundation for a more advanced stage of industrial development, in which the district finds itself amidst more competitive global markets. In this phase, a new type of trust arises to gain competitive advantage and to overcome 'the costs of non-cooperating'. This new type of trust seems to be based upon a sort of 'cost/benefit analysis'.

## ***SME CLUSTERS IN ALBANIA***

After the democratization process in the beginning of 90's Albanian economy is still facing problems of unemployment and development. According to World Bank<sup>56</sup> Albania classifies among the upper-middle-income economies or as categorized as economies in transition with GDP per capita varying from \$3,946 to \$12,195 annually. Appendix 3 (Bank of Albania: 2009) presents an overview of macroeconomic figures in Albania.

Turan and Cicek (2007) have stated that "SMEs are predominant enterprises and its share is reaching 98.8% in Albania" compared to "99.8 % in EU". This shows the

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<sup>56</sup> Classification of world countries as per the annual GDP income (Soubotina&Sheram: 2000)

advances in privatization and increase in entrepreneurial spirit in Albania. However, the entrepreneurial activity is still much lower in the EU. Mostly SMEs are concentrated in the trade and service sector in Albania. SMEs show higher productivity than large enterprises in Albania because big share of large enterprises is still state-owned and not yet restructured.

Even though there was a rapid growth of SMEs during the last decade, still they encounter many barriers such as fiscal barriers, financial and institutional barriers. There is no experience of formal economic clusters in Albania, and generally the existing complementary economies have resulted due to the need of the private initiative. A thorough policy inducement approach combined with the spontaneous and social approach is required in order to support these business initiatives.

Still, the government has prioritized the development of clusters in its own program. The program specifies industrial parks and complementary ports with the free economic zones as an instrument for fiscal encouraging of private local and foreign investments with the aim of reducing unemployment and exporting goods and services. It is also prescribed in the National Strategy of Development and Integration 2007 - 2013 (p.57) "the stimulation of the establishment of industrial parks and zones; establishment of new industries through domestic investment which will attract foreign capital". The need for building economic clusters is also expressed by the national strategies on "Innovation and Business Technology" and on "Business Development". Business Relay and Innovation Center within the Albanian Agency for Business and Investment has been established to fill the institutional gap in the Albanian innovation system and implement the programmes supporting actions of the Business Innovation and Technology (BITS) policy according to the Strategic Programme for the Development of Innovation and Technology of SMEs (2011-2016)(METE 2011).

## ***LESSONS LEARNED FROM THE ITALIAN INDUSTRIAL DISTRICTS***

Bianchi et al (1997) after analyzing Italian clusters of SMEs have emphasized that the development of a cluster of SMEs is a long-term process. Brusco (1990) has identified 4 models of SME clustering in Italy through which he explains the historical process of evolution of cluster in Italy: the simple agglomeration of craft enterprises between the 1920s and the 1950s; large firm-led industrial agglomerations in the 1950s and the early 1960s; traditional industrial districts from the late 1960s to the 1980s; and new competitive IDs from the late 1980s onwards.

Parilli (2007) argued that the four models identified by Brusco, represent a 'sequence' of stages in the growth trajectory of Italian industrial districts and he emphasizes the fact that passing through stages has been an essential aspect of their development. This consideration can have real meaning for cluster development in developing countries, where few or no steps have yet been experienced and where policy-makers often attempt to cross too many stages at once.

There might be alternative processes of development rather than the one proposed by Brusco and Parilli, but the most important issue to be underlined is that SME cluster development is a process, and can not grow in the "twinkling of an eye". As they

suggest small high technology firms could be the leaders of a development at the local level, making the presence of large firms redundant. Business incubators, technology parks and public procurement programmes may be other solutions that could stimulate local investment to shift production activities from craftwork to industrial production.

The Italian cluster experience offers two principal methodological lessons to those wishing to act in emerging countries to promote diffused development.

1. A strong capacity for territorial and sectorial analysis, combined with the ability to analyze social interaction is required.

2. It is necessary to evaluate the results of intervention, not only in terms of firm growth, but also in terms of general development of the territory. In this way the cumulative effects of changing competencies and know-how available in the area may be fully understood. Methods of monitoring the change process should therefore be built-in to interventions so that the local-level actors will be able to effectively observe changes and make future adjustment if necessary.

The lessons learned from the Italian experience from Bianchi et al (1997) analysis undertaken in the framework of UNIDO show that the formation of SME systems implies:

- some necessary macroeconomic and macro-institutional preconditions;
- a differentiated set of strategies, according to the stage of development of SME systems, the peculiarities of the sector, the characteristics of the territory and its human resources;
- active local governments and intermediate institutions;
- a great variety of policy instruments and actors, with a wide range of possible combinations.

## ***CONCLUSIONS AND POLICY RECOMMENDATIONS***

After explaining main determinants of SMEs clusters in a local development system, the best approach to adopt is the one that tries to combine the three main approaches of the development of clusters in Italy: the spontaneous approach, the inducement approach and the social approach. If all these elements are embraced and examined carefully the feasibility study of implementing cluster development projects in developing countries would result positive and successful.

These factors should not be taken in isolation from one another. They are interdependent factors and intrinsically linked that jointly produce a 'positive sum game' for the local system as a whole. All aspects: the natural convergence of small businesses in order to specialize and benefit by the sharing of knowledge, resources and technology innovation, known as collective efficiency, the inducement of governmental and non-governmental actors and the social networking embedded in the local individuals and community play essential role in the overall process.

Following the example of cluster initiatives in developed countries there is a need to design programmes for establishing and managing clusters including activities of:

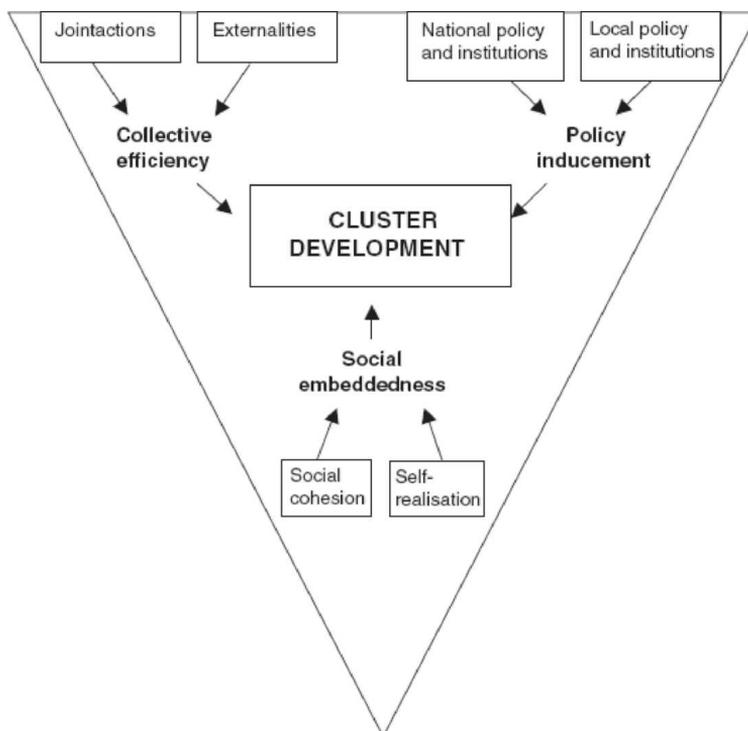
1. conducting regional clustering analysis,

2. developing cluster maps,
3. identifying key issues, clarifying value chains and identifying network leaders
4. Conducting SWOT analysis
5. Developing strategic action

Albania and other economies in transition require an approach of combining bottom-up/collective efficiency and top-down elements. There is a demand of integrating a formal policy for clusters' development and engaging horizontal measures and instruments whose basic objective is to strengthen the abilities of companies, institutions and organizations to work together in regional, national and international network structures.

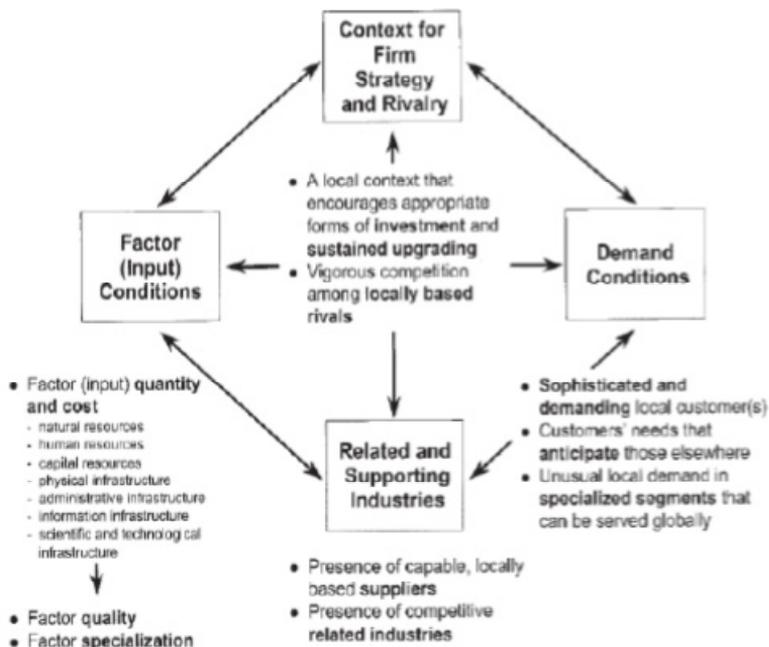
### *Appendix 1*

*A systemic approach to the interpretation of cluster development  
by Mario Davide Parrilli*



*Source: Parrilli, 2009*

*Appendix 2: Michael Porter's competitive diamond (Porter,1990)*



Source: Porter,1990

*Appendix 3*

*Key indicators of Albanian economy in years*

	2002	2003	2004	2005	2006	2007	2008	2009
Real GDP (in %) <sup>14</sup>	4.2	5.8	5.7	5.7	5.4	6.0	7.8*	4.9*
GDP (at current prices, in ALL mln) <sup>15</sup>	622,711	694,098	750,785	814,797	882,209	966,651	1,087,867*	1,143,373*
GDP (at current prices, in USD mln) <sup>16</sup>	4,444.8	5,694.0	7,303.4	8,156.1	8,993.0	10,693.0	12,966.2*	12,035.5*
GDP (per capita in USD)	1,437	1,831	2,336	2,597	2,854	3,394	4,073*	3,765*
Number of employed persons (in thousand) <sup>17</sup>	920	926	931	932	935	966	974	972*
Unemployment rate	15.8	15.0	14.4	14.2	13.9	13.5	13.2	12.8*
Inflation rate (y-o-y)	1.7	3.3	2.2	2.0	2.5	3.1	2.2	3.5
Budget deficit (including grants, as a share of GDP)	-6.1	-4.9	-5.1	-3.5	-3.3	-3.5	-5.5	-7.0
Public debt (as a share of GDP) <sup>18</sup>	62.9	58.9	56.5	57.4	56.1	53.5	54.8	59.5
External debt (as a share of GDP) <sup>19</sup>	21.0	18.4	17.2	17.3	16.5	15.2	17.9	23.1
Current account (excluding official transfers, as a share of GDP)	-10.3	-9.0	-6.8	-10.0	-7.3	-11.4	-15.8	-15.6
ALL/USD average exchange rate	140.1	121.9	102.8	99.9	98.1	90.4	83.9	95.0
ALL/Eur average exchange rate	132.4	137.5	127.6	124.2	123.1	123.6	122.8	132.1

Source: bank of Albania, Annual report 2009.

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## ***INTERNATIONAL TRADE AND FREE EXCHANGE AS A WAY OF MODERN EXPLOITATION***

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**Abstract:**Free market, as a starting global base, is unquestionably accepted. It is believed that its power brings wealth to everybody to the economic balance. Domestic economies are ruined, entrusted, fall in poverty, so as to build European in future. Respecting the requests of the free market and pieces of advice of globalists, so as to develop and successfully join European Union it is not necessary nowadays to have a large scaled companies and hard working within them. Instead, there is a need for incubators, workshops, family business and small and medium sized enterprises.

This paper specially elaborates: free trade – the way of global servitude and new economic systems.

**Key words:** Globalization, Trade, Development

**JEL classification:** F60, F10, O10

**UDC** 339.5(082); 339.13.012.42(082)

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## ***INTRODUCTION***

The last decade of the twentieth and first decade of the twenty-first century brought a new quality of goods and services, new ways of production, new philosophy and business culture, new rules of social and economic relations. The main motive of new production and socio-economic relations **is the maximization of profit at any cost**. Sometimes it seems that mercantilism is an economic theory in action. But the basis of today's philosophy of international trade is a free market for goods and services without tariff barriers, with significant non-tariff barriers and financial liberalization. The European Union as the most famous economic (political) regional organization promotes equality and land of equally happy and successful people. On the road to the equal and happy, countries that are not EU founding and is economically developed, actions of political and market policies (trade liberalization) are destroying their own economy, borrow and fall into poverty and a high dependency on developed countries. It creates the illusion that everything that is homemade is not good quality and all things that is from European Union necessary, the best and that it has no alternative.

To less developed and developing countries is imposed a dominant strategy for small and medium-sized companies, pointing out that they are, engine, of economy. The real positive elements and positive characteristics of small and medium companies (easy mobility, flexibility, lower equity in the establishment, etc.) are pointed out, but also it is forgotten that their function exists only if there are large companies that small and medium ones will work for. Small and medium-sized companies in the same field as the big multinational companies will never be able to seriously compete with these companies for the simple reason that big companies work on the principle of economies of scale, which lowers the per-unit cost, and thus achieves the administrative price competitiveness.

Underdevelopment and poverty naturally encourages the search for new solutions. Nothing is unnatural and nothing is illogical striving towards developed and creating a community with developed. However, the developed have already been developed, and aspiring to even greater development and in this way they need less developed and underdeveloped. Developed between themselves trade with high technology and highly sophisticated products. If these facts are in mind it could be concluded that underdeveloped and less developed are not required. However, underdeveloped are needed to share less sophisticated products and products with a lower technological level. They need to export all its excess goods and services, in particular they need to import raw materials and products with low technological processing. Primary agricultural products are among the most important products imported from less developed and developing countries.

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*RELATIONS BETWEEN LESS DEVELOPED, UNDERDEVELOPED  
COUNTRIES AND DEVELOPED COUNTRIES*

Totally free international market which is actually a free exchange between buyers and suppliers at the contract price has not been applied anywhere and it seems that there will not be applied. Although the creators and proponents of free markets promote abolition of customs duties and other fiscal barriers in order to promote international trade, non-tariff barriers restrict imports from less developed and developing countries, and encourage export in the developed countries. Because of a gathering of developed countries in an economic (political) organization and their “desire” to join them less developed and developing countries for their prosperity is neither honest nor economically justified. In fact if their primary goal is their own growth, development (enlarge of wealth, an increase in all of its resources, the development and use of new technologies, increased international trade and overall standard of living) and profit maximization, and it certainly is, then, the cooperation and the less developed and developing countries is aimed at further development and maximizing profits. Therefore, it is a complete illusion that the goal of developed countries is to get underdeveloped countries economically developed because it is contrary to any economic logic. Therefore, the free market do not fully fit the less developed and developing countries, free market fits the developing and less developed countries, but with the possibility that they can protect their production and their economic resources, primarily those where they are not competitive. David Goliath struggle in the economy has never had and never can have victory of the David. But this conclusion raises the question of what path and strategy development should have less developed and underdeveloped.

For less developed and developing countries free international trade is very important, it is the path and the way of acquiring new technology, knowledge, access to capital markets and other financial markets, it is the method and way of achieving exports and thereby obtaining foreign exchange. But despite that the less developed and developing countries dominantly must rely on their own strength and resources.

Reform of the public sector and reducing the volume and quality of content that is comparable, and it is safe to say the public sector is proportional to the developed countries. Less developed and developing countries, similar to the developed countries must identify and determine who is or which are the dominant industries will be backbone and support economic development. Medium and long term strategy of economic development must be an expression of consensus for all political parties and that will not be changed by changing the political elite in power or worse, it will not even start with its implementation as is the case with the strategy of economic development of Serbia 2006-2012 year. That strategy is adopted by one political party and the other political party, which came in power after first political party, didn't want to apply that strategy.

According to some data there is a billion hungry people on Earth (the FAO data, as on Earth's 870 million hungry people) agriculture as a sector must be the duty of all those countries which have the resources for agricultural production.

The world in which we live is constantly changing and improving in all aspects, and with increasing speed. Changes and improvements are taking place even in the

business world. As a result, a large shareholding companies and other international companies that have reached a very high level of development irresistibly penetrate the borders and full internal markets near and far countries from all continents. They bring with them a new quality goods and services. And at the same time - a new philosophy, a new culture of modern business, the new rules of social and economic relations.

In this way, these foreign companies influence and motivate local companies to enhance domestic competitiveness which also means better positioning or the possibility of a better position in other markets. It is known that those companies that are competitive on the domestic can not be a competitive international market.

Competition requires a corresponding change of each manufacturer and the national economy as a whole. This is particularly important in less developed countries, which are characterized by relatively low operating culture. Therefore, a competition represents new serious exam and risk in the business, but at the same time, in certain circumstances, and opportunities.

International exchange offers consumers a new quality and provides them with the opportunity the actual use of his right of choice of goods and services. It contributes to changes in the perception of consumers, arouses in them a sense of self-esteem and makes them more demanding to suppliers.

In addition, competition encourages manufacturers and other suppliers of goods and services to the development. It provides new benefits to those who strive for progress and achievement of the required level of perfection. Unmercifully destroys all who show lower levels of its achievements and requirements. There is the problem of cooperation less developed, underdeveloped and developed countries. Less developed and developing countries are often unable to participate in market competition with developed countries.

### ***FREE TRADE - A CHANCE FOR DEVELOPMENT OR...***

Free trade allows the expansion of international trade. It is an instrument of globalization and globalist processes in all spheres of social life. But at the same time free trade is the greatest influence on boosting economic development of most developed countries. Objective in these countries, knowledge and technology have advanced so much so that through economies of scale and price policy can prevent the development and operation of industries in less developed countries. The famous German economist Friedrich List, in his work *The National System of Political Economy* (1841), in the first half of the nineteenth century, when Germany was developing country argued that Germany at any cost does not agree to the English influence on the introduction of free trade. **Why is that? Because it is still in development and could not compete equally with English.**

After the Second World War, an economically developed America that was not destroyed in the war, sought to find new markets for their products. That is why in 1947 under the General Agreement on Tariffs and Trade (GATT) managed to free trade rise to the leading principle of the world economy. Since then, the United States took a firm and unyielding stance in the fight for the abolition of customs duties. "The

United States is under the GATT engaged unilaterally, protecting its national interests."(Stiglitz J., 2005., 215).

GATT, under the influence of the United States, was transformed in 1995. in the World Trade Organization (WTO). As part of the act of establishment of the WTO there is the GATT agreement which means that the principles of GATT - an integral part of the free trade principles of the WTO. So the United States as one of the most developed countries in the world and continues to insist on free trade or no trade barriers that US makes the most of it. "This is a hard position typical of hegemonic who are weak, and that their position stubbornly wants to defend himself, as he is still the only remaining world power." (Stiglitz, 2005)

The meaning of free trade is very important, since the success of globalization measures increasing share of international trade in world GDP. The indicators on the participation of world imports in a world gross domestic product from 1938 to 1996 show that more than 11% as follows 7% (1938) to 10% (1970) and 18% in 1996. This led to the expansion of foreign direct investment (FDI) in underdeveloped countries and countries in development. "Investments have increased from 2.2 billion dollars in 1970 to 154 billion dollars in 1997, when the global financial market daily selling money value of 1.3 trillion dollars, of which 2% were trade transactions in goods." (Williamson,1998).

Globalization has led to the fact the money started running out of underdeveloped toward developed countries. Underdeveloped countries have lost their money and had to look for it in developed countries. The reason is the release of the financial markets.

**Developed countries released their financial markets at the height of its financial strength, 70s of the last century, and the less developed countries are required, through globalization, to do so at the lowest level of their own development.** The free financial market is natural that weaker currency runs in stronger, which means that underdeveloped countries are losing their money, no opportunities for development and without their monetary policy.

Today's globalization is not recent, but the third in the series. It dates back to the 1760s when the theory is dominated by a policy in the short term, at the French court, called physiocracy.

Second time with globalization was attempted 1840th year. Then England as the most industrialized country has moved with attempted fraud, because at that time England had no ability to provide food for their own population, so the decision to lift tariffs on agricultural products. England as an industrialized country, persuading the underdeveloped countries, it is best for them and useful to them (underdeveloped countries), to supply duty free raw materials, so England, as the most industrialized country, will process them in the cheapest way and deliver to other underdeveloped countries without tariffs cheapest finished products. This process was then called free trade, and today it is called globalization. England managed to convince the majority of European countries to free trade, except France and Russia. In countries that have managed to convince the free trade, there has been an accumulation of social problems, but in 1848 turned into a revolution.

Free trade advocated by the British were strongly oppose the United States. United States built its steel industry by protecting the duties that went up to 100%.

Abraham Lincoln said, "**Free trade is a good thing, just a shame we do not have the money for it.**"(Erik,2006).

**Such a position, in a deep conviction of the author, should bear in mind the most of the politicians and economists in Serbia.**

One of the main reasons why the United States liberated from England in 1776 is that England, prohibited any industrial production in the North American colonies, except the production of tar and wood but for the use of English

Economic war between the U.S. and England managed a full 150 years (until the Second World War), and right at the beginning U.S. have noticed that the English one talk and the other work, because free trade has had a much higher duty.

It is well known slogan of 1870: "Do not listen to what these English talk, but do what Englishman do"(Eric,2006). Lord Lionel Robbins said: "We will be very wrong if we recommend to the world advices of English economists. What they recommend to the world is exactly what is harmful to apply in their own country. "(Robbins,1952).

Today this is a base of policy globalism implemented by United States. divisions, fights, create conflict, making small economically helpless and dependent state, a permanent state of neither war nor peace, which does not allow economic development.

In underdeveloped countries and developing countries is insisted on decisions that are totally different from the decisions in their own country. To accomplish this plan, it is necessary to engage its own advisors and consultants to assist local staff with financial support. The main objective is to make the wrong decision, as the main method of economic enslavement.

Today's globalization is significantly more successful than the previous ones. It takes much longer, because the free international trade visibly advanced. The debt of less developed extremely underdeveloped and transition countries is on a boom and the poverty of less developed countries in developing and transition countries in the era of globalization sharply increase. Obligation of former socialist countries for the period 2000-2012 year, billions of dollars are given in Table 1

*Table 1: Summary of indebtedness of selected countries*

ordinal.	country	Obligation by year in billions \$				Area in km <sup>2</sup>	population
		2000	2003	2009	2012		
1.	Czech Republic	21,3	2003	76,8	90,18	78.866	10.273.000
2.	Hungary	29,6	28,0	116,8	170,00	93.03	10.022.000
3.	Poland	57,0	42,8	201,8	310,2	312	38.650.000
4.	Slovenia	6,2	86,8	55,0	61,23	20.256	1.988.000
5.	Slovakia	10,3	11,3	69,5	72,94	49.036	5.402.000
6.	Lithuania	2,5	18,3	36,4	31,37	65.301	3.698.000
7.	Latvia	0,8	7,7	38,0	35,34	64.61	2.417.000
8.	Estonia	1,6	6,8	22,5	25,92	45.225	1.435.000
9.	Romania	9,3	7,0	95,5	125,9	237.5	22.435.000
10.	Bulgaria	10,4	18,3	49,3	43,24	110.994	8.167.000
11.	Serbia	14,0	12,0	31,7	33,41	102.173	10.616.000
12.	Croatia	9,9	14,0	59,4	56,542	56.542	4.437.000
13.	Bosnia and Herzegovina	3,4	23,5	8,4	9,05	51.129	3.297.000
14.	Montenegro	-	-	0,6	1,70		
15.	Macedonia	1,4	-	5,4	6,56	25.713	2.031.000
16.	Albania	1,0	1,9	1,5	5,28	28.748	3.411.000

Source: [http://www.geografija.net/evropa\\_resp.asp?id=1](http://www.geografija.net/evropa_resp.asp?id=1) for 2000, 2003, 2009 and CIA world factbook for 2012 year

Quick, and especially in recent times, an unprecedented increase debt of less developed countries. Particular concern is the growth rate and height of the debts of countries that are members of the European Union, as higher debts of those countries which are at the door of joining the European Union. If we add the volume growth of the current account deficit, we see that the current account deficit in countries that are not members of the European Union is extremely high. The member countries of the European Union balance of payments deficit are much better. The reason lies in the benefits of increased volume of exports made by foreign companies located in those countries. In the table 2 is given the import and export of the former socialist countries, in billions of dollars for the 2009 and 2012 year.

Table 2: Summary of imports and exports of selected countries

Country	2009		2012	
	export	import	Export	import
Czech Republic	112,6	103,1	134,1	129
Hungary	82,5	75,9	105,1	98,2
Poland	139,5	144,3	192,2	206,5
Slovenia	22,6	23,4	28,42	29,83
Slovakia	55,3	53,7	77,82	74,29
Lithuania	16,4	17,5	29,01	31,41
Latvia	7,2	8,9	17,38	17,87
Estonia	9,1	9,8	12,42	15,92
Romania	40,4	49,7	67,72	78,31
Bulgaria	16,4	22,1	27,67	30,32
Serbia	8,4	15,8	11,35	19,01
Croatia	10,3	21,0	12,34	20,76
Bosnia and Herzegovina	4,4	8,8	5,427	10,18
Montenegro	0,2	0,6	489,2 millions	2,4
Macedonia	2,7	4,8	2,002	6,511
Albania	1,0	4,3	2,121	5,219

Source: [http://rs.alumnieeni.com/rs\\_rs.asp](http://rs.alumnieeni.com/rs_rs.asp) for 2009th and CIA world factbook for 2012th year.

European Union's intention is not at all difficult to see through. One thing is saying and the other one is doing. The story is about the bright future of a united Europe, but they concerned about depression, because in front of storm of real economy from China crumble parity bloated economy of the West.

It is evident that the search for solutions to go out so a significant part of the burden of trying to shift to less developed countries through debt and balance of payments deficit. Western countries have a large economic downturn, and as can be seen from the data that all major economic countries are far over Maastricht limits, for example. Germany, which in 2002 exceeded the criteria of debt and deficit criteria of the Maastricht (Otte, 2009).

Given the strategy applied by America and United Europe against the third world, it is safe to say, "Do what the Americans were doing, not what they are talking about." (Edgar, 2007).

Globalism goes a step further because focused on the degradation and destruction of the state. Therefore, it is much more dangerous than communism, because the state

is the only one guarantor of the nation. Globalism is a complete negation of the former historic road that is mainly based upon the concept of developmental successes of some of the people who are competing with each other.

Globalism turned to the state and its degradation. "Observing the endless list of errors that were committed by poor countries" (Dani, 2008) those "concerned" for the increasing poverty the United States Government, the World Bank and the International Monetary Fund entered into in 1990. The Washington Agreement which provide recommendations for the reform of economies of less developed countries. The agreement was first intended for the countries of South America and sub-Saharan Africa, but with the fall of communism, it has focused on the former countries of the Eastern Association. Degradation of the state, globalists (Washington Agreement, the European Union, the IMF, World Bank, etc.) prevent less developed countries to replicate the development path of developed countries. All developed Western countries have developed their economies by protecting them with tariffs and other protection until the economic adjustment with other developed countries.

Proposal of the globalists in Washington Treaty is clear. The state should withdraw from the economy, and leave everything to the forces and freedom of the market. The results of these changes and their globalization advices are catastrophic for some areas.

The height of cynicism comes from Jeffrey Sachs, World Bank consultant, who recommended the Mongols to specialize in software production, though in the country outside the capital city only 4% of the population has electricity (Eric, 2006). In Table 3 is given the Washington agreement with the original proposal and the "extended" measures to be taken.

*Table 3: Measures of the Washington Treaty*

Washington Agreement	
original	"Extended"
1. Fiscal discipline	11. Corporate Governance
2. Redirection of public spending	12. Fight against corruption
3. Tax Reform	13. Flexible labor markets
4. Financial liberalization	14. Accession to the WTO
5. Unified and competitive exchange rate	15. Financial standards
6. Liberalization of the trade regime	16. Cautious liberalization of the capital balance
7. Openness to foreign direct investment	17. Completely fixed or flexible exchange rate
8. Privatization	18. Independent central bank
9. Deregulation	19. The social protection system
10. Protection of property rights	20. Targeted measures to reduce poverty

It is evident that the "extended" Washington Agreement represents a significant interference in the affairs of individual states. It is clear that this applies to the European Union as a form of realization of globalization and the Washington Treaty on European soil. Washington Agreement did not give the desired results in the counties that were meant, quite the opposite of poverty is given unprecedented proportions.

"The transition crisis" in the former socialist countries is deeper and longer than expected. That is why today question is not whether the Washington treaty is dead or alive, but what will replace it.

**The basic method of economic destruction of the less developed and their economic capturing is preventing to replicate the path of development of the developed countries.**<sup>60</sup> They are required that country should be excluded from the economy, and the economy should cross into the hands of the free market. From the lower and extremely underdeveloped is required to introduce free market that will be the foundation of their economic system. Unlike developing countries, developed countries have not developed their economies to the free market. On the contrary, it is quite the opposite. They were protecting their economies high customs duties and other protections as well as the monetary function of protecting them from unwanted influence. This protection is prohibited for the less developed by imposing free market. For these reasons they were led to their full economic destruction, visible. This is a known method developed countries, which in practice has given exceptional results. It is necessary to drain the underdeveloped land, then buy up all the cheap, and allow citizens (workers) to work for miserable wages. Based on the results this is the final cost of joining the European Union.

We can not expect globalism to be organized for the reasons that contribute to the development of less developed countries. The point is on a completely different side of that, on side of economic and any other enslavement which are evidence and other painful economic history. Destructive power is now in the open market. Because nothing like an open market does not destroy so thoroughly economies of the developing countries. All this is done without resistance, with the full cooperation and support of local factors. It is only required to convince and force the impossible, on bright economic prospects of the open market.

**Strategy of globalization capturing is mainly in the following runs. Induce of international tension, controversy, local wars, divide and chop up country and opposition forces must be brought to power.**<sup>61</sup> As much as possible impoverish country persuasion, encouragement and forcing the wrong decision. In addition, it is necessary to gradually credit that it does not feel excessive loss of their own economy, as it may cause unwanted reactions. Impoverished easily accept assignment and submit the final goal of economic globalization. When you enter the public and trespassing valuable economic assets and when others are big enough, the economic rationality of the globalization shows its true colors.

The essence of globalization is the dominance of big capital over national interests. Capital that have been painstakingly created by domestic workers is going overseas, whose workers are employed, while they remain jobless. All nature of globalism is in economic relations of the developed countries towards China and other large countries that do not accept debit or of any sale, and can not be forced. Then, due to cheap labor occurs outflow of capital from developed countries, which already faces fierce opposition from the developed West. It is assumed that in less than a decade it will come to a shift of the world economic center from the United States to China.

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<sup>60</sup> Author's note

<sup>61</sup> Author's note

## ***NEW ECONOMIC SYSTEM***

If you do not want to completely economically perish, we need a radical change of the economic system. The current path of self-destruction should abandon. It has to start a completely new path of development. **In author's opinion, it should not invent anything new but repeat the path of development of the developed countries.** This means primarily the protection of national and local natural resources. Serbia has a number of very important national natural resources such as agricultural land, rivers, fresh and mineral water, etc... **Path of the completely free market is not suitable for the less developed and developing countries simply because they are unable to use all the instruments of the free market.** Even developed countries very carefully protect themselves from completely free from the market via a variety of non-tariff barriers (standards, certification, quotas, etc).. Today it is obvious that this was not the way of the free market, but strong denial of the state.

Advisers from developed countries' governments recommended the development of small and medium companies as engines of economic development, without development of large companies. Same principle also recommend lenders such as the World Bank, IMF, etc.. There is no dispute that the small and medium companies are necessary, that they are more flexible and more mobile, but they alone without the development of large enterprises can not develop underdeveloped economy.

Long as the World Bank and consultants of the International Monetary Fund advised the South Asian countries to develop their small and medium enterprises as a key to the success. The more they listened to advisers situation in these countries was getting worse. When the South Asian countries have decided to stop listening to advices and started the construction of large (big) companies, which have been caught clusters of small and medium companies situation has radically changed (Milojevic, 2010). Development in South Korea, Taiwan, Malaysia, Thailand, set off an unprecedented pace. Today these are South Asian tigers in the economy.

A very important pillar in the construction of the economic system is in development of shareholding because the wheel of development is in the property. Economic development is nothing more than the development of property. It is necessary to leave the lower forms of ownership and property relations conquer higher enrichment capacity. That means that the key of the wealth is in the richness of the shareholders, and when we have rich shareholders there will be jobs and salaries for the workers.

Free market, as a theoretical concept in its full meaning nowhere has never existed, especially lately. Instead of the free market, there is now a strong role of the state, which promotes its own, rather than market action. Everything that was accounted by its development developed countries, it is now, by promoting free markets, prohibited to the poor and less developed countries. Free market does not develop, it destroys the underdeveloped countries, because it is fundamental globalist weapons of destruction less developed. Although it is known that the state was not a good businessman, its role must be very important. The state in modern conditions must be interventionist role. **The free market does not provide the balance but the imbalance and therefore it is necessary that state acts in terms of recession,**

**depression and expansion. Free markets just can not solve all the problems of the market and that is why the state needs to create an environment for market-effects and influence on the market when it comes to imbalance**

## ***CONCLUSION***

Globalization raises sharpening competitive struggle in the market of any country. It requires a corresponding change of each manufacturer and the national economy as a whole. Therefore, a globalization represents new serious exam and risk in the business, but at the same time, in certain circumstances, and opportunities. Free trade as an instrument of globalist process encourages the development of the most developed countries. Developed countries released their financial markets at the height of its financial strength, and the less developed countries are required, to do so at the lowest level of their own development. The free financial market is natural that weaker currency runs in stronger, which means that underdeveloped countries are losing their money, no opportunities for development and without their monetary policy.

The basic method of economic destruction of the less developed and their economic capturing is preventing to replicate the path of development of the developed countries. They are required that country should be excluded from the economy, and the economy should cross into the hands of the free market. From the lower and extremely underdeveloped is required to introduce free market that will be the foundation of their economic system.

A very important pillar in the construction of the economic system is in development of shareholding because the wheel of development is in the property. Economic development is nothing more than the development of property. Therefore it is necessary to develop relations of higher degree of enrichment because rich and wealthy shareholder means rich and wealthy employee.

Market is modern achievement of economic relations, it encourages competition, increases the quality of products and services, lower prices, etc., but it was not enough for the successful functioning of the economic system. In today's market conditions, government's role in creating the environment and determining strategic directions of economic development and the impact of the interventions on the market, how to market goods (stockpiles) or the impact of the financial market (open surgery) as well as in the conduct of consistent economic policies that are mutually agreed (monetary, fiscal, trade, etc..) is unavoidable.

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***PART TWO***

***ENTREPRENEURSHIP AND FINANCE***





# ***THE IMPACT OF GLOBAL ECONOMIC AND FINANCIAL CRISIS ON FINANCIAL POSITION OF THE ENTERPRISE FROM SERBIA***

***Dragana Beslic***<sup>62</sup>  
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**Abstract:** The survival, growth and development of enterprise, and therefore and the ability of finance enterprises in conditions of the global economic - financial crisis, were determined by financial position of the enterprise. The financial position of the enterprise is expressed its quantity and structure of the assets and capital, and by their interrelations - which are recorded in the balance sheet and income statement of the enterprise. The rating of financial position of the enterprise is based on the analysis of short and long term financial balance, analysis of indebtedness and the analysis of reproductive performance of the enterprise.

The management of the enterprise based on analysis of financial position of the enterprise can develop a strategic option for the prevention and elimination of consequences of current economic - financial crisis and take action (measures) that will lead to profitable growth and development of the enterprise in the future. Therefore, the subject of this paper is devoted just it. The main objective of this paper is to show a practical example of analysis of financial position of the enterprise - factory of the leather "Ruma" from Ruma for the period since 2006 until 2009 year, which to management of enterprise serves as the basis for conclusion on the development of the enterprise in conditions of the global economic - financial crisis. In this paper are used following research methods: an overview relevant scientific literature, the method of analysis, the method of synthesis, the method of induction, method of deduction, historical method, mathematical method, ratio analysis, comparative method, a case study.

**Key words:** Economic and Financial Crisis, Enterprise, Analysis of The Financial Position, Management, Development

**JEL classification:** M41

**UDC** 339.9(497.11)(082); 658(497.11)(082); 339.747(082)

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## ***INTRODUCTION***

The environment of the enterprises in Serbia is very dynamic and susceptible to frequent financial and macroeconomic instabilities. The effects of the global economic crisis are began to be felt in Serbia and other Western Balkan countries in the last two quarters of the 2008th year. On the management of the enterprise is to develop a strategic option for the prevention and elimination of consequences of the crisis and that he takes actions (measures) that will lead to a desirable future growth. So, in order the enterprises in a rapidly changing business environment survived in the market, with an orientation to their future development, support of management of the enterprise is of great importance. The managers (leaders) are required to invest the effort aimed at removing crisis of situation and taking different strategies restoration (healing) of the enterprise that will strengthen the financial position of the enterprise and contribute to the establishment of financial balance.

The financial position the enterprise is determined by the state of financial balance, indebtedness, solvency, maintaining the real value of equity and reproductive ability. It can be: good, acceptable and bad. Good financial position of the enterprise is if financial balance provides security in maintain liquidity, if is the indebtedness such that the enterprise provides full independence and good reliability its creditors, if it is solvent, if the enterprise at stable monetary unit from the financial results significantly increasing equity, and in terms of inflation from effect of revaluation and the financial result increases the real value of equity capital and if the enterprise from own funds financed simple and part of expanded reproduction. Acceptable financial position of the enterprise is if financial balance provides maintain liquidity (without security), if is indebtedness such to the enterprises provides the relative independence and relative safety its creditors, if it is solvent, if is the enterprise at stable monetary unit from the financial result moderately increased equity, and in terms of inflation from effect of revaluation and financial results maintains the real value of equity capital and if the enterprise from its own financed simple reproduction. Weak financial position of the enterprise is if the financial balance does not provide liquidity, if indebtedness does not provides the independence the enterprises and security of its creditors, if the solvency of the critical, if the enterprise under a stable monetary unit from the financial results does not increased equity capital, and in terms of inflation from the effect of revaluation and the financial results do not maintain the real value of equity capital and if the enterprise from own funds can not finance simple reproduction.

The main objective this paper is to show a practical example of the analysis of financial position of the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year, that serves the management enterprise as a basis for reasoning about the survival and development of the enterprise. In this paper autors are started from next hypothesis: the management of the enterprise on based on analysis of financial position of the enterprises can assess the survival, growth and development of the enterprise in turbulent business environment and therefore to take appropriate control actions. In the proving of the hypothesis in this paper are used the following research methods: case studies, ratio analysis, comparative method, the classical

methods of analysis, methods of synthesis and historical method. This paper presents an analysis of the basic parameters of the financial position of the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year. For this analysis, we are used data from annual financial statements of the enterprise observed for 4 consecutive years (2006th, 2007th, 2008th, 2009th), because already felt the first effects of the global economic and financial crisis.

## ***SHORT-TERM FINANCIAL BALANCE ANALYSIS***

The enterprise Factory leather "Ruma" from Ruma ([http://www.fabrikakoza.net/index\\_main.html](http://www.fabrikakoza.net/index_main.html)) was founded 1936 year as a factory for the production and processing of leather (cow, pig and horse), dressing and dyeing in privately owned. Factory leather "Ruma" for over of 7 decades long work, is specializing in the production of vegetable and chrome tanned leather from raw hides of cattle, which are professional selected from the best sources throughout the Republic of Serbia. The factory has about 200 employees specialized workers and engineers that their knowledge and skills are applied at all stages of the production process. The result of this potential is that the processing capacity going in the range of 20-25 t of beef and pork skin daily, and the current utilization of these facilities is at 80%. Product range factory includes leather products from technical leather and leather for safety equipment, leather for clothing, footwear, civil, military and police program, leather for modeling, interior furniture, a luxury leather accessories. Continuously improving its business, enterprise Factory leather "Ruma" at the end of 2008 year is established the Institute for the skin, which is engaged in the research and quality control of finished leather and leather products compared to current standards. "Vulin-comerc" is the majority owner of enterprise Factory leather "Ruma" since 2005 year. Since its foundation, enterprise Factory leather "Ruma" was going through a series of status and organizational changes.

The mission of the enterprise Factory leather "Ruma" from Ruma is establishing and nurturing partnerships through accurate and reliable delivery of the contracted product quality to requirements customer and the relevant regulations. To be customer satisfaction has led to the highest level of systematic and documented water policy of quality, with the development of new technologies with the constant improvement of methods and means of production. Introduction of quality assurance system according to ISO 9002 and certification of the Federal bureau for standards is another confirmation of superior quality products and team work, but also the obligation to is on perseveres.

According to IAS 1 - Presentation of financial statements complete set of financial statements for enterprise Leather Factory "Ruma" as a middle entity includes (PRSP, 2008, 5): 1. Balance sheet, 2. Income statement, 3. Statement of cash flows, 4. Statement of changes in equity and 5. Notes to the financial statements. On based information from the financial statements of internal and external users (managers, owners, creditors, government etc.). (Vujević K., Balen, M., 2006) will receive information enabling them to make good business decisions and more efficient

operations. The main task of the financial analysis is to establish a clear picture (diagnosis) of financial and business situation of the enterprises. Any serious financial analysis based is on data and information from financial statements (Bragg, M., S., 2007).

Managers of the enterprise Factory leather "Ruma " from Ruma are perform a comparison of income statement and balance sheet through a number of time intervals in order to determine trends in business and planning business processes in the future. Horizontal analysis balance (Rodić, J., and others, 2011, 141) is a comparison of balance sheet items in the balance sheet, income statement and statement of cash flows for two or more years. Through horizontal analysis, he is observed tendencies and dynamics of changes in certain balance sheet items between the observed period, on based which it is possible to determine problem areas of business. Changes are to be expressed in absolute numbers, percentages and indices. The index is the ratio of two sizes showing their relative change (variation) in the observed period: Index (relative) change = amount of change in the current period/amount of change in the past \* 100, Table 1. and Table 2. showing the balances the enterprise Factory leather "Ruma" for four business years (since 2006 until 2009 year.) And indices obtained by comparison of the data (value) from the current fiscal year compared to the data from the previous fiscal year.

*Table 1: Income statement of the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year*

**in thousands dinars (RSD)**

POSITION	2006	2007	2008	2009	Index 2007/06	Index 2008/07	Index 2009/08
<b>A. OPERATING REVENUES AND EXPENSES</b>	644.133	908.360	963.858	692.603	141	106	72
<b>I. OPERATING REVENUES (1+2+3-4+5)</b>							
1. Revenue s from sales	581.723	816.623	872.659	667.631	140	107	77
2. Revenue s from activation effects and goods							
3. Increase values stock effects	47.933	71.500	73.386	5.750	149	103	8
4. Reductio n values stock effects							
5. Other operating revenues	14.477	20.237	17.813	19.222	140	88	108
<b>II. OPERATING EXPENSES (1+2+3+4+5)</b>	680.589	911.354	913.985	671.417	134	100	73

<b>1. Cost of goods sold</b>	38.035	127.826	207.723	44.375	336	163	21
<b>2. Cost of materials</b>	422.313	584.530	480.702	394.621	138	82	82
<b>3. Costs of earnings reimburseme nt of earnings and other personal expenses</b>	147.020	133.608	135.261	132.090	91	101	98
<b>4. Costs depreciation and provisions</b>	24.023	20.240	19.131	17.693	84	95	92
<b>5. Other operating expenses</b>	49.198	45.150	71.168	82.638	92	158	116
<b>III. OPERATING INCOME (I-II)</b>			49.873	21.186		0	42
<b>IV. OPERATING LOSS (I-II)</b>	36.456	2.994			8	0	
<b>V. FINANCIAL REVENUES</b>	22.910	10.643	41.560	22.221	46	390	53
<b>VI. FINANCIAL EXPENSES</b>	16.241	9.538	52.174	44.616	59	547	86
<b>VII. OTHER REVENUES</b>	144.573	22.166	4.161	16.075	15	19	386
<b>VIII. OTHER EXPENSES</b>	26.413	3.094	36.602	1.829	12	1183	5
<b>IX. OPERATING INCOME BEFORE TAX (III-IV+V-VI+VII-VIII)</b>	88.373	17.183	6.818	13.037	19	40	191
<b>X. OPERATING LOSS BEFORE TAX (IV-III-V+VI-VII+VIII)</b>							
<b>XI. NET OPERATING REVENUES THAT IS DISCONTINUED</b>		1.229			0		
<b>XII. NET OPERATING LOSS THAT IS DISCONTINUED</b>							
<b>B. INCOME BEFORE TAX (IX-X+XI-XII)</b>	88.373	18.412	6.818	13.037	21	37	191

<b>V. LOSS BEFORE TAX (X-IX+XII-XI)</b>							
<b>G. INCOME TAX</b>							
<b>1. Tax expense period</b>							
<b>2. Deferred tax expenses of period</b>							
<b>3. Deferred tax revenues of period</b>	281	3.023	4.037	2.133	1.076	134	53
<b>D. NET INCOME (B-V-G1-G2+G3)</b>	88.654	21.435	10.855	15.170	24	51	140
<b>D. NET LOSS (V-B+G1+G2-G3)</b>							

Source: <http://www.fabrikakoza.net>

The balance sheet on side the asset has applied net principle - does not show cost value and allowance value, but the present value current and previous year.

Table 2: Balance sheet of enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year

in thousands dinars (RSD)

POSITION	2006	2007	2008	2009	Index 2007/ 06	Index 2008/ 07	Index 2009/ 08
<b>A. FIXED ASSETS (I+II+III+IV+V)</b>	316.524	345.726	285.265	277.562	109	83	97
<b>I. Unpaid registered capital</b>							
<b>II. Goodwill</b>							
<b>III. Intangible assets</b>	144	101	58	14	70	57	24
<b>IV. Property, plant, equipment and biological assets</b>	310.977	340.250	279.302	271.643	109	82	97
<b>1. Property, plant and equipment</b>	303.708	335.856	279.302	271.643	111	83	97
<b>2. Investment property</b>	7.269	4.394				0	
<b>3. Biological assets</b>							
<b>V. Long-term investment</b>	5.403	5.375	5.905	5.905	99	110	100

<b>1. Participation in capital</b>	160	132	662	662	83	502	100
<b>2. Remaining long-term investment</b>	5.243	5.243	5.243	5.243	100	100	100
<b>B. CURRENT ASSETS (I+II+III)</b>	774.084	699.267	955.719	926.863	90	137	97
<b>I. Inventories</b>	455.737	421.580	482.752	467.796	93	115	97
<b>II. Permanent assets intended sales and operating assets that are discontinued</b>				7.328			0
<b>III. Short-term receivables, investment and cash</b>	318.066	274.383	465.356	451.739	86	170	97
<b>1. Receivables</b>	143.125	145.997	312.019	270.915	102	214	87
<b>2. Receivables to more paid tax on income</b>	14.414	14.414	14.414	14.414	100	100	100
<b>3. Short-term investment</b>	100	100	25.299	100	100	25.299	4
<b>4. Cash and cash equivalents</b>	154.413	113.172	110.475	162.633	73	98	147
<b>5. Income tax and ATA</b>	6.014	700	3.149	3.677	12	450	117
<b>V. POSTPONED TAX ASSETS</b>	281	3.304	7.611	9.744	1.176	230	128
<b>G. OPERATING ASSETS</b>	1.090.608	1.044.993	1.240.984	1.214.169	96	119	98
<b>D. LOSS ABOVE HEIGHT OF CAPITAL</b>							
<b>D. TOTAL ASSETS (G+D)</b>	1.090.608	1.044.993	1.240.984	1.214.169	96	119	98
<b>E. OFF-BALANCE SHEET ASSETS</b>			27.544	9.784		0	36
<b>A. CAPITAL (I+II+III+IV+V-VI-VII)</b>	897.682	901.042	898.857	913.652	100	100	102
<b>I. Nominal paid-in capital</b>	378.749	378.749	378.749	378.749	100	100	100
<b>II. Unpaid enrolled capital</b>							
<b>III. Reserves</b>	438.487	438.487	438.487	438.487	100	100	100
<b>IV. Revaluation reserves</b>							

<b>V. Retained profit</b>	88.654	83.806	81.621	96.416	95	97	118
<b>VI. Loss</b>	8.208				0		
<b>VII. Purchased own stocks</b>							
<b>B. LONG-TERM RESERVES AND LIABILITIES (I+II+III+IV)</b>	192.926	143.951	342.127	300.517	75	238	88
<b>I. Long-term reserves</b>		1.355	1.347	842	0	99	63
<b>II. Long-term liabilities</b>	50.481	50.632	56.616	40.849	100	112	72
<b>1. Long-term loans</b>	50.481	50.632	56.616	40.849	100	112	72
<b>2. Other long-term liabilities</b>							
<b>III. SHORT-TERM LIABILITIES</b>	142.445	91.964	284.164	258.826	65	31	91
<b>1. Short-term financial liabilities</b>	108.511	20.486	205.852	168.650	19	1.005	82
<b>2. Liabilities by the assets intended sales and operating assets that are discontinued</b>							
<b>3. Operating liabilities</b>	25.013	48.846	62.381	81.673	195	128	131
<b>4. Other short-term liabilities</b>	8.371	21.615	12.318	7.928	258	57	64
<b>5. Liabilities by the tax to added value and other public revenues and PTA</b>	550	1.017	3.813	575	185	375	15
<b>6. Liabilities by the tax on income</b>							
<b>IV. DEFERRED TAX LIABILITIES</b>							
<b>V. TOTAL LIABILITIES (A+B)</b>	1.090.608	1.044.993	1.240.984	1.214.169	96	119	98
<b>G. OFF-BALANCE SHEET LIABILITIES</b>			27.544	9.784		0	36

Source: <http://www.fabrikakoza.net>

According to the International Accounting Standard (IAS) 12 – Income tax (SRRS, 2007, 951) accounting profit is defined as net profit or loss for the period before deduction tax of expenditures. Accounting income is recognized in the balance sheet on positions: income before tax or loss before tax.

With the analysis of the income statement (Table 1.) can be seen reduction of net income in 2007th year, in regard to 2006th year with 88.654 thousand on 21.435 thousand. In 2008th year again we see a decrease net income in regard to 2007 year with 21.435 thousand on 10.855 thousand. In 2009th year in regard to 2008 year the net income increases with 10.855 thousand on 15.170 thousand.

Financial results and financial position of the enterprise are interconnected (Collier, M.P. 2003), so can not in the long time financial results to be a good and financial position to be bad and vice versa. For the assessment of the financial position of the enterprises is necessary to analyze short and long-term financial balance, indebtedness and reproductive ability. Analysis of the financial position of the enterprise Factory leather "Ruma" from Ruma was performed using data from the balance of observed enterprise for the period since 2006 until 2009 year. Liquidity and terms for maintenance liquidity (Rodić, J., and others, 2007, 273) are evaluated with analysis financial balance, which is assessment of the financial situation in the narrow sense. The financial balance means that the resources in terms of volume and time for which are related correspond to the volume and time availability sources funding. Review of the financial situation in a broader sense requires and the analysis of indebtedness. Analysis of financial balance is reduced to the analysis of short-term financial balance and analysis of long-term financial balance. Short-term financial balance exists if the liquid and short-linked assets the same as short-term liabilities (short-term sources funding). This equation short-term financial balance corresponds funding policy, which requires that the ratio of cash, securities that are listed on the stock market and short-term receivables toward short term liabilities to be 1:1. Short-term financial balance enterprise Factory leather "Ruma" from Ruma is determined ratio liquid and short-term connected assets, on the one hand and short-term sources funding, on the other hand. Short-term financial balance on the base forward given of the balance observed enterprises is follows:

*Table 3: Methodology analysis of short-term financial balance enterprise Factory leather "Ruma" from Ruma*

Elements	2006		2007		2008		2009	
	Amount	Share in balance forest operating assets	Amount	Share in balance forest operating assets	Amount	Share in balance forest operating assets	Amount	Share in balance forest operating assets
1. Receivables	143.125	13,12%	145.997	13,97%	312.019	25,14%	270.915	22,31%
2. Receivables to more paid tax on income	14.414	1,32%	14.414	1,38%	14.414	1,16%	14.414	1,16%
3. Short-term investment	100	0,09%	100	0,009%	25.299	2,04%	100	0,008%
4. Cash and cash equivalents	154.413	14,16%	113.172	10,83%	110.475	8,90%	162.633	13,39%
5. Income tax and ATA	6.014	0,55%	700	0,07%	3.149	0,25%	3.677	0,30%
Liquid and short-term connected assets (1+2+3+4+5)	318.066	29,16%	274.383	26,26%	465.356	37,50%	451.739	37,21%
6. Short-term financial liabilities	108.511	9,95%	20.486	1,96%	205.852	16,59%	168.650	13,89%
7. Operating liabilities	25.013	2,29%	48.846	4,67%	62.381	5,03%	81.673	6,72%
8. Other short-term liabilities	8.371	0,77%	21.615	2,07%	12.318	0,99%	7.928	0,65%
9. Liabilities by the tax to added value and other public revenues and PTA	550	0,05%	1.017	0,10%	3.813	0,31%	575	0,05%
Short-term sources funding (7 +8 +9 +10)	142.445	13,06%	91.964	8,80%	284.364	22,91%	258.826	21,32%

*Source: author's calculation*

*Table 4: Ratio liquid and short-term connected assets and short-term sources funding enterprise Factory leather "Ruma" from Ruma*

Year	Liquid and short-term connected assets	Short-term sources funding
2006	1	$142.445/318.066 = 0,4478$
2007	1	$91.964/274.383 = 0,3352$
2008	1	$284.364/465.356 = 0,6111$
2009	1	$258.826/451.739 = 0,5730$

*Source: author's calculation*

The analysis of short-term financial balance of the enterprise Factory leather "Ruma" from Ruma (Table 3. and Table 4.): In 2006th year, 2007th year, 2008th year and 2009th year short-term financial balance is shifting towards liquid and short-term connected assets. In 2006th year at 100 dinars liquid and short-term connected assets waste 44,78 dinars short-term liabilities, which means that the enterprises can maintain liquidity, provided that the terms of liquid and short-term connected assets, on average, did not exceed the terms of the availability of short-term liabilities since 55,22% (100-44, 78). In 2007th year at 100 dinars in liquid and short-term connected assets to waste 33,52 dinars short-term liabilities, which means that the enterprises can maintain liquidity, provided that the terms of linked short-term assets, on average, did not exceed the terms of the availability of short-term liabilities since 66,48% (100-33, 52). In 2008th year at 100 dinars liquid and short-term connected assets waste 61.11 dinars short-term liabilities, which means that the enterprises can maintain liquidity, provided that the terms of linked short-term assets, on average, did not exceed the terms of the availability of short-term liabilities since 38,89% (100-61,11). In 2009th year at 100 dinars liquid and short-term connected assets waste 57,30 dinars short-term liabilities, which means that the enterprises can maintain liquidity, provided that the terms of linked short-term assets, on average, did not exceed the terms of the availability of short-term liabilities since 42,70% (100-57, 30).

For the analysis of short-term financial balance should be calculated and liquidity ratios. In paper presents some of the most important the coefficient of liquidity. For calculate the coefficient of liquidity, used the data presented in the Balance sheet and Income statement enterprise Leather Factory "Ruma" from Ruma shown in Table 1. and Table 2. liquidity of a enterprise means the enterprise ability to pay liabilities at the time their maturity. The enterprise liquidity is evaluated on the basis the coefficient of liquidity. The main the coefficients of liquidity (Rodić, J., and others, 2011, 147) are:

1. The coefficient of instantaneous (cash) liquidity =  $G + HV / KO$ , where:

$G$  – cash desk and assets on deposit accounts,

$HV$  – securities which are the same day can be exchanged or transferred by endorsement on lender and

$KO$  – short-term liabilities;

If is the coefficient of current liquidity 1 or greater than 1 enterprise is liquidity on day the measurement liquidity and vice versa.

2. The coefficient of current (general) liquidity =  $OBS / KO$ , where:

$OBS$  - current assets and

$KO$  - short-term liabilities;

Desirable value coefficient of the current (general) liquidity should be least 2, which corresponds to a rule of finance 2:1 ("current-ratio") in order to be considered that is the enterprise liquid.

3. The coefficient of accelerated (rigorous) liquidity =  $(G + HV + KP) / WHO$ , where:
- G – cash desk and assets on deposit accounts and term deposits up to one year,
  - HV – securities that can be exchanged for cash within one year,
  - KP – short-term receivables with repayment period to one year and
  - WHO – short-term liabilities with a maturity up to one year;

Desirable value the coefficient of accelerated (rigorous) liquidity, Quick ratio (Žager, K., and others, 246) should be 1, which corresponds to a rule finance 1:1 (acid test) or greater than 1 in order to be considered that the is enterprise liquid.

4. The coefficient of financial stability = long-term connected assets / (capital + long-term reserves + long-term liabilities);

Long-linked assets are: 1. fixed assets, 2. fixed inventories, 3. permanent assets intended sales and operating assets which are discontinued and 4. loss above height capital. Desirable value coefficient of financial stability should be 1 or less than 1.

5. The coefficient of solvency = operating assets / total liabilities. Desirable value coefficient of solvency should be greater than 1.

The enterprise liquidity measured with three the coefficient of liquidity are shown in Table 5..

*Table 5: The coefficient of instantaneous, general and accelerated liquidity enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year*

<b>The coefficient of liquidity</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>The coefficient of instantaneous (cash) liquidity</b>	1,08	1,23	0,39	0,63
<b>The coefficient of current (general) liquidity</b>	5,43	7,60	3,36	3,58
<b>The coefficient of accelerated (rigorous) liquidity</b>	2,09	2,82	1,49	1,68

*Source: author's calculation*

Table 5. shows that is the 2006th year and 2007th year the coefficient of instantaneous (cash) liquidity for the enterprise Leather Factory "Ruma" from Ruma greater than 1, which means that is the enterprise liquid on day of the measurement of liquidity, ie. the enterprise is able to meet its liabilities in maturity, while in 2008th year and 2009th year current liquidity ratio is less than 1, which means that the enterprise is not liquid on day of the measurement of liquidity. The coefficient of the current (general) liquidity for the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year is greater than 2, so the analysis of the liquidity of observed enterprise on based the coefficient of current (general) liquidity for the period since 2006 until 2009 year is assessed as good. The coefficient of current (general) liquidity in 2008th year and 2009th year is for half less than in 2007th year.

The coefficient of accelerated (rigorous) the solvency of enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year is greater than 1, so the analysis of liquidity of observed enterprise on based the coefficient of accelerated (rigorous) of liquidity for the period since 2006 until 2009 year is assessed as good.

## ***LONG-TERM FINANCIAL BALANCE ANALYSIS***

Long-term financial balance (Rodić, J., and others, 2007, 271) there if are long-term connected assets the same as capital plus long-term reserves plus long-term liabilities. Long-term financial balance on the base forward given of the balance observed enterprise is follows:

*Table 6: Methodology analysis of long-term financial balance enterprise Factory leather "Ruma" from Ruma*

**in thousands dinars (RSD)**

<b>Ordinal number</b>	<b>POSITION</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
1.	<b>Intangible assets</b>	144	101	58	14
2.	<b>Property, plant, equipment and biological assets</b>	310.977	340.250	279.302	271.643
3.	<b>Long-term investment</b>	5.403	5.375	5.905	5.905
4.	<b>Inventories</b>	455.737	421.580	482.752	467.796
5.	<b>Fixed assets intended sales and operating assets that are discontinued</b>	-	-	-	7.328
6.	<b>Loss above height of capital</b>	-	-	-	-
7.	<b>Long-term connected assets (1+2+3+4+5+6)</b>	772.261	767.306	768.017	752.686
8.	<b>Capital</b>	897.682	901.042	898.857	913.652
9.	<b>Long-term reserves</b>	-	1.355	1.347	842
10.	<b>Long-term liabilities</b>	50.481	50.632	56.616	40.849
11.	<b>Capital, long-term reserves and long-term liabilities (8+9+10)</b>	948.163	953.029	956.820	955.343

*Source: author's calculation*

*Table 7: Ratio long-term connected assets and capital plus for long-term reserves and long-term liabilities enterprise Factory leather "Ruma" from Ruma*

<b>Year</b>	<b>Long-term connected assets</b>	<b>Capital plus long-term reserves plus long-term liabilities</b>
<b>2006</b>	1	948.163/772.261 = 1,2278
<b>2007</b>	1	953.029/767.306 = 1,2420
<b>2008</b>	1	956.820/768.017 = 1,2458
<b>2009</b>	1	955.343/752.686 = 1,2692

*Source: author's calculation*

The analysis of long-term financial balance of enterprise Factory leather "Ruma" from Ruma on based of long-term connected assets (Table 6. and Table 7.): In 2006th year, 2007th year, 2008th year and 2009th year long-term financial balance is shifted towards equity plus long-term reserves and long-term liabilities. In the 2006th year every 100 dinars of long-term connected assets financed is with 122.78 dinars capital plus long-term reserves and long-term liabilities (permanent and long-term sources of financing). Difference from 22,78% (122,78-100) equity plus long-term reserves and long-term liabilities which in absolute terms makes 175.902 thousand of dinars (948.163-772.261) was used for finance of short-term connected assets and means a safety to maintain liquidity. In 2007th year every 100 dinars of long-term connected assets are financed with 124,20 dinars capital plus long-term reserves and long-term liabilities (permanent and long-term sources of financing). Difference from 24,20% (124,20-100) equity plus long-term reserves and long-term liabilities which in absolute terms makes 185.723 thousand of dinars (953.029-767.306) was used to finance short-term connected assets and means a safety to maintain liquidity. In 2008th year every 100 dinars of long-term connected assets are financed with 124,58 dinars capital plus long-term reserves and long-term liabilities (permanent and long-term sources of financing). Difference from 24,58% (124,58-100) equity plus long-term reserves and long-term liabilities which in absolute terms makes 188.803 thousand of dinars (956.820-768.017) was used to finance short-term connected assets and means a safety to maintain liquidity. In 2009th year every 100 dinars of long-term connected assets are financed with 126,92 dinars capital plus long-term reserves and long-term liabilities (permanent and long-term sources of financing). Difference from 26,92% (126,92-100) equity plus long-term reserves and long-term liabilities which in absolute terms makes 202.657 thousand of dinars (955.343-752.686) was used to finance short-term connected assets and it represent a safety for upkeep liquidity.

Long-term financial balance is expressed often by the coefficient of financial stability, which in our example is:

*Table 8: The calculation of the coefficient of financial stability enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year*

(in thousands RSD)

<b>Ordinal number</b>	<b>POSITION</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>1.</b>	<b>Long-term connected assets</b>	772.261	767.306	768.017	752.686
<b>2.</b>	<b>Capital, long-term reserves and long-term liabilities</b>	948.163	953.029	956.820	955.343
<b>3.</b>	<b>The coefficient of financial stability 1/2</b>	0,82	0,81	0,80	0,79

*Source:* author's calculation

The analysis of the coefficient of financial stability of the enterprise Factory leather "Ruma" from Ruma (Table 8.): In 2006th year, 2007th year, 2008th year and 2009th year long-term financial balance is shifted towards equity plus long-term reserves and long-term liabilities. In 2006th year the coefficient of financial stability is less than 1. The conditions are created for the safe maintenance of liquidity, because be the part of the capital plus long-term reserve and long-term liabilities above long-term connected assets are use for to finance short-term connected assets in the amount of 175.902 thousand dinars (948.163-772.261). In 2007th year the coefficient of financial stability is less than 1. The conditions are created for the safe maintenance of liquidity, because the part of the capital plus long-term reserve and long-term liabilities above long-term connected assets are use for to finance short-term connected assets in the amount of 185.723 thousand dinars (953.029-767.306). In 2008th year the coefficient of financial stability is less than 1. The conditions are created for the safe maintenance of liquidity, because the part of the capital plus long-term reserve and long-term liabilities above long-term connected assets are use for to finance short-term connected assets in the amount of 188.803 thousand dinars (956.820-768.017). In 2009th year the coefficient of financial stability is less than 1. The conditions are created for the safe maintenance of liquidity, because the part of the capital plus long-term reserve and long-term liabilities above long-term connected assets are use for to finance short-term connected assets in the amount of 202.657 thousand dinars (955.343-752.686). Therefore, the coefficient of financial stability is less than 1, so that be the liquidity of the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year on based the coefficient of financial stability for the period since 2006 until 2009 year assessed as good.

The coefficient of solvency of the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year is:

*Table 9: The calculation of the coefficient of solvency enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year*

(in thousands RSD)

<b>Ordinal number</b>	<b>POSITION</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>1.</b>	<b>Operating assets</b>	1.090.608	1.044.993	1.240.984	1.214.169
<b>2.</b>	<b>Total liabilities (Short-term liabilities + Long-term liabilities)</b>	192.926	142.596	340.780	299.675
<b>3.</b>	<b>The coefficient of solvency 1/2</b>	5,65	7,33	3,64	4,05

*Source: author's calculation*

The solvency enterprise Factory leather "Ruma" from Ruma on based the coefficient of solvency for the period since 2006 until 2009 year (Table 9.) is assessed as good, because assets are cashed and the book value of assets enough for cover the liabilities (debts). The highest value of solvency ratio was 2007th year (7,33).

## ***ANALYSIS OF INDEBTEDNESS***

The coefficient of indebtedness (financial leverage) shows how much of each dinar capital waste dinar liabilities. The indebtedness of the enterprises is evaluated through the structure of balance sheet liabilities from the standpoint of ownership (the ratio of equity capital and debt capital). The coefficient of indebtedness (financial leverage) shows how much on each dinar of capital waste dinar liabilities. The indebtedness of the enterprises is evaluated through the structure liabilities of balance sheet observed with ownership the standpoint (the ratio of equity capital and debt capital). Per the traditional financial rules acceptable structure of capital (Rodić, J., and others, 294) is if equity 50%, and debt (liabilities) 50% of the sum of liabilities (1:1), and optimal structure of capital consists of 60% equity capital and 40% debt (liabilities), because this structure provides a minimum weighted average cost of capital after tax, thereby maximizing the value of the enterprises. Desirable value the coefficient of indebtedness should be 0.50 or less than 0.50. The coefficient of indebtedness (financial leverage) for the enterprise Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year is:

*Table 10: The calculation of the coefficient of indebtedness (financial leverage) enterprises Factory leather "Ruma" from Ruma for the period since 2006 until 2009 year (in thousands RSD)*

	POSITION	2006		2007		2008		2009	
		value	%	value	%	value	%	value	%
1.	<b>Total liabilities (Short-term liabilities and Long-term liabilities)</b>	192.926	18	142.596	14	340.780	28	299.675	25
2.	<b>Equity capital</b>	897.682	82	901.042	86	898.857	72	913.652	75
3.	<b>Liabilities without transient position</b>	1.090.608	100	1.043.638	100	1.239.637	100	1.213.327	100
4.	<b>The coefficient of indebtedness (financial leverage) 1/2</b>	0,21	-	0,16	-	0,38	-	0,33	-

*Source: author's calculation*

Table 10. shows that the coefficient of indebtedness (financial leverage) for the enterprise Factory leather "Ruma" from Ruma is less than 0,50. The liquidity of observed enterprise on based the coefficient of indebtedness (financial leverage) for the period since 2006 until 2009 year is assessed as good, which means that is the enterprise in analysed period had adequate structure of capital. For example, in 2006th year structure of liabilities of balance sheet observed with ownership the standpoint is directed towards equity capital, since equity capital makes 82% of liabilities the balance sheet the enterprise. In 2007th year structure of liabilities of balance sheet observed with ownership the standpoint is directed towards equity capital, since equity capital makes 86% of liabilities the balance sheet the enterprises. In 2008th year structure of liabilities of balance sheet observed with ownership the standpoint is directed towards equity capital, since equity capital makes 72% of liabilities the balance sheet the enterprise. In 2009th year structure of liabilities of balance sheet observed with ownership the standpoint is directed towards equity capital, since equity capital makes 75% of liabilities the balance sheet the enterprise.

Since the financial balance affect on liquidity the enterprise, management the enterprises has to constantly monitor the status of financial balance on basis implementation analysis of short-term financial balance, the coefficient of liquidity and long-term financial balance and the coefficient of financial stability, coefficient of solvency and the coefficient of indebtedness (financial leverage). If the financial balance is disturbed management of the enterprise shall that promptly respond by taking steps to establish financial balance (Mikerević, D., 2005, 677-681), such as:

1. Additional investments in capital – capital increase and payment of funds increased equity capital and cash in the enterprise;
2. Restructuring of assets – reducing fixed assets on based sale fixed assets (for example, sale of part of the premises), part of the long-term investments (for example, sale of purchased shares of other enterprises) increase are cash, and thus the current assets the enterprise;
3. Restructuring sources assets - based on the conversion of short-term liabilities in the capital or in long-term liabilities, which is determined by the will of creditors.

After the selection of appropriate measures are perform projection their effects on the balance sheet and the financial balance of the enterprise. If projections of the effects of potential measures indicate improvement and establishment of financial balance, makes are their implementation. When are measures taken, a comparison is made with the designed parameters and identify discrepancies. The enterprise Factory leather "Ruma" from Ruma is for four years (2006, 2007, 2008 and 2009) had a good financial position. Financial balance to maintain safety and liquidity margin of safety had the following trend: 22,78% (2006); 24,20% (2007); 24,58% (2008) and 26,92% (2009). The enterprises is in the entire period since 2006 until 2009 were liquid, solvent and have sufficient structure of capital. Given the state of long-term financial balance, the enterprise Factory leather "Ruma" from Ruma in the entire monitoring period (since 2006 until 2009 year), can be concluded that Factory leather "Ruma" from Ruma able to finance from its own resources simple and expanded reproduction, because are long-term sources funding higher than long-term connected assets.

Finally, we conclude that management the enterprise Factory leather "Ruma" from Ruma in the entire period since 2006 until 2009 year successfully implemented the control action according to conditions. For example, taking 2008th year as the base year, as they had already felt the effects of the global economic crisis in Serbia, we can see that the financial balance of the enterprise in 2009th year even improved. So, regardless of the presence and crisis management of the enterprise Factory leather "Ruma" from Ruma has managed to adequate preventive measures to improve the financial position of the enterprise. Looking at the financial statements for a enterprise we note that management the enterprise decided to restructure the assets and decrease non-current assets on the sale of fixed assets (for example, sale of part of the premises) which increased the cash (for example, from 8,90% in 2008th year to 13,39% in 2009th year). Also, in the period since 2008 until 2009 year the reduced level of debt (short-and long-term liabilities) the enterprise from 28% to 25%. In 2009th year, management the enterprise has decided to sell long-term investments (for example, sale of purchased shares of other enterprises), as well as for additional capital investment (capital increase). Therefore, the enterprise Factory leather "Ruma" from Ruma is successful business model and example that we must follow.

## ***CONCLUSION***

The modern business environment is changing rapidly, it is more complex and turbulent. Crises are an integral part of the enterprise that acting as a legal entity. In order the enterprises in a rapidly changing business environment survived in the market, with its orientation to their future development needed is the support of management the enterprise, who should assess the financial position of the enterprise and selects and implements adequate measures to be strengthened the financial position and contributes the establishment of specific financial balance of the enterprise in the future. Exposed control activities are characteristic for the management enterprise Factory leather "Ruma" which despite financial and macroeconomic volatility contributes that the enterprise survives in the market to meet its business plan and has a good financial position in the long term.

Without a good financial position does not have a good financial reputation of the enterprise. Analysis of the financial position of the enterprise includes analysis: short-term and long-term financial balance, indebtedness and solvency, maintenance of the real value of equity, reproductive ability and opportunities to improve financial the position. On based the theoretical and practical research on the subject autors conclude that is the hypothesis confirmed: management the enterprise based on an analysis of the financial position of the enterprise can assess the survival, growth and development of the enterprise in a rapidly changing business environment and that take appropriate control action. Quality analysis of the financial position of the enterprise need to use balance statements for at least three the past periods. This way you can make the time of compare and determine whether the financial position of the enterprise at that periods improved or not. It is also necessary to provide information about similar businesses that represent a given economic sector, in order to be create regional comparisons.

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# ***PERFORMANCE OF MSCI WORLD INDEX DURING THE GLOBAL FINANCIAL CRISIS: VALUE-AT-RISK APPROACH***

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**Abstract:** Recent global financial crisis is a major turmoil event which permeated all over the world irrespective of developed or emerging countries. Value at Risk (VaR) was introduced in the Basel Accord and has become a standard measure of market risk. Banks and other financial institutions often use the concept of Value-at-Risk as a measure of market risk. The aim of this paper is to analyse the effectiveness of GARCH models in estimating Value-at-Risk for MSCI World Index, one of the most widely known benchmark for global stock funds, before and during the financial crisis. Daily returns of stock market index MSCI is analysed during the period Jun 3, 2002 to March 22, 2013 in respect. We employ symmetric GARCH and asymmetric GARCH models, as VaR forecast models. One-day-ahead VaR performance under 95% and 99% confidence levels is evaluated with realized profit and loss for 200 observations in selected stock market indices. The performance of the VaR is assessed by Kupiec test unconditional coverage which represent the most famous test in this group. Results of backtesting show that assessed Value-at-Risk for EGARCH model is adequate for both confidence level according to Kupiec test for pre crisis period. On the other hand, EGARCH (2,1) model used for calculating VaR with 99% confidence level according to Kupiec test seems to be adequate if we assume both normal and Student's t distribution of returns. At the same time, EGARCH (2,1) model did not pass Kupiec test at 95% confidence level with assumption that residuals follow normal and Student's t distribution. Since, Basel Committee prescribes testing VaR model adequacy at 99% confidence level, at these confidence level our results show that VaR calculation based on EGARCH model is adequate measure of downside risk.

**Key words:** Financial Risk, MSCI World Index, Value-at-Risk, GARCH models, Kupiec Test

**JEL classification:** G32, C14, C22, C52

**UDC** 005.334(082); 330.322.54(082); 339.747(082); 336.761(082)

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## **INTRODUCTION**

Recent global financial crisis is a major turmoil event which permeated all over the world irrespective of developed or emerging countries. Probably, it is the largest crisis after great recession of 1930's that affected both real and financial sectors (Lianto and Badiola, 2010). These crises which was triggered by subprime mortgage crisis in the United States got worst momentum in the year 2008 with the failure, merger or conservatorship several large financial institutions exposed to packaged subprime loans and credit default swaps issued to insure these loans and their issuers. This crisis rapidly evolved into global credit crisis resulting in a number of bank failures in Europe and sharpe reductions in the value of stocks worldwide. In the U.S. 15 banks failed in 2008, while several others were rescued through acquisitions by other banks or by government interventions. In EU, many countries had supported their financial institutions. As result, the cost of dealing with the consequence of the crisis created huge budget deficits and contributed to the low economic growth in small EU countries as well in more advanced economies (Koksal and Orhan 2012). In response to the financial crisis, the Basel Committee on Banking Supervision established revised global standards (Basel III).

Value at risk is the assessment of the maximum loss in value of portfolio over a given time horizon at a given confidence level. Based on the VaR financial institutions are able to determine the level of capital that provides cover losses and ensure the financial position of extreme market movements. VaR provides mechanism for investors to value their market exposure in terms of risk, thereby providing them with a basis to allocate risk more efficiently (Engle and Manganelli 2004). Implementation of the VaR methodology in the investment process is directly related to the selection of appropriate method of estimation. In selecting the appropriate method of key importance is that it accurately determines the likelihood of losses.

One such approach is represented by time-varying volatility models which were expressed by Engle (1982) as autoregressive conditionally heteroskedasticity (ARCH) model and extended by Bollerslev (1986) into generalized ARCH (GARCH) model. These models recognize the difference between the conditional and the unconditional volatility of stochastic process, where the former varies over time while the latter remains constant. In addition, these models have triggered a range of extensions cover a wide spectrum of observed behavior in stock markets including the asymmetric impact of returns on volatility and long memory dynamics in stock return volatility (McMillan and Thupayagale 2010).

This paper will test the applicability of the concept of VaR to the MSCI World Index. This index is free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The MSCI World Index consists of the 24 developed market country indices (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, United Kingdom and the United States).

We employ symmetric GARCH and three asymmetric GARCH models, which are EGARCH, TGARCH and APARCH with variations in their mean equations: in-mean, AR(1), MA(1), and ARMA (1,1) as VaR forecast models. One-day-ahead VaR

performance under 95% and 99% confidence levels is evaluated with realized profit and loss for 200 observations in selected stock market indices. As a result, it is beyond all doubt to obtain more understanding to know the risk and volatility aspects of it.

The working paper is structured as follows. Literature review is presented in the second chapter. In third chapter GARCH type approach to obtain the VaR estimate, as well as methodology of back testing process is presented. The fourth chapter presents the results of empirical analysis and back testing. Finally, concluding remarks are given in the fifth chapter.

## ***LITERATURE REVIEW***

There is now a huge and increasing literature on value-at-risk. Some selected papers are reviewed here. Almost all researchers are unanimous that there is no single approach or a VaR model that is optimal in all markets and in all situations. According to previous published studies, models of VaR models based on moving averages give a good prediction of market risk, and that results vary depending on the loss function that was used, the chosen level of confidence VaR, the period for which the survey was conducted (turbulent or normal), used model for assessing the VAR and etc.

For example Degiannakis (2004) conclude that different technique of volatility are applied with different goals and objectives, and that the modeling of time varying volatility is necessary for estimating the VaR. Linsmeier and Pearson (1996) conclude that there is no simple answer to the question which VaR model gives better estimates of market risk given the fact that volatility is not constant but varies over time. Different statistical characteristics such as volatility clustering, flattening and asymmetry may affect the calculation and selection of appropriate model of VaR. Although most commonly used method of Risk Metrics assumes normality of distribution of returns, numerous empirical studies show that the distribution of returns is not normal. Thus, value of VaR obtained assuming normal distribution underestimate the true value of market risk. (Duffie et al., 1997).

Wong, Cheng and Wong (2002) concluded that although the GARCH models in many cases show superior prediction of volatility, they consistently fail to pass the back testing analysis of the Basel agreement. In several studies, the authors conducted a comparison of different models of VaR. Guermat and Harris (2002) indicate that the EWMA model made estimates of volatility unnecessarily high when returns are conditionally normally distributed, but tend to have tails. The main reason is that EWMA models provide significantly higher weights of extreme values return. Brooks and Persaud (2003) conclude that the performance of different models for volatility depend on the use of loss functions. Alexander and Leigh (1997) analyzed the performance of different models of volatility (model with equal weights, EWMA and GARCH models) and concluded that GARCH models show better results compared to the EWMA model, although a simple weighted average model provide superior results compared to both of these models. Some authors emphasize that the results of selected models of VaR vary depending on the chosen confidence interval. Christoffersen, Hahn and Inoue (2001) show that applicability of different models (EWMA, GARCH, models of implied volatility) depend on the selected level of probability. Su and Knowles (2006) point out that the standard error of VaR values increases as the confidence interval increases.

According to the results of this analysis, with the confidence interval of 99%, the parametric model (delta normal VaR) produces more abnormal values of VaR than with the confidence interval of 95%.

Mladenović, Miletić and Miletić (2012) considers adequacy of VaR models in selected emerging economies with the daily returns of Bulgarian (SOFIX), Croatian (CROBEX), Czech (PX50), Hungarian (BUX), Romanian (BET) and Serbian (BELEX15) stock exchange indices before and during the financial turmoil. Authors conclude that GARCH type models with t error distribution give better 5% and 1% VaR estimation in comparison to normal error GARCH type models. Authors emphasize that GARCH type models for most confidence levels are not outperformed by EVT approach and estimations derived from POT.

In several of papers VaR was evaluated using similar methodology as we do. McMillan and Speight (2007) investigated the value-at-risk in emerging equity markets. Comparative evidence for symmetric, asymmetric, and long- memory GARCH models is also provided. In the analysis of daily index data for eight emerging stock markets in the Asia-Pacific region, in addition to the US and the UK benchmarks, they found both asymmetric and long memory features to be important considerations in providing improved VaR estimates. Iqbal, Azher, Ijza (2010) analyze the accuracy of VaR measure for Pakistan's emerging stock market using daily data from the Karachi Stock Exchange-100 index January 1992 to June 2008. Authors computed VaR by employing data on annual basis as well as for the whole 17 year period. Overall authors found that VaR measures are more accurate when KSE index return volatility is estimated by GARCH (1,1) model especially at 95% confidence level. At 99% confidence level authors finds that no method generally gives accurate VaR estimates. In addition authors investigated the asset pricing implication of downside risk measured by VaR and expected returns for docile portfolios sorted according to VaR of each stock. Authors found that portfolios with higher VaR have higher average returns and conclude that VaR as a measure of downside risk is associated with higher returns.

## **METODOLOGY**

### *DEFINING THE CONCEPT OF VALUE AT RISK (VAR)*

VaR is a measure that gives the maximum loss that can be realized from certain investments over a given time horizon (usually 1 day or 10 days), with a certain probability (Jorion, 2001). Mathematically, VaR for the period of the k day in day t can be represented as follows:

$$P(P_t - P_{t-k} \leq VaR(t, k, \alpha)) = \alpha \quad (1)$$

where  $P_t$  is the price of a particular type of financial asset, and  $\alpha$  represent a given level of probability.

VaR can be expressed in terms of a percentile of the return distributions. Specifically, if  $\alpha$  is the  $\alpha$ -th percentile of the continuously compound return, VaR is calculated as follows:

$$VaR(t, k, \alpha) = (e^{q_\alpha} - 1)P_{t-k} \quad (2)$$

Previous equation implies that a good estimate of VaR can only be produced with accurate forecast of the percentiles, which is obtained on the corresponding volatility modeling. Therefore, below we discuss the value of VaR for a series of returns.

Define a one-day return on day  $t$  as:

$$r_t = \log(P_t) - \log(P_{t-1}) \quad (3)$$

For the time series of return  $r_t$ , VaR can be expressed as:

$$P(r_t < VaR_t | I_{t-1}) = \alpha \quad (4)$$

From this equation it follows that finding the VaR values is the same as finding a  $100\alpha\%$  conditional quantiles. Formally, it is possible to develop models for the stock returns  $r_t$  as follows:

$$r_t = \mu_t + \varepsilon_t, \varepsilon_t = \alpha_t \eta_t, \mu_t = \mu(I_{t-1} | \theta), \sigma_t^2 = \sigma^2(I_{t-1} | \theta) \quad (5)$$

where  $I_{t-1}$  is a set of information available at time  $t-1$ , and where  $\mu$  and  $\sigma$  are functions of a certain dimensional vector of parameter values  $\theta$ . In this model  $\varepsilon_t$  is innovation,  $\sigma_t$  is the unobserved volatility, and  $\eta_t$  is martingale difference sequence satisfying:

$$E(\eta_t | I_{t-1}, \theta) = 0, V(\eta_t | I_{t-1}, \theta) = 1 \quad (6)$$

As a consequence, we have:

$$E(r_t | I_{t-1}, \theta) = \mu_t, V(r_t | I_{t-1}, \theta) = \sigma_t^2, \varepsilon_t | I_{t-1} \sim D(0, \sigma_t^2) \quad (7)$$

where  $D(0, \sigma_t^2)$  represents the conditional distribution with zero mean value and variance  $\sigma_t^2$ .

If the return can be modeled by a parametric distribution, VaR can be derived from the distributional parameters. Unconditioned parametric models were determined with  $\mu_t = \mu$  and  $\sigma_t = \sigma$ . Therefore we assume that returns are independent and equally distributed with a given density function:

$$f_r(x) = \frac{1}{\sigma} f_r^* \left( \frac{x - \mu}{\sigma} \right) \quad (8)$$

where  $f_r$  is density function of distribution of  $r_t$  and  $f_r^*$  being density function of the standardized distribution of  $r_t$ .

### GARCH TYPE MODELS

The GARCH type models successfully capture several characteristics of financial time series, such as thick tailed returns and volatility clustering. This type of models represents standard and very often used approach for getting VaR estimate. A general GARCH(p,q) model proposed by Bollerslev (1986) can be written in the following form:

$$y_t = a_0 + \sum_{i=1}^m a_i y_{t-i} + \varepsilon_t - \sum_{j=1}^s b_j \varepsilon_{t-j} \quad (9)$$

$$\varepsilon_t = z_t \sigma_t, \quad \varepsilon_t | I_{t-1} \sim N(0, \sigma_t^2)$$

$$\sigma_t^2 = \alpha_0 + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j \sigma_{t-j}^2$$

$$\alpha_i \geq 0, \quad \beta_j \geq 0, \quad i = 1, \dots, q, \quad j = 1, \dots, p$$

$q > 0$

The first equation actually describes the percentage level of return,  $y_t = 100 \cdot r_t$ , which is presented in the form of autoregressive and moving average terms, i.e. ARMA(m,s) process. Error term  $\varepsilon_t$  in the first equation is a function of  $z_t$ , which is random component with the properties of white noise. The third equation describes the conditional variance of return,  $y_t$ , which is function of  $q$  previous periods and conditional variance of  $p$  previous periods. The stationarity condition for GARCH (p, q) is  $\sum_{i=1}^q \alpha_i < 1$  and  $\sum_{j=1}^p \beta_j < 1$ .

Size of parameters  $\alpha$  and  $\beta$  in the equation determines the observed short-term volatility dynamics obtained from series of returns. The high value of coefficient  $\beta$  indicates that shocks to conditional variance need a long time to disappear, so the volatility is constant. The high value of the coefficient  $\alpha$  mean that volatility reacts intensively to changes in the market.

If  $\sum_{i=1}^q \alpha_i < 1$  and  $\sum_{j=1}^p \beta_j < 1$ , for a sufficiently long horizon forecasts conditional variance of GARCH (p, q) process:

$$\sigma_t^2 = \alpha_0 \left( 1 - \sum_{i=1}^q \alpha_i - \sum_{j=1}^p \beta_j \right)^{-1} \quad (10)$$

is called unconditional variance of GARCH (p, q) process.

By standard arguments, the model is covariance stationary if and only if all the roots of  $\sum_{i=1}^q \alpha_i + \sum_{j=1}^p \beta_j = 1$  lie outside the unit circle. In many applications with high frequency financial data the estimate for  $\sum_{i=1}^q \alpha_i + \sum_{j=1}^p \beta_j$  turns out to be very close to unity. This provides an empirical motivation for the so-called integrated GARCH(p,q), or IGARCH(p,q), model [see Bollerslev et al. (1994)]. In the IGARCH class of models the autoregressive polynomial in equation (10) has a unit root, and consequently a shock to the conditional variance is persistent in the sense that it remains important for future forecasts of all horizons. A general IGARCH (p, q) process can be written in the following form:

$$\sigma_t^2 = \alpha_0 + A(L)\varepsilon_t^2 + B(L)\sigma_t^2, \quad A(L) + B(L) = 1 \quad (11)$$

where  $A(L)$  and  $B(L)$  are lag operators.

In order to capture asymmetry Nelson (1991) proposed exponential GARCH process or EGARCH for the conditional variance:

$$\log(\sigma_t^2) = \alpha_0 + \sum_{i=1}^{\infty} \pi_i g\left(\frac{\varepsilon_{t-i}}{\sigma_{t-i}}\right) \quad (12)$$

Asymmetric relation between returns and volatility change is given as function  $g(\varepsilon_t/\sigma_t)$ , which represent linear combination of  $|\varepsilon_t/\sigma_t|$  and  $\varepsilon_t/\sigma_t$ :

$$g\left(\frac{\varepsilon_t}{\sigma_t}\right) = \theta \left( \left| \frac{\varepsilon_t}{\sigma_t} \right| - E \left| \frac{\varepsilon_t}{\sigma_t} \right| \right) + \gamma \left( \frac{\varepsilon_t}{\sigma_t} \right) \quad (13)$$

where  $\theta$  and  $\gamma$  are constants.

By construction, equation is a zero mean process (bearing in mind that  $z_t = \varepsilon_t/\sigma_t$ ). For  $0 < z_t < \infty$ ,  $g(z_t)$ , is linear function with slope coefficient  $\theta + \gamma$ , while for  $-\infty < z_t \leq 0$  it is linear function with slope coefficient  $\gamma - \theta$ . First part of equation,  $\theta(|z_t| - E|z_t|)$ , captures the size effect, while second part,  $\gamma(z_t)$ , captures the leverage effect.

Zakoian (1994) proposed TGARCH (p,q) model as alternative to EGARCH process, where asymmetry of positive and negative innovations is incorporated in the model by using indicator function:

$$\sigma_t^2 = \alpha_0 + \sum_{i=1}^q (\alpha_i \varepsilon_{t-i}^2) + \sum_{i=1}^q (\gamma_i d(\varepsilon_{t-i} < 0) \varepsilon_{t-i}^2) + \sum_{j=1}^p (\beta_j \sigma_{t-j}^2) \quad (14)$$

where  $\gamma_i$  are parameters that have to be estimated,  $d(\bullet)$  denotes the indicator function defined as:

$$d(\varepsilon_{t-i} < 0) = \begin{cases} 1, & \varepsilon_{t-i} < 0 \\ 0 & \varepsilon_{t-i} \geq 0 \end{cases} \quad (15)$$

TGARCH model allows good news,  $(\varepsilon_{t-1} > 0)$ , and bad news,  $(\varepsilon_{t-1} < 0)$ , to have differential effects on the conditional variance. For instance, in the case of TGARCH (1,1) process, good news has an impact of  $\alpha_1$ , while bad news has an impact of  $\alpha_1 + \gamma_1$ . For  $\gamma_1 > 0$ , the leverage effect exists.

APARCH (p, q) process, proposed by Ding, Granger and Engle (1993), includes seven different GARCH type models (ARCH, GARCH, AGARCH, TGARCH, TARCH, NGARCH, Log-GARCH):

$$\sigma_t^\delta = \alpha_0 + \sum_{i=1}^q \alpha_i (|\varepsilon_{t-i}| - \gamma_i \varepsilon_{t-i})^\delta + \sum_{j=1}^p (\beta_j \sigma_{t-j}^\delta) \quad (16)$$

where  $\alpha_0 > 0, \delta \geq 0, \beta_j \geq 0, j=1, \dots, p, \alpha_i \geq 0, -1 < \gamma_i < 1$ , and  $i=1, \dots, q$ .

Parameter  $\delta$  in the equation denotes exponent of conditional standard deviation, while parameter  $\gamma$  describes asymmetry effect of good and bad news on conditional volatility. Positive value of  $\gamma$  means that negative shocks from previous period have higher impact on current level of volatility, and otherwise.

Based on estimated parameters of GARCH type process it is possible to make forecast of  $y_{t+k}$  and conditional volatility  $\sigma_{t+k}^2$  for next  $k$  periods [for details see Mladenović et al. (2006)]. Forecasted value of return and the conditional volatility for the next period is obtained as follows:

$$\hat{y}_n(1) = a_0 + \sum_{i=1}^m a_i y_{n+1-i} + \varepsilon_t - \sum_{j=1}^s b_j \varepsilon_{n+1-j} \quad (17)$$

$$\hat{\sigma}_n^2(1) = \alpha_0 + \sum_{i=1}^q \alpha_i \varepsilon_{n+1-i}^2 + \sum_{j=1}^p \beta_j \sigma_{n+1-j}^2$$

If residuals  $z_t$  follow standardized normal distribution, VaR at 95% confidence level could be calculated as:

$$\hat{y}_n(1) - 1.65 \hat{\sigma}_n(1) \quad (18)$$

while if residuals  $z_t$  follow standardized distribution with degrees of freedom, then VaR could be calculated as:

$$\hat{y}_n(1) - t_v \sqrt{\frac{v-2}{v}} \hat{\sigma}_n(1) \quad (19)$$

### BACKTESTING

Back testing represents a statistical procedure by which losses and gains are systematically compared to the appropriate valuation of VaR. In the back testing process it can be statistically examined if the frequency exceptions, during the selected time interval, are in accordance with the chosen confidence level. These types of tests are known as tests of unconditional coverage. The most famous test in this group is the Kupiec test.

### THE KUPIEC TEST

The Kupiec test, known as the proportions of failures test (POF), measures whether the number of exemptions is consistent with a given confidence level (Kupiec, 1995). If the null hypothesis is true, then the number of exemptions follows the binomial distribution. Therefore, to implement the POF test it is necessary to know the number of observations ( $n$ ), the number of exceptions ( $x$ ) and confidence level.

The null hypothesis of the POF test is:

$$H_0 : p = \hat{p} = \frac{x}{n}$$

The basic idea is to determine if the observed excess rate  $\hat{p}$  is significantly different from  $p$ , excess rate determined by the given confidence level. According to Kupiec (1995) POF test is best implemented as a likelihood-ratio test (LR). The statistical test has the following form:

$$LR_{POF} = -2 \ln \left( \frac{(1-p)^{n-x} p^x}{\left[1 - \left(\frac{x}{n}\right)\right]^{n-x} \left(\frac{x}{n}\right)^x} \right) \quad (20)$$

If the null hypothesis is correct, statistics in asymptotic conditions has distribution with a single degree of freedom. If the value of statistics exceeds the critical value of distribution, the null hypothesis is rejected and the model is considered to be imprecise.

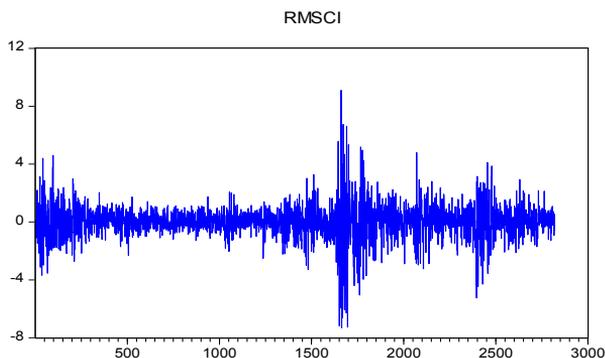
## ***RESULTS OF EMPIRICAL ANALYSIS AND BACK TESTING***

We make use of the MSCI World Index obtained from MSCI website. The sample analysis of the research comprises daily returns of stock index MSCI World Index one of the most widely known benchmark for global stock funds. The tested stock index during the period Jun 3, 2002 to March 22, 2013 in respect. For MSCI World Index we compute daily logarithmic returns, i.e.  $r_t = (\log P_t - \log P_{t-1}) * 100$ .

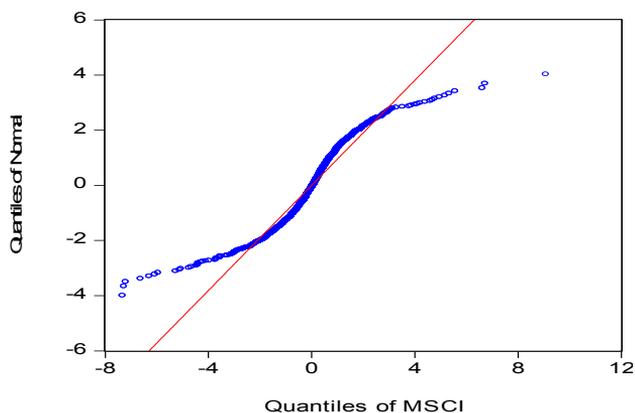
Since the focus of this research is to examine the impact of global financial crisis, dummy variable will be adopted. The decision to create dummy variables which represents the both crisis periods will be subjective and it depends on author's argument. The paper set the global financial crisis at September 2008. The reason for this is that the Lehman Brothers collapse in mid September, 2008. When Lehman Brothers and other important financial institution such as Bear Stern requested a help from U.S. government, it was the sign that the crisis start spread around the world. Furthermore, with the regard to the last day of crisis, this research argues that crisis ended at the end of 2009. That date was selected based on fact that rates of most of central banks, as an important instrument in conducting the monetary policy, has been stable. Hence it is subjectively argued that particular date was signal that crisis ends.

### ***PROPERTIES OF DATA***

Bearing in mind that the one-time structural breaks may lead to erroneous statistical conclusions, in all four cases we indicate the most prominent non-standard values and then regress series of returns on constant and dummy variables that take non-zero values for the observations with the most prominent nonstandard values. New adjusted series of daily returns are used in empirical analysis (see Chart 1). Volatility clustering is clearly visible in all cases. The quantiles of an empirical distribution are plotted against the quantiles of a normal distribution. From the Chart 2 it is clear that QQ plot is not linear and that empirical distribution differs from the hypothesized normal distribution.



*Graph 1: Stock Exchange index daily returns*



*Graph 2: Q-Q plot of returns*

### *RESULTS OF ANALYSIS FOR PRE-CRISIS PERIOD*

A result of analysis for pre-crisis period comprises daily returns of MSCI World stock index during the period Jun 3, 2002 - September 1 in respect.

Table 1 indicates that the daily return of MSCI World stock index is not normally distributed. The skewness is evident; kurtosis is in all cases much greater than 3 and the Jarque-Bera statistics are highly significant. Negatively skewed distributions indicate that abnormally low return days occurred more frequently than abnormally high return days. The coefficient of excess kurtosis is in all cases much greater than 3 indicating the distribution of the returns is leptokurtic, which means that the distribution has fatter tails. The results confirm the presence of fat tails, which suggest that the assumption of a normal distribution is not satisfied. ARCH-LM test indicates presence of time varying volatility, and Box-Ljung statistics indicate evidence of autocorrelation in squared standardized residuals.

Table 1: Descriptive characteristics of MSCI daily returns

	Skewness	Kurtosis	JB	Q <sup>2</sup> (10)	Q <sup>2</sup> (30)	ARCH-LM (10)	ARCH-LM (30)
MSCI	-0.041	5.680	485.43 (0.00)	816.78 (0.00)	1635.0 (0.00)	284.93 (0.00)	354.15 (0.00)

Source: Author's calculations. Note: P values of corresponding test statistics are given in parentheses. JB represents Jarque-Bera statistics for normality testing; Q<sup>2</sup> represents Box-Ljung statistics for testing autocorrelation in squared standardized residuals, while ARCH-LM test is test of autoregressive conditional heteroscedasticity.

Bearing in mind that Box-Ljung autocorrelation test for squared standardized residuals and ARCH/LM tests indicate presence of ARCH effects, we estimate models of conditional autoregressive heteroscedasticity (GARCH type models). Model selection was done according to modified Akaike criteria. Model parameters are calculated using maximum likelihood estimation method. Maximum likelihood estimates of the parameters are obtained by numerical maximization of the log-likelihood function using the BHHH algorithm.

Results of estimating ARMA (m,s)-GARCH (p,q) model, and different types of asymmetric ARMA (m,s)-GARCH (p,q) model with assumption that the residuals follow normal or Student's t distribution for MSCI World stock index suggest the following conclusion (Table 2). MSCI World stock index best describes EGARCH (1,1) model regardless of whether it is assumed that the residuals follow normal or Student's t distribution. In the mean equation autoregression component of the first order is significant, but estimated value of the autoregression parameter is very small. As far as conditional variance equation concern, the value of  $\beta$  coefficient is highly significant which shows that persistence volatility clustering prevails in MSCI World stock index. Value of  $\gamma$  coefficient is statistically significant which shows that asymmetry information impact does exist in this stock market and negative shock has stronger impact on the volatility than the positive shock. Models have appropriate statistical characteristic, i.e. autocorrelation and ARCH effects do not exist in standardized residual. Furthermore, the Jarque-Bera statistics show that skewness and kurtosis in standardized residuals are reduced but not completely eliminated.

*Table 2: Parameter estimates of the GARCH model of the standardized residuals for MSCI World Index daily returns*

	Normal distribution	<i>Student's t distribution</i>
	EGARCH(1,1)	EGARCH (1,1)
Mean equation		
Constant	0.027 (0.12)	0.034 (0.05)
AR(1)	0.131 (0.00)	0.134 (0.00)
Volatility equation		
c	-0.091 (0.00)	-0.092 (0.00)
$\alpha$		
$\beta$	0.983 (0.00)	0.985 (0.00)
$\theta$	0.102 (0.00)	0.104 (0.00)
$\gamma$	-0.083 (0.00)	-0.088 (0.00)
$\delta$		
Number of degrees of freedom		
$\nu$		18
Specification tests		
Q2(30)	26.85 (0.57)	26.59 (0.59)
JB	40.73 (0.00)	46.84 (0.00)
ARCH (10)	16.57 (0.08)	16.00 (0.09)

*Source: Author's calculations*

Based on estimated parameters by EGARCH model we make forecast of returns and volatility for one day ahead to get VaR estimates at 95% and 99% coverage of the market risk. Results are given in Table 3 and they represent percentage values. Based on estimated results it could be concluded that maximum daily loss for the MSCI World stock index daily returns is 175 to 179 USD on invested 10000 USD at 95% confidence level, and from 252 to 258 USD at 99% confidence level.

*Table 3: Econometric estimation of the parameters of VaR for one-day-ahead period for MSCI World Index daily returns*

	Normal distribution	Student t distribution
	EGARCH	EGARCH
Forecasted return	0.013	0.007
Forecasted cond. volatility	1.184	1.156
VaR (1,0.95)	1.782	1.750
VaR (1, 0.99)	2.522	2.580

*Source: Author's calculations*

Applied methods were evaluated by back testing procedure for the last 200 observations. Accuracy of estimated VaR by EGARCH model is tested by the Kupiec POF test for 95% and 99 % confidence level (Table 4). If we compare the number of exemption exceeding the last 200 data returns MSCI World Index, it could be concluded that assessed Value-at-Risk for EGARCH model is adequate for both confidence level according to Kupiec test. In addition, results presented in Table 4 show that EGARCH model is too conservative, i.e overestimates VaR at both confidence level.

*Table 4: Back testing results for MSCI index daily returns*

	Normal distribution	Student t distribution
	EGARCH	EGARCH
Kupiec test 95%	0.450	0.108
Kupiec test 99%	0	0

*Source: Author's calculation. Note to Table. Critical value of  $\chi^2$  test with one degree of freedom at 95 and 99% confidence level is respectively: 3.849 and 6.635.*

### *RESULTS OF ANALYSIS FOR DURING THE CRISIS PERIOD*

Since the aim of this study is to find the impact of global financial crisis on MSCI World stock market index this study included an explanatory variable of global financial crisis in conditional mean and variance equation with intention to find the impact of both crisis on the stock return and volatility. Therefore, a dummy variables is prepared which is meant as 1 for the period from September 2008 to December 2009 defined as financial crisis period otherwise 0.

Results of descriptive statistics presented in Table 5 show similar pattern compare to the pre-crisis period; daily returns of MSCI World stock market index is not normally distributed, skewness is evident and kurtosis is much greater than 3. ARCH-LM test, also, indicates presence of time varying volatility, and Box-Ljung statistics indicate evidence of autocorrelation in squared standardized residuals.

*Table 5: Descriptive characteristics of MSCI daily returns*

	Skewness	Kurtosis	JB	$Q^2(10)$	$Q^2(30)$	ARCH-LM (10)	ARCH-LM (30)
MSCI	-0.395	8.985	1819.31 (0.00)	1060.5 (0.00)	2185.5 (0.00)	370.91 (0.00)	469.08 (0.00)

*Source: Author's calculations*

Results of estimating ARMA (m,s)-GARCH (p,q) model, and different types of asymmetric ARMA (m,s)-GARCH (p,q) model with assumption that the residuals follow normal or Student's t distribution for MSCI World stock index suggest the following conclusion (Table 6). MSCI World stock index best describes EGARCH (2,1) model regardless of whether it is assumed that the residuals follow normal or Student's t

distribution. Based on these results we can conclude that the conditional variance of the returns of the MSCI World stock index depends on the square value of the random errors in the previous two periods and the eigen values with one period of delay. In the mean equation autoregression component of the first order is significant, but estimated value of the autoregression parameter is very small. With the respect to the mean equation, coefficient d1(coefficient of global financial crisis) reveals that the existence of global financial crisis is not significant in influencing stock index. This show probability of test statistic of 0.71 and 0.89 for MSCI World stock index. This implies that global financial crisis has no impact on stock returns.

As far as conditional variance equation concerne, the coefficient d2 (coefficient of global financial crisis) is positive and statistically significant. This evidence confirms that recent global financial crisis positively hit volatility of stock return by 2.7 percent.

Models have appropriate statistical characteristic, i.e. autocorrelation and ARCH effects do not exist in standardized residual. Furthermore, the Jarque-Bera statistic show that skewness and kurtosis in standardized residuals are reduced but not completely eliminated.

*Table 6: Parameter estimates of the GARCH model of the standardized residuals for MSCI World Index daily returns*

	Normal distribution	Student's t distribution
	EGARCH (1,1)	EGARCH (1,1)
Mean equation		
d1	-0.031(0.71)	-0.010 (0.89)
Constant	0.02 (0.10)	0.034 (0.02)
AR(1)	0.109(0.00)	0.108 (0.00)
Volatility equation		
c	-0.109 (0.00)	-0.110 (0.01)
$\alpha$		
$\beta$	0.977 (0.00)	0.977 (0.00)
$\theta_1$	-0.090 (0.01)	-0.096(0.04)
$\theta_2$	0.218 (0.00)	0.223(0.00)
$\gamma$	-0.110 (0.00)	-0.119(0.00)
$\delta$		
d2	0.027 (0.00)	0.027 (0.00)
Number of degrees of freedom		
$\nu$		10
Specification tests		
Q2(30)	36.58 (0.15)	36.78 (0.15)
JB	87.63 (0.00)	94.49 (0.00)
ARCH (10)	13.28 (0.20)	12.83 (0.23)

*Source: Author's calculations*

The obtained VaR values are different depending on the assumptions that residuals have normal or Student's t distribution. Value at risk measure at 99% confidence level is higher within assumption that residuals follow Student's t distribution, while at 95% confidence level it is opposite.

Based on estimated results, given in Table 7, it could be concluded that maximum daily loss for the MSCI World stock index daily returns is 85 to 87 USD on invested 10000 USD at 95% confidence level, and from 141 to 150 USD at 99% confidence level.

*Table 7: Econometric estimation of the parameters of VaR for one-day-ahead period for MSCI index daily returns*

	Normal distribution	Student t distribution
	EGARCH	EGARCH
Forecasted return	0.396	0.396
Forecasted cond. volatility	0.605	0.594
VaR (1,0.95)	0.887	0.857
VaR (1, 0.99)	1.416	1.509

*Source: Author's calculations*

EGARCH (2,1) model used for calculating VaR with 99% confidence level according to Kupiec test seems to be adequate if we assume both normal and Student's t distribution of returns (see Table 8). At the same time, EGARCH (2,1) model did not pass Kupec test at 95% confidence level with assumption that residuals follow normal and Student's t distribution. It seems that EGARCH (2,1) model underestimate VaR at 95% confidence level.

Although it is informative to look at VaR model properties at different confidence level, Basel Committee prescribes testing VaR model adequacy at 99% confidence level (Mladenović, Miletić, Miletić, 2012). At these confidence level our results show that VaR calculation based on EGARCH model is adequate measure of downside risk.

*Table 8: Back testing results for MSCI index daily return*

	Normal distribution	Student t distribution
	EGARCH	EGARCH
Kupiec test 95%	4.302*	5.501*
Kupiec test 99%	3.208	1.565

*Source: Author's calculations*

Note to Tables; \*denotes statistical significance of the test statistics. Critical value of  $\chi^2$  test with one degree of freedom at 95% and 99% confidence level is respectively, 3.849 and 6.635.

## **CONCLUDING REMARKS**

In the global financial crisis conditions for investors is extremely important to accurately measure and allocate risk as well as to more efficiently manage their portfolio. Recent global financial crisis is a major turmoil event which permeated all over the world irrespective of developed or emerging countries. These crises which was triggered by subprime mortgage crisis in the United States got worst momentum in the year 2008 with the failure, merger or conservatorship several large financial institutions exposed to packaged subprime loans and credit default swaps issued to insure these loans and their issuers. This crisis rapidly evolved into global credit crisis resulting in a number of bank failures in Europe and sharpe reductions in the value of stocks worldwide. In response to the financial crisis, the Basel Committee on Banking Supervision established revised global standards (Basell III).

Value at risk is the assessment of the maximum loss in value of portfolio over a given time horizon at a given confidence level. Based on the VaR financial institutions are able to determine the level of capital that provides cover losses and ensure the financial position of extreme market movements.

The main objective of this study is to envisage the impact of global financial crisis on MSCI World stock index. Daily returns of stock market index MSCI is analyzed during the period Jun 3, 2002 to March 22, 2013 in respect. Since the focus of this research is to examine the impact of global financial crisis, dummy variable were adopted. The paper set the global financial crisis at September 2008. Therefore, dummy variable take 1 from the period from September 2008 December 2009, otherwise 0. We employ symmetric GARCH and asymmetric GARCH models, as VaR forecast models. One-day-ahead VaR performance under 95% and 99% confidence levels is evaluated with realized profit and loss for 200 observations in selected stock market indices. The performance of the VaR is assessed by Kupiec test unconditional coverage which represents the most famous test in this group.

Results of back testing show that assessed Value-at-Risk for EGARCH model is adequate for both confidence levels according to Kupiec test for pre crisis period. In addition, results suggest that EGARCH model is too conservative, i.e overestimates VaR at both confidence level. On the other hand, EGARCH (2,1) model used for calculating VaR with 99% confidence level according to Kupiec test seems to be adequate if we assume both normal and Student's t distribution of returns. At the same time, EGARCH (2,1) model did not pass Kupec test at 95% confidence level with assumption that residuals follow normal and Student's t distribution. It seems that EGARCH (2,1) model underestimate VaR at 95% confidence level.

Although it is informative to look at VaR model properties at different confidence level, Basel Committee prescribes testing VaR model adequacy at 99% confidence level. At these confidence level our results show that VaR calculation based on EGARCH model is adequate measure of downside risk.

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## ***PROBLEMS OF FINANCING INVESTMENTS UNDER AN UNSUSTAINABLE RELATIONSHIP BETWEEN THE BUDGET DEFICIT AND PUBLIC DEBT***

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**Abstract:** The paper aims to highlight the important problems of the budget deficit and public debt and its impact on economic growth. To explore the effects of budget deficits and public debt in macroeconomic relationships and aggregates (interest rate, public spending, private consumption, private investment, national income), of relevant studies and articles, as well as reports and publications (national and international). Debt crisis shakes almost all developed economies of the world. Debt implosion and explosion of development is characteristic of the economy of Serbia. The constant growth of foreign indebtedness and obligations of debt has led to their automatic growth, regardless of the pace of economic growth. Annual debt obligations exceed the last few years the amount of growth of gross domestic product. Realistically opens the problem of insolvency in international financial relations. This paper examines the relations between the dynamics of growth and rising foreign debt, the pressure of debts, factors and indicators of indebtedness. A section refers to the connection between investment and borrowing, and the inflow of capital and funding sources, with particular emphasis on domestic sources of financing, foreign direct investment and portfolio investment. The problems that we would like to point out are: the actual amount of the deficit of the consolidated budget deficit and the official system of financing the deficit, but the huge problems that will arise in the coming years in budgetary policy. The main results of the analysis indicate a crisis of public finances, which are accumulated for many years, with a growing budget deficit and the dominant external financing of the budget deficit and investment.

**Key words:** Foreign Debt, Debt Indicators, Investment, Interest Burden, Fiscal Policy

**JEL classification:** E20, E60, H60

**UDC** 336.143.232(082); 336.581(082); 336.27(082)

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## ***INTRODUCTION***

In the financial literature, we find different theoretical interpretations of deficit financing. Classical economic theory considers the financial mechanism of the state of liberal epoch based on the principle of "common funding" public need. This view is derived from the then doctrinal teaching on the place and role of the social superstructure of liberal capitalism known as "Lasser-fair laissez-passer." In this model, problems of the imbalance between supply and demand, as well as the problems of differences between actual and potential output, they do not exist. According to these conceptions scenarios is like this: "the invisible hand" and Say's law of markets automatically regulates these mechanisms, savings and consumption are determined by income growth; investment is automatically adjusted to the level of savings; economic mechanism works without exogenous inputs, IE. Without government intervention with whom he is closely linked fiscal policies of our time (Sljivic et al., 2013).

These views are the result of the doctrinal teachings of liberal economic epochs: (1) the system of economy, private initiative is absolutely superior to individual capitalists are the basis for economic progress and holders of production programs, (2) market power and spontaneous automatism locating optimum water production factors: (3) public expenditure can potentially impoverish the nation and (4) the role of the state is only providing three functions, namely: the external and internal security, and judiciary; thus essentially neutralized its main economic function under normal conditions.

Absolute budget balance for a long time is denoted as a healthy financial management, and the "golden rule of finance." Classical doctrine defended the principle of strict equilibrium načn following: (1) if the budget is in a state of imbalance deficient then scarce public resources cover expenses of the public debt, which will pay off the next generation (amortization loan to a particular interest) and (2) if the state can borrow (broadcast public debt), then they resort to new monetary program, whose circulation, in addition to: goods not covered - keep inflation.

The result of both approaches is steadily increasing public spending and borrowing, monetary depreciation, the rise in economic activity and disorganization. However, these orthodox budgetary balance and the golden rules of budgetary management, have fundamentally undermined by the crisis and deflationary tendencies on the wings of liberal capitalism between 1929 in 1933th, so that by Keynes to this doctrine, the classical strict budget balance in terms of cyclical movement of the economy (alternative prosperous and depressive phases), have the effect of accelerating expanding, or demolition of depression and economic balance. Hence Keynes and within the policy active public finance, accepted tolerant budget deficits in periods of economic depression, which would not require significant debt or to generate inflationary trends. In this context, Keynes advocated the dynamic aspect of a balanced budget, or for the use of budget deficits to finance public investment demand, which is a multiplier effect on the growth of national income, and consequently, the growth of financial potential, which compensates for the lack of public resources.

## ***CONVENTIONAL CONCEPTS AND OPERATIONAL FISCAL DEFICIT***

The conventional budget deficit is defined as the difference between tax revenues (gross power-flow lending) and expenditure (excluding debt monetization), which is funded through the items of gross loans net of amortization of debt. This definition enables the measurement of total government net financial needs for loanable resources, including: (1) the amortization payments in the nature of the different items of expenditure, (2) the effects of the demand for equal depreciation expense, and (3) that these expenses such that they can make up new debt (Bierman, Smidt, 2003). As an indicator of the "state contribution" the gap in domestic resources, the fiscal deficit is usually measured in terms of nominal gross domestic product. Therefore, in conditions of high inflation considers the different concepts of the fiscal deficit adequately express "levy" in the form of pressure on demand.

Thus, according to the conventional definition of fiscal deficit is the difference between total revenue and total expenditure of the state, created over a period of one year. However, such a definite fiscal deficit is not a reliable measure, and the purpose of the analysis of the deficit and its impact on other macroeconomic size necessary to accurately determine the content of the term. The reason for this is the fact that the amount and importance of the fiscal deficit varies with the state include: general government; consolidated general government, except that the general government includes extra-budgetary funds; consolidated general government, which includes revenues and expenditures local government bodies, public sector as a whole, which includes the balance of the financial transactions of public companies, as well as the fiscal transactions of the financial sector - privatization funds and/or development banks (Jacobs et al, 2002).

The Operationalized budget deficit is different from the conventional treatment only in the nominal interest rate. The part of the interest to be transferred (interest a transfer payment) with the institutional arrangements, it is usually caused by inflation can be considered, but can be extracted from the items that determine the deficit. It is considered to be implicitly included in the items for deficit financing as a "below the line" as equivalent to depreciation. But when applied indexation, estimate operational deficit requires a separation of inflation caused real interest rates. Buitter, Miller, Eisner and Piper have adopted this concept in the analysis of U.S. fiscal policy, budget deficits performing live from the real cycle of debt in order to avoid the cardinal "money illusion" (Eisner, 1989). In practice, it has been empirically confirmed that the operating deficit less than conventional, and over time these differences increase as follows: as in nominal and in real terms (Elyas, 2013)

Accordingly, the most comprehensive measure of state influence on other sectors and the economy as a whole should include a government deficit in its broadest scope. As is well known, such measures are rarely published and are typically used in the analysis: conventional deficit (general or consolidated general government), the primary deficit and the cyclically corrected deficit in terms of inflation, the real costs of these quantities (IMF institute, 2001, pp. 85-116). Cyclically corrected deficit is applied in the analysis of multipliers based on the traditional IS-LM model. The conventional deficit as partially endogenous, there is a multiplier effect, as it is the result of increased transfers to the

unemployed (as opposed to the deficit, the rise in public investment), and as such is already embedded in the multiplier (Tobin, (2001), website 23).

Another important observation is connected with the preceding paragraph, is the fact that there are differences in the effects of permanent and temporary deficits. Temporary deficits can stabilize the effect, and the impact of permanent deficit depends on the financing of the deficit: the banks, and/or borrowing. The debt does not increase when the deficit is financed by issuing money, and no effects on the levels of indebtedness, unless the debt is denominated in local currency and when it is not indexed. This means that public debt is the result of permanent deficits that are financed by borrowing (at home or abroad). From the foregoing it follows that the change in the deficit of the public debt between the two (if it is not financed by issuing money), and their effects on the economy coincide in cases of permanent fiscal deficit and by borrowing financed (Tobin,2002, website 24).

## ***FISCAL SPENDING AND ECONOMIC GROWTH***

Current fiscal trends in most countries of the world, indicating the increasing importance of the fiscal sector, and today he is considered one of the most important areas of economic policy. Resolving the issue of public debt sustainability, it becomes crucial to the survival of the economy of most countries of the modern world. A large national debt, when funded from domestic sources, can lead to an increase in taxes, or owing to rising interest rates, crowding out the private sector. On the other hand, if it is funded from foreign sources, a large national debt may require drastic macroeconomic adjustment, which could lead to instability.

Trend of public expenditure in total, and its structure is mainly comparable with GDP trends and their interrelations. A large and constantly growing of the share of public revenue and expenditure to GDP static terms, indicating increased load GDP procedures for public consumption and pressure of this form of the total energy consumption, and market prices. In this way, it can be seen and the level of GDP load "non-productive" spending by the state.

Today is an indicator of the evolution of the debt to GDP ratio most commonly used, especially after the appearance of Blanchard (1990)., But also because of the many difficulties when using other indicators. This indicator measures the level of debt in relation to the economic activity of the country, which directly involves the assumption that the government is funding the debt burden has all the resources of the GDP. However, this assumption is not always valid. Generally speaking: in most cases it is incorrect. On the other hand, this indicator is claimed to be the most important for measuring the degree of indebtedness, because it indicates the degree of solvency of the government, but also the possibility of simultaneous consideration of the degree of burden of the business sector and the household sector, the volume of public spending (Blanchard, 1990).

Preliminary considerations could be taken as a criticism of "excessive" government spending and higher tax treatment. And not only that. From this it follows that the criticism is a criticism of state intervention in the economy, choking economic activity and a source of instability expressed devastating effects of the modern financial crisis. The data

presented in Table 1 illustrate the burden of GDP by expenditure on public expenditures of Serbia in the period from 2005 to 2012.

*Table 1: Load of GDP public expenditure and revenue - amounts in billions RSD, the consolidated balance sheet of the public sector -*

	GDP	Public Expenses	Public Revenues	Budget Deficit	A shares of GDP		
					Expenses	Revenues	Deficit
2005.	1.883,5	706,8	724,5	+17,6	37,5	38,4	+0,9
2006.	1.962,1	899,3	867,7	-31,6	45,8	44,2	-1,6
2007.	2.276,9	1.046,8	1.002,0	-44,8	45,9	42,0	-3,0
2008.	2.661,4	1.213,9	1.134,4	-70,5	45,6	42,9	-2,7
2009.	2.713,2	1.267,9	1.146,5	-121,4	46,7	42,2	-4,5
2010.	2.986,8	1.359,8	1.225,2	-134,6	45,5	41,0	-4,5
2011.	3.293,3	1.460,9	1.302,5	-158,4	44,8	39,5	-5,3
2012.	3.267,1	1.622,8	1.405,4	-217,4	49,7	43,0	-6,7

*Source: Bilten javnih finansija, Ministarstvo javnih finansija Republike Srbije No. 12.2011.*

*Table 1 and 2, for 2012. the same source in October 2012, Table 1 - estimation.*

The data presented in Table 1 suggest the reduction of the share of public revenues and expenditures in GDP during the global financial crisis since 2007 by 2012 year, but the decline in the share of public revenues higher, which contributes to the growth of the budget deficit. The exception was the 2012th year in which both units increase significantly, indicating a the deepening of the crisis of indebtedness.

Another important consideration stems from the indicators presented in Table 2, which indicates excessive public spending on these forms of consumption, with the basic message that this is the key generators of development problems and instability of the Serbian economy.

*Table 2: Gross domestic product, and charged with public consumption - in% -*

	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.
Real growth of GDP	5,2	3,6	5,4	3,8	-3,5	1,0	1,6	-2,0
Nominal growth of GDP	21,9	16,6	16,0	16,8	1,9	10,0	10,2	1,0
The rise of consolidated public revenues	10,8	10,5	17,4	12,3	2,5	6,9	6,3	5,9
The rise of consolidated public expenditure	12,3	23,7	16,4	16,0	4,4	7,2	7,4	11,6
The share of public expenditures in the GDP	37,5	45,8	46,0	45,6	46,7	45,5	44,8	49,7
The share of public revenue in the GDP	38,4	43,6	44,3	41,2	42,2	41,0	39,5	43,0
The deficit or surplus budget - a classic, the primary	+17,6	-31,6	-54,7	-70,5	-125,4	-134,6	-158,4	-217,4
Share of the deficit in GDP (official)	+0,9	-1,6	-3,0	-2,7	-4,5	-4,5	-5,3	-6,7

*Source: Ministarstvo finansija Republike Srbije, Bilten javnih finansija, December 2008. and 2011., October 2012.*

As is evident from the data analysis table above notes, budgetary expenditures in the years of crisis increases slower than nominal GDP growth, it is for the consolidated public revenues. However, the share of public expenditure and revenue to GDP shows some instability, as after a three-year record of lowering the growth of these aggregates.

The load of GDP in Serbian economy in comparison to other EU countries is not more, on the contrary, is lower (Nikolić, A., 2011, pp. 154-163). However, the main problem is slower economic growth, with the effects of inflation are reflected in the public sector, given that the real annual increase in expenses and revenues below nominal GDP growth. Classic (primary) deficit in the years of crisis held at the level of 4,3-4,5% of GDP, although the weight of increasing year by year, so that the problem of its financing complicates. Conclusion at this point information about the consolidated budget of the Republic of Serbia (classical state budget), which is most often singled out in the public debate, given in Table 3.

*Table 3: Income, expenditure and deficit of Serbia - changes in% -*

	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Nominal growth of GDP	21,9	16,5	16,0	16,8	1,9	10,0	10,1
The annual increase in revenue budget	10,8	10,5	17,3	12,3	0,7	8,6	4,6
The annual growth of budget expenditures	12,3	20,7	16,6	13,6	6,3	9,8	6,9
The share of budgetary expenditure in GDP	37,0	27,0	27,1	26,3	27,5	27,4	26,6
The share of revenues of the budget in GDP	37,7	25,1	25,4	24,4	24,1	23,8	22,6
The budget deficit (bn RSD)	+8,2	-35,6	-38,1	-50,8	-90,5	-108,0	-132,5
Share of the deficit to GDP	+0,8	-1,8	-1,7	-1,9	-3,4	-3,6	-4,0

*Source: Ministarstvo finansija Republike Srbije, Bilten javnih finansija, October 2012., <http://mfp.gov.rs/UserFiles/File/bilten%20javne%20finansije/bilten%20-%2009%20-%20SRP%20za%20web.pdf>*

As is evident from the data of Table 3, the picture changes significantly. Classical state budget, with all the reviews that have recently been pointing to government spending and highlighting the need for reform of the public sector - the overall public finances could not be characterized as a large fiscal burden. In fact, it could mean that the problem is extremely low real economic growth, low tax base and low government revenues to finance public expenditures (Đurić, Živkov, Kolar 2011).

The dynamics of the annual increase in public revenue and expenditure are less than the annual growth of nominal GDP. This tendency is especially pronounced in the years of the crisis, with revenue growth is less than the increase in public expenditure. This has led to an increase in the budget deficit, lowering the share of public revenue and expenditure in gross domestic product (with revenues from 37.7% to 22.6%, and expenditures from 37% to 26.6%).

The problem of sustainability can be formulated as follows: the budget deficit leads to an increase of the public debt that will need to be serviced in the future. If interest rates on public debt exceeded the growth rate of the economy, the debt dynamic set, so that the ratio of public debt to GDP ratio is getting worse. It is clear that this can become unsustainable and require corrective action (Ball, Mankiw, 1995, website 1).

According to the definition, the public debt is sustainable when its level can long remain unchanged, and that does not lead to the necessity of changing fiscal policy (Brümmerhoff, 2007). In this sense, the debt is not sustainable in Serbia, while fiscal reform budžeskog not contribute to reducing the deficit. From this point of view, it is not appropriate to question whether sustainability is achieved, it is important to question whether government policy leads to sustainability.

The structure and dynamics of government expenditure show some problematic trends:

- 1) The effectiveness of public revenue decreases dramatically;
- 2) Public expenditure autonomously behaves in relation to GDP, leading to explosive expansion of additional financing of budget expenditures;
- 3) Budgetary control is significantly limited, and thus the efficiency of funds (Henriksson, 2007).

## **THE EFFECTS OF THE INCREMENT OF GROSS DOMESTIC PRODUCT AND DEBT GROWTH**

The most commonly used indicator of debt burden, formulated ratio of debt to GDP, however, is not a true indicator of external debt. In this sense, the more important indicator of the accrued annual commitments from foreign debt and GDP growth, as they realistically indicate the status of the debt burden, and bring us closer to answering the question of whether the state is threatening condition called: „The noose of debt“. These the circumstances of in the Republic of Serbia for the period 2002-2012, may indicate data from Table 4.

*Table 4: The annual growth in gross domestic product & annually by external debt commitments - in% -*

	The growth of GDP (%)	The annual increase in foreign debt (%)	Share of commitments to GDP	The annual increase (bn €) GDP DEBT		Debt-to-GDP
2002	4,3	2,9	1,6	3,2	0,1	67,2
2003.	2,5	2,9	2,5	1,4	-0,6	62,3
2004.	9,3	-2,2	5,0	1,7	0,1	54,3
2005.	5,4	28,8	7,6	1,3	2,7	64,8
2006.	3,6	16,3	9,9	1,5	1,8	60,9
2007.	5,4	20,3	10,2	3,1	2,9	64,6
2008.	3,8	23,0	10,5	4,2	3,9	67,6
2009.	-3,5	7,0	13,6	-3,8	1,4	77,9
2010.	1,0	5,8	9,4	0,1	1,3	82,1
2011.	1,9	4,4	10,3	2,9	1,0	77,9
Average 2002.-2012.	3,4	9,0	8,1	15,6	14,6	68,2
The crisis 2008.-2012. Average	0,8	10,0	11,0	3,4	7,6	77,0

*Source: NBS, Izveštaj o inflaciji, February 2013. p. 46-47.*

As the data presented in Table 4 shows, the annual increase of debt and the amount of maturing debt obligations, may indicate that it strengthens or weakens the power of the general development of the economy or the state enters into a zone of over-indebtedness and the inability to service foreign debts. It can be concluded that the rate of economic growth (GDP), which generates over 70% in the service sector, which are not "product for export" in the period 2002-2012 amounts to approximately 3%, while in the same period, the average annual growth of foreign debt and 9% share of the debt commitments of 8.1% (with a tendency of constant increase). This means that the growth of GDP, which is three times slower than the growth of the debts and obligations of debt, causing a larger increase in the share of debt commitments of the growth rate, and that GDP increase is not sufficient to service the foreign debt. From this point of view, the characteristic period of the crisis 2008th the end of 2012 year. During this period, the average GDP growth rate falls to 0.8%, the growth of foreign debt was approximately 10%, and the debt commitments of 11%. This means that during this period there is a negative increase in GDP of 3.0 billion euros, while the external debt increased by 7.6 billion euros.

The data presented in Table 5 suggest that the problem is that the commitments of debt from year to year: from 103 million in 2,001th to 3.4 billion in the 2008th and to 4.2 billion euros in 2012th year, so that in recent years is not enough increase domestic product (1-2%) to be serviced and interest payments on the debt, which means that the debt obligations fully absorb the entire increase of GDP.

*Table 5: Crisis period and obligations of foreign debt - the mill. Euro -*

	Interest	Repayments	In total	The annual Increase GDP	The growth of GDP minus commitments	Annual increase of debt
2008.	184,2	3.269,0	3.453,2	4.200	747	3.949
2009.	233,4	3.080,6	3.314,0	-3.785	-7.099	1.319
2010.	323,6	3.079,5	3.403,1	101	-3.302	1.299
2011.	369,1	3.693,1	4.062,2	2.857	-1.205	1.039
2012.	424,4	3.858,0	4.282,4	-1.066	-5.348	896
In total	1.534,7	16.980,2	18.514,9	2.307	-16.208	8.582

*Source: NBS, Izveštaj o inflaciji, February 2013. p. 46-47.*

Consequently, the share of commitments soaring, thus it can be considered that there arose a great break. Obviously, the external debt "replaces" means otherwise large and unsuccessful privatization. Sale of the national wealth has replaced the large debt and external debt. Of course, the time comes to large outflows of national savings (accumulation) abroad. This problem has been formulated Henriksson in the principles of budgetary consolidation, as a third principle: "If you owe, you are not free" (Henriksson, 2007).

It must be mentioned that for many loans obtained favorable "grace period", which should be used to revive investment and development, in order to put into

operation loans repayment from GDP growth. Accordingly, the method of use and the effects on income and accumulation of foreign loans, are becoming key issues of economic policy that are being used and how, production and investment, and that part of them are used for other forms of final consumption - personality and budget. Answers to these questions enable the analysis of economic trends in the direction of excessive foreign indebtedness, insolvency, and/or water debt crisis. It is clear that the increase in debt at a faster pace than the growth of GDP, leads the state known as the "The noose of debt", which in these conditions increasingly stretched.

Data in Table 6 indicate that the share of payments to GDP increased from 0.8% in 2,001th and 4.6% in the 2005th to 14.5% in the 2012th year, which means that the outflow of capital in the last two years higher than the overall growth of GDP, IE. Comes to an outflow of capital from the country abroad. Participation of brain gain in gross domestic product in the 2008th was about 4%, which increases the 2009th to over 160% due to the negative growth rate of GDP of minus 3.5%.

*Table 6: Annual servicing of foreign debt - in the millions. Euros -*

	Repayments And interest	GDP	Foreign Debt	Ratio Debt / GDP In%	Payment And interest Of GDP	Payment According to Exports	The rate Of growth
2001.	103	12.821	12.609	98,3	0,8	3,7	5,6
2002.	218	16.034	10.768	67,2	1,4	7,1	3,9
2003.	348	17.416	10.857	62,3	2,0	9,1	2,4
2004.	736	19.075	10.355	54,3	3,9	16,8	8,3
2005.	945	20.358	13.964	64,8	4,6	17,9	5,6
2006.	1.635	23.305	14.889	63,9	7,0	23,1	5,2
2007.	2.885	28.468	17.789	62,2	9,8	33,4	6,9
2008.	3.453	32.668	21.088	64,6	10,8	34,5	5,4
2009.	4.314	28.863	22.487	77,8	11,5	39,1	-3,5
2010.	3.403	28.984	23.786	82,1	11,7	34,0	1,0
2011.	4.062	31.140	24.825	77,9	12,7	35,4	1,9
2012	3.858	30.074	25.721	85,6	14,5	36,4	-3,4

*Source: NBS, Izveštaj o inflaciji, February 2013. p. 46-47.*

On the practical approach to the sustainability of public finances can be viewed from the aspect of control. From this point of view, a particularly important issue as net cash obligations of the state, not the level of the deficit and debt. The increase in net liabilities of the Republic, as already pointed out in this paper, seriously affect the stability of the domestic currency due to higher interest rates. In addition, this can lead to a significant reduction in budget expenditure and increase taxes. Practical tools for determining the path that leads to repeated fiscal sustainability, define the von Hagen, Hallett and Strauch, to work together. These tools are used as quantitative measures in assessing the readiness of the candidate countries for accession to the EU (Von Hagen J., at all, 2001, website 25). It is the measurement of practical stages following fiscal sustainability: (1) whether the decline in the share of the primary deficit of GDP is at least 0.5 percentage points of GDP, (2) whether the relative contribution of the reduced share of spending to deficit reduction during consolidation is at least 2 / 3 initial contribution of consumption increase the deficit, (2) whether steps have been taken to reverse the trend of increasing expenditure items that lead to an increase in the deficit. From this follows the defined quantitative measures that the country that has gone

through the last phase of the evaluation, failed to reverse the trend of expenditures, which are a source of increasing deficit.

Serbia still does not have development strategy and borrowing based on these criteria, unless the Fiscal rules do not consider this strategy. However, this is unlikely given the many complaints of the Fiscal Council, stated during the previous and current fiscal years of instability and the threat of continued growth of the budget deficit (Republic of Serbia Fiscal Council, 2013, website 22).

## ***THE EFFECTIVENESS OF THE INVESTMENT POLICY***

An effective investment policy involves Ensuring optimal ratio between (1) the real investment (gross fixed capital and inventories) and (2) financial investments (deposits, cash, stocks, bonds), often belonging to the speculative economy, is the sphere of redistribution of money and savings, and in the second iteration through stock transactions followed was directed savings into real capital. Accordingly, it is a very complex relationship in gross domestic product, as well as in shaping behavior and its components. Today these relations are more complex, because in open economies, there is a significant "correction" available GDP imports of capital and corrections spending by exporting capital.

It is clear that routing, the use and effects of imports and exports of capital into the national economy, are becoming key factors and sources of growth. In fact, it does not matter whether this part of the GDP growth in direct current private consumption, government expenditure and cover the deficit, or used for investment, while it is extremely important that you are talking about manufacturing or non-manufacturing investments.

Since the investments generator of economic development, especially through its multiplier effect on a number of macro-aggregates of the economy, it is necessary to monitor the following key elements of the investment process:

- a) The amount and rate of gross and net investment;
- b) Sources of investment financing;
- c) The structure of investment spending (equipment, import and export facilities, the technical structure of investment, the economic structure of investments, etc..)
- d) The effects of investment on consumption, income, employment, growth, export, import and other forms of consumption;
- e) Effecting investment.

## ***INVESTING AND BORROWING***

Today's statistics investments in Serbia, trying to follow the area through indirect indicator of investment and over the long-term and medium-term borrowing of the economy and banks; domestic investment of bank loans and long-term loans granted to households. We are confident that this approach does not provide a realistic analysis of data on investments, and especially the economic, technical and regional investment

structure, while monitoring the effects on investment difficult to speak. Official statistics, regardless of the institutional sources of data, trying to indirectly identify and monitor investment spending through the use of medium-and long-term loans by businesses and individuals in banks.

In order to illustrate this approach, it is useful to consider the data presented in Table 7 In the period of financial crisis, 2007.-2012. Banks in Serbia approved the new 933.6 billion of long-term and medium-term loans to the corporate sector (companies) and 399.5 billion retail sector. The level of loans that are still in the two sectors amounted to 1704.1 billion.

*Table 7: Long-term and medium-term bank loans - in billions. RSD -*

	<b>Business companies</b>	<b>The household sector</b>	<b>Other sectors</b>	<b>Total Investment Loans</b>
2007.	185,4	253,3		456,0
2011.	495,4	527,6	11	1.140,0
2012.	1.119,	652,8	38	2.160,1
The increase in	933,6	399,5	37	1.704,1

*Source: NBS, Statistički bilten, No. 2, 2012. and Bilans stanja bankarskog sektora na kraju 2012., Makroekonomske analize i trendovi, Tabela bank placements, [http://www.ecinst.org.rs/sites/default/files/mat-kratki/temabroja\\_mat\\_220.pdf](http://www.ecinst.org.rs/sites/default/files/mat-kratki/temabroja_mat_220.pdf)*

If the mass is converted dinar loans in euros at the average exchange rate, this amounts to about 15 billion euros in investment spending, which can be indicators of investment in fixed assets, especially in terms of their structure, quality, and the regional branch of funds. It is interesting to note that foreign direct investment (mainly from the sale of companies and banks) in this period, also amount to about 15 billion euros.

*Table 8: The structure of foreign debt by sector - in millions of euros -*

	<b>2001.</b>	<b>Structure</b>	<b>2012.</b>	<b>Structure</b>	<b>Change 2001.-2012.</b>
<b>Public sector</b>	10.	93,5	10	42,4	+644
(In it NBS)	309		1.		1.287
Short term	150		-		-150
<b>Enterprises</b>	607	5,5	9.	38,6	+9.323
Long term	38		9.		+9.794
Short term	569		98		-471
<b>The banking</b>	105	1,0	4.	19,0	+4.786
Long term	10		4.		+4.267
Short term	95		61		+519
<b>Total Debt</b>	10.	100	25	100	+14.753

*Source: Bilten javnih finansija, December. 2011. p. 21. Tab. 8. For 2012 according to the end of October.*

The data Table 8 shows that the enterprises in the period analyzed, using about 10 billion euros of long-term loans and the banking sector 5 billion, which amounts to about 15 billion "supplemental" accumulation (savings) to finance investments. Thus, debt and other economic sectors abroad "compensated" lack of national savings (accumulation), which consequently leads to explosive growth of external debt (Đurić, D. at all, 2011, pp. 299-309). At the same time, remittances from abroad has been an influx of 20 billion euros and net normal credit abroad 17.5 billion, which amounts to about 53 billion euros, or nearly \$ 70 billion. With such an influx of capital and domestic capital loan was the modest average rate of economic growth in the period 2001 to-2012<sup>th</sup> of about 3%, and the rate of gross investment of 16.7%. A particular problem with this data is the fact that you can not see what those investments in which sectors they went resources, and the public often emphasized that Serbia needs between 3 and 5 billion of foreign investment to achieve an economic growth rate of 6 - 7% (Ekonomski institut, 2010, pp. 48).

Of course, that its growth of gross domestic product was higher, the share of investment in it would be proportionately less. The above-mentioned paradox leads us to ask at least two questions: (a) what happened to such a great source of funds for investment, when and distorted data on this investment rate quite low? And (b) wherein the system of financing amortization lost? The latter question is important because if the funding includes funding depreciation, participating in GDP between 14% and 16%, the net investment rate above the depreciation of between 2.2% and 4.2%. Obviously, the rate of net investment is quite low, and this fact corresponds with the decline in overall employment by 400 thousand previously employed in the economy of the 555 thousand. The unemployment rate in this period increased from 12.8% in 2,001<sup>th</sup> to 23.7% late 2011 and about 26% of the 2012<sup>th</sup> year.

In addition to the above, should be emphasized the fact that the structure used loans sector companies do not serve as a basis for a finding of a greater effect on the acceleration of economic growth. In fact, the financial services related 1.9 billion in real estate transactions and leasing 2.1 billion and 1.7 billion in trade. Manufacturing uses only 935 million (of which the production of food and drinks almost half) - (Bilten javnih finansija, 2012, pp. 21). This structure prior to the conclusion that much of the investment in sectors of non-tradable goods such as housing construction and infrastructure facilities. Consequently, there is very little foothold claims that this investment will be associated with the sustainable balance of payments deficit, and will not have a significant impact on the increase of production capacity, which implies that it will have no impact on the unemployment rate.

## ***FOREIGN DIRECT AND PORTFOLIO INVESTMENT***

In the period 2005-2011, foreign direct investment in Serbia amounted to 13.7 billion euros. Their structure indicates that the greatest investment in the financial sector (37%) due to the recapitalization of banks' investments in services and telecommunications (29%), while FDI in the industry, only 18% (due to the privatization of the company). For comparison, we give comparative data for some transition countries in 2008. While Serbia that year had FDI inflows of 1,824 million

euros, or 2,572 million, Slovakia was 13 billion dollars, 11.4 billion Czech Republic, Poland 7.7 billion, 6.8 billion, Hungary (from 1994 to 2008, only the Hungary has attracted over \$ 64 billion FDI) - (IMF, 2012, website 10).

The data from Table 9 suggest that the share of FDI in GDP was between 2.9% and 14.8% in that period, or an average of 6.4% for the whole period. The share of FDI in gross fixed ranges between 16% and 52% different in age, and the average over the entire period about 30%. This means that domestic savings practically disappeared in financing investment.

In order to get a clearer picture of their class in the financing of investments in Serbia, and also exclude foreign exchange fluctuations, we give them in the form of foreign exchange.

*Table 9: The share of FDI in gross domestic product and gross investment - in billions euro -*

	2005.	2006	2007	2008	2009	2010	2011	2012
GDP	20,4	23,3	28,5	32,7	28,9	29,0	33,0	30,
FDI	1,2	3,3	1,8	1,8	1,4	0,8	1,5	0,8
The share of FDI in GDP	6,1%	14,8%	6,2%	5,4%	4,8%	2,9%	4,5%	2,7%
The share of FDI in gross domestic investment	32%	62%	22%	31%	26,8%	16,4%	31,0%	...

*Source: Ministarstvo finansija Republike Srbije, Bilten javnih finansija, No. 101, January 2013.*

The problem is that the structure of FDI is very unfavorable, since greenfield investments (investments in new capacity) almost symbolic stake. Foreign capital for the Serbian economy mainly through privatization of existing enterprises and banks. It is the green field investments driver and stimulator of economic development (Kindlberger, 1998), and there has so far been very little. So it was mainly about investing in the purchase of state and social capital through privatization (Horvat, 2008).

Portfolio investment is a form of international investment in which the investor is not the sole motive of control over the company, but also income generation. The difference between direct investment and portfolio investment is essential. Portfolio investors as the main motive for acquiring a regular income from their capital invested in the purchase of securities (companies, government, insurance companies, etc.). These are securities with fixed interest rates. It all boils down to "clipping coupons" with its securities. The motive investment is almost the same as depositors in banks. Portfolio investors are therefore not directly deal with the development of business and winning markets as a direct investor (Kvrđić, Nikolić, 2010).

*Table 10: Portfolio investments in Serbia - in millions of euros -*

	2007.	2008.	2009.	2010.	2011.	2012.
Assets	-3	-28	-5	-30	67	57
Liabilities	682	-63	-46	69	1.552	0
Portfolio investments – net	679	-91	-51	39	1.619	57

*Source: Statistički bilten NBS, January 2013., tab. 14a*

Portfolio investments are uncertain and quite variable, an additional source of funding, especially since it is closely related to risk. In current investment policy to attract foreign capital and portfolio investments are modest, almost symbolic, except in the 2011th year (related to issue bonds budget in euros), as can be seen from the data in Table 10.

It remains an open question as to whether such terms of gross investment (their technological, economic, regional structures are unknowns) could run economic growth and solve the problem of high unemployment and out of the development crisis. Given that it noose tightened strong external debts, with high debt obligations, require a much higher rate of economic growth to its gradual easing, duly serviced commitments of debt, and then gradually realized financial surplus and domestic savings to finance investment. The rate self-financing of the economy is extremely low. All of the above requires that the investment sector, which are the generators of development, so the general shift in both the complex monitoring of investments and combining funding and monitoring the effects of investment.

## **CONCLUSION**

High public debt, especially in the case of its foreign component does not contribute to economic development and must not be an instrument to encourage economic growth. In this regard, the government should take measures which contribute to the harmonization of public debt and its servicing capabilities. Otherwise, a short-term policy is qualitatively narrowing space for future decisions. The use of debt to finance the current deficit and the investment projects of the state and the Shifting of such costs in the future, the most negative impact on the flexibility of public finances, which consist of slow economic development in the coming years.

Optimum limit of public debt is considered to be the amount of debt that ensures the achievement of desired economic stabilization objectives, financial market development and economic growth, and that when it does not jeopardize the potential economic and social development. However, the increase in gross domestic productivity and the maturity of the debt commitments, indicate that the debt burden increases, the weak development of the economy and the debt, and the power of the state and threatened to open debt crisis, with the emergence of foreign insolvency. In this context, the state must reach a state of over-indebtedness leading financial insolvency and instability, which can be achieved so that the rate of growth of public debt in the long run does not exceed the rate of growth of GDP.

In the macroeconomic policy Serbian chose an open economy model of commodity and financial capital. Created a high credit and capital dependency of the public and private sectors from foreign creditors. The share of foreign capital in the domestic investment is high, and obligations of used capital, which created an economy with a high debt burden. Domestic savings in the financing of investments in a small percentage, except through foreign currency bank loans which are concentrated savings accounts. In addition, the economy has all of the lower rate of gross investment, with several years of net investment has been disinvesting. With the emergence of the financial crisis is gradually declining capital inflows, due to inadequate investment structure decreases the effectiveness of investment, economic growth is slowing down, with rising unemployment.

Viewed dynamically, so that economic growth was redirected according to equilibrium, measures of fiscal and monetary policy would have to meet the following essential requirements:

(1) Healthy rate of production that can be achieved if the average consumption for a few years is growing faster than production of investment, and even in the withdrawal of foreign resources;

(2) Domestic savings are not behind the increase in investments, which means that the proportion of foreign funding is not increasing, so that the state falls into a state of accelerated indebtedness.

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## MACROECONOMIC STABILITY AS PRECONDITION FOR INCREASE IN PROPENSITY TO INVEST

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**Abstract:** This paper aims to explain the long-run and short-run relationship between the share of investments in GDP and CPI as well as inflation volatility. We estimate error correction models on the quarterly data for Serbia for the period from 2002 to 2012. By estimating the two models we concluded that in the long run CPI as well as inflation volatility negatively affect the agents' propensity to invest. The results of this research suggest that macroeconomic stability that may be considered through stability of prices is a precondition for sustainable economic growth that is led by increased share of investments in the real GDP. Granger causality has proven the hypothesis that CPI as well as inflation volatility affect the propensity to invest.

**Key words:** Inflation, Volatility, Macroeconomic Stability, Investments

**JEL classification:** E22, E31

**UDC** 330.362(082); 330.322(082)

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## INTRODUCTION

Rising unemployment is a problem that Serbia has been suffering from for a long time. In the periods of crisis this problem is even more pronounced and calls for implementation of strategies that will lead to an increase in both employment and economic activity and investments. The increase in investments would certainly lead to a reduction in unemployment rate, but it is necessary to maintain stable macroeconomic environment in order to attract investors and increase agents' propensity to invest. Propensity of agents to invest may be represented as a share of investments in the gross domestic product (GDP).

The purpose of this research is to investigate if there is empirical evidence of positive effects of monetary policy measures on an increase in investments and consequently growth and employment. Monetary policy measures may not influence economic growth in the long run (superneutrality of money) but monetary policy measures that are aimed at price stabilization, according to current literature, may in the long run positively affect GDP growth. To sum up, monetary policy cannot be expected to directly contribute to raising long-term economic growth, though it can foster sustainable growth by maintaining an environment of price stability.

Graphical analysis of y-o-y inflation and growth rates of the share of investments in GDP (Figure 1) has shown negative relationship between these two variables. In periods of higher inflation, growth rates of the propensity to invest were lower and vice versa.

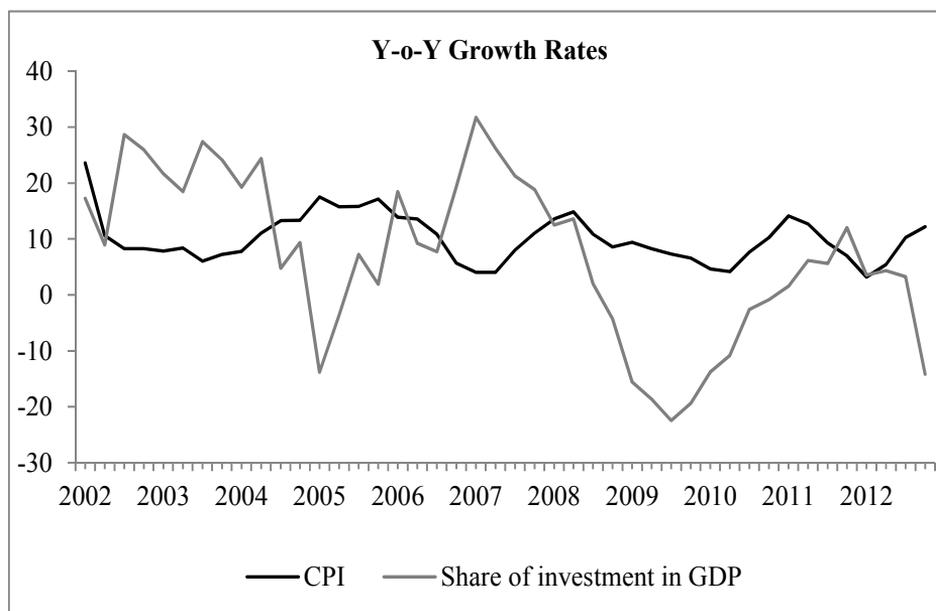


Figure 1: Y-o-Y inflation and share of investments in GDP growth rates in Serbia (Q1 2002 – Q4 2012), in %

Source: NBS, authors' illustrations

In order to test if macroeconomic stability is a precondition for an increase in investments, i.e. propensity to invest, we estimated error correction models with the share of gross investments in real GDP as dependent variable. The long-run relationship between propensity to invest and monetary variables such as inflation level and inflation volatility is tested by cointegration equations, while the short term relationship is tested using error correction models.

The results obtained suggest that there exist negative and significant long-run relationship between CPI and the share of investments in GDP, but the impact of CPI loses its explanatory power once volatility of inflation is included in the model. Estimated coefficients for the volatility of inflation also have a negative sign and are in accordance with the theory which suggests that inflation is not the only thing that concerns potential investors, but so does its stability. In some cases, relatively higher but stable inflation rates are preferable to lower but more volatile rates.

Section 1 of this paper gives a brief overview of the relevant literature and the most important empirical findings. Section 2 deals with the empirical analysis which assumes both data description and methodological issues. This section also gives a detailed description of the econometrical methods that were applied, such as unit root tests, cointegration analysis, estimation of coefficients and the causality analysis. Section 3 presents the main conclusions, policy implications and the possibilities for future research.

## ***LITERATURE REVIEW***

The relationship between inflation and economic growth has recently been the subject of many research papers. In order to test if the macroeconomic stability is precondition for sustainable growth, papers differ in the data sets and applied econometric techniques. There are very few empirical analyses that have identified a positive and stable long-term relationship between inflation and growth, but this relationship holds for low rates of inflation only. A clear majority of studies find that inflation and long-term growth are systematically and negatively related. In other words, higher inflation tends to reduce growth in the long run. A number of studies have considered whether there are any nonlinearities in the relationship between inflation and growth by examining the possibility that there are "threshold levels" in the relationship. It has been found that the effect of an increase in inflation on growth may depend on whether inflation is above or below a particular threshold level: while inflation above this level is associated with lower growth, this does not appear to be the case for inflation rates below the threshold level.

In the cross-country study, Barro (1995) found that inflation affects economic growth negatively. He estimated the relationship between inflation and growth of real GDP per capita as well as between inflation and the share of investments in GDP using data set of around 100 countries for the period from 1960 to 1990. The results suggest that an increase in the average inflation of 10 percentage points per year leads to a reduction in real GDP per capita growth of 0.2-0.3 and a reduction in the ratio of investments to GDP ratio of 0.4-0.6.

Farooq, Chaudhry and Ayyoub (2008) tested relationship between inflation rates and growth rates for Pakistan for the period 1972-73 and 2009-10 by implementing OLS methodology. They proved that inflation negatively affects GDP growth, as well as that there exists certain threshold above which inflation starts to influence economic growth negatively. In the case of Pakistan, that threshold is defined at the level of 7% y-o-y, which means that when y-o-y inflation is lower than 7%, an increase in inflation may lead to an increase in GDP growth rates, while in cases when inflation is higher than 7%, an increase in inflation may lead to a decrease in GDP growth rates.

Mallik and Chowdhury (2001) estimated the relationship between inflation and GDP growth for four South Asian countries (Bangladesh, India, Pakistan and Sri Lanka). They applied cointegration and error correction models using annual data on inflation and GDP growth rates. The authors found evidence of a long-run positive relationship between GDP growth rate and inflation for all four countries. They also ascertained significant feedbacks between inflation and economic growth. These results have important policy implications. Moderate inflation is helpful to growth, but faster economic growth feeds back into inflation. Thus, these countries are on a knife-edge.

Judson and Orphanides (1996) state that in some cases higher inflation rates stabilized through indexation (lower volatility) may be preferable to lower rates but are more volatile. They found that inflation volatility is robustly and statistically significantly negatively correlated to economic growth. The level of inflation is also negatively correlated to economic growth, but they showed that this holds only for inflation levels above 10 per cent. The third finding from their research is that inflation rates and inflation volatility have independent negative effect on economic growth.

Erbaykal and Okuyan (2008) estimated the relationship between inflation and economic growth in Turkey for the period from 1987 to 2006. They estimated long-run relationship using Bound Test. They found no statistically significant long term relationship but found a negative and statistically significant short term relationship. Whereas no causality relationship has been found from economic growth to inflation, a causality relationship has been found from inflation to economic growth.

## ***EMPIRICAL RESULTS***

### *DATA DESCRIPTION*

In order to test the relationship between macroeconomic stability and propensity to invest we collected data on prices and the share of investments in GDP from the Statistical Office of the Republic of Serbia, while the modifications of the data are results of authors' calculations.

Variables that figure in models are the following:

**SI** – natural logarithm of real investments share in GDP,

**CPI** – natural logarithm of Consumer Price Index, December 2006=100,

**VOLATILITY** – natural logarithm of volatility of q-o-q inflation rates.

All data are quarterly and samples used in the paper are from Q1 2002 to Q4 2012.

Real investments share in GDP approximates the agents' propensity to invest. It is calculated as the share of gross fixed investments expressed in constant prices in real GDP. During the whole period the share of investments in GDP was between 9.2% and 30.1%. Due to the presence of seasonality in the series of investments share in GDP, we seasonally adjusted data for the purpose of our analysis.

For prices we used CPI calculated prices with the base of December 2006. Quarterly inflation rates are approximated by the first differences of the natural logarithm of the quarterly Consumer Price Index. Due to methodological changes in the statistics of prices, official data on CPI for Serbia is available from January 2007. The data from Q1 2002 to Q4 2006 are CPI obtained by modifying the data on RPI (retail price index) that was the official measure of price movements in Serbia up to January 2009.

From Q1 2002 to Q4 2012 inflation rates (y-o-y as well as quarterly) remained very volatile (Figure 2 and Figure 3). The NBS made a great effort in order to stabilize price movements and reduced y-o-y inflation rates from above 30% in 2002 to 2.7% in April 2012, but inflation remained very volatile due to high share of food prices in CPI that drives volatility of inflation but cannot be controlled by monetary authorities. On the other hand, the National Bank of Serbia set target at  $4 \pm 1.5\%$  until 2014 and acted in a way to reduce inflation by keeping restrictiveness of its monetary policy even when high inflation resulted from one-time shocks in order to prevent the spill on expectations. The adoption of inflation targeting regime in 2009 expresses the commitment of the Serbian monetary authorities to reduce the level of inflation, but the fact that inflation corridor was targeted in the first year of implementation of the inflation targeting regime, speaks in favour of the NBS commitment to maintain less volatile inflation rates. This is manifested through lower volatility of inflation rates after the introduction of inflation targeting regime.

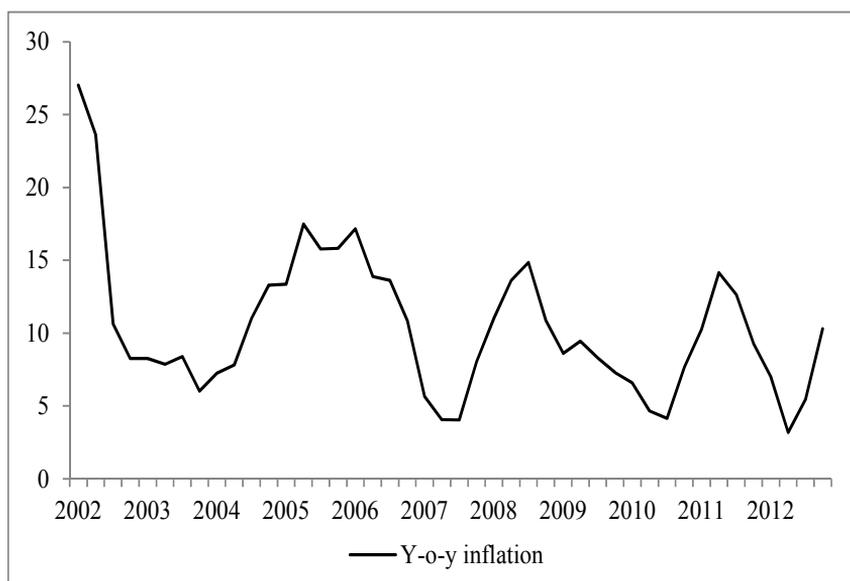


Figure 2: Y-o-y inflation rates in Serbia (Q1 2002 – Q4 2012), in %

Source: NBS, authors' illustrations

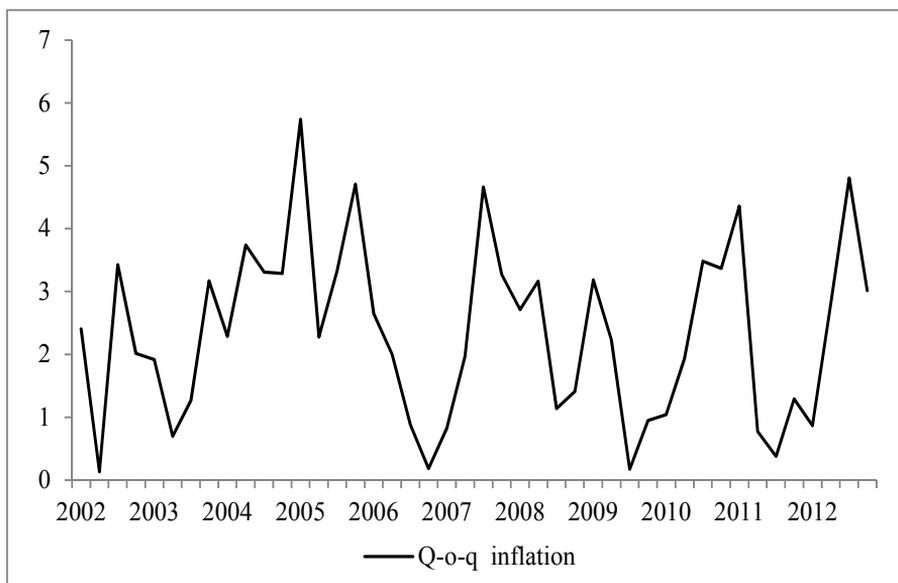


Figure 3: Q-o-q inflation rates in Serbia (Q1 2002 – Q4 2012), in %

Source: NBS, authors' illustrations

As can be observed from Figure 2, although the level of y-o-y inflation rates is reduced significantly from Q1 2002 to Q4 2012, y-o-y inflation rates, as well as quarterly inflation rates remained very volatile. In order to test for the presence of ARCH effects in the volatility of quarterly inflation rates, the correlation structure of ordinary residuals and squared residuals is considered (Table 1). Since there is statistically significant autocorrelation observed in squared residuals, volatility of monthly inflation rates is estimated using several parametric approaches.

Table 1: The correlation structure of CPI mean and variance

Lag	1	2	3	4	5	6
CPI						
AC	0.23	0.02	-0.14	-0.08	-0.08	-0.04
PAC	0.23	-0.53	-0.13	-0.15	-0.07	-0.02
Squared CPI						
AC	0.02	-0.03	-0.01	-0.02	-0.04	-0.02
PAC	0.02	-0.03	-0.01	-0.02	-0.04	-0.02

Source: Authors' calculations

Among several specifications, we chose the EGARCH (1,1) specification for the unconditional variance of CPI. Estimated equation for unconditional variance is given by the following expression:

$$\pi_t = 0.02 + 0.27\pi_{t-1}$$

$$\log \sigma_t^2 = -3.82 - 1.78 \frac{|\varepsilon_{t-1}|}{|\sigma_{t-1}|} + 0.04 \frac{|\varepsilon_{t-1}|}{\sigma_{t-1}} + 0.38 \log \sigma_{t-1}^2$$

Time series of volatility is estimated on the sample from January 2002 to December 2012 and based on the EGARCH (1,1) specification.

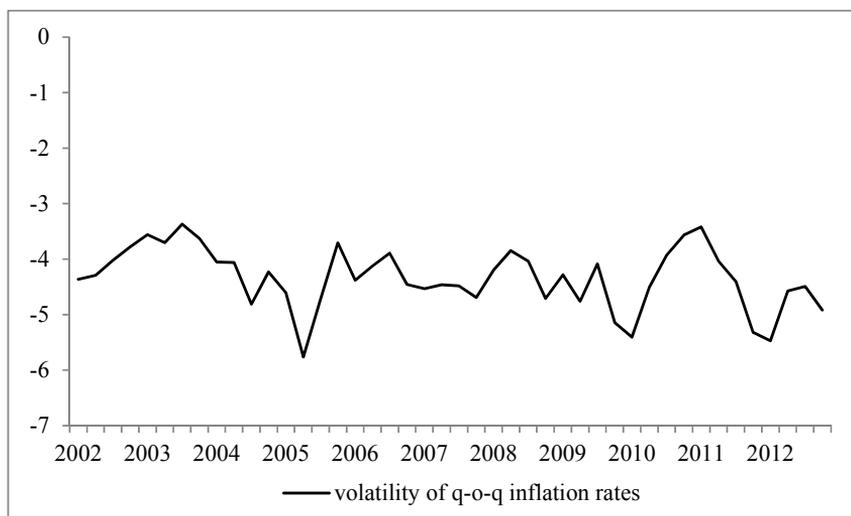


Figure 4: Volatility of q-o-q inflation rates in Serbia (Q1 2002 – Q4 2012), log values

Source: authors' calculations

## METHODOLOGY AND RESULTS

Most econometric techniques are based on the assumption that the analysed time series are stationary. For example, the results evaluated using OLS in case when the analysed series are not stationary, are meaningless and untrue. Many time series found among economic data are not stationary and we need a technique that can be used to analyse relationships between non-stationary series. This is exactly the concept of cointegration and evaluation of long-term and short-term relationships. If the analysed series are integrated of order one, or in other words, if the series observed in the levels are non-stationary, while their differences are stationary, then we analyse cointegration between series. In this case, cointegration relationships between sets of observed variables in levels i.e. long-term relationships are estimated, and then a short-term relationship - the relationship between differenced series can be estimated, since series in differences are stationary and standard econometric methods can be applied. To be precise, if we have two time series in levels, denote them  $X_t$  and  $Y_t$  and they are both

eg.  $X_t, Y_t \sim I(1)$ , then long-run relationship between them can be described by the following equation – so -called cointegration equation:

$$Y_t = \alpha + \beta X_t + \varepsilon_t$$

and short-run relationship can be described by the so-called error-correction model:

$$\Delta Y_t = \delta + \gamma \cdot \text{ErrorCorrection}_t + \sum_{i=1}^p \varphi_i \Delta X_{t-i} + \sum_{j=1}^q \theta_j \Delta Y_{t-j} + \varepsilon_t$$

where  $\text{ErrorCorrection}_t = Y_{t-1} - \alpha - \beta X_{t-1}$ , and  $(1, \alpha, \beta)$  is cointegration vector.  $\gamma$  is the most important parameter. It shows the speed of convergence of one time series to another after short-term deviations from long-run equilibrium relationship. The value of the parameter  $\gamma$  must be negative so that the ECM makes sense.

In our analysis, dependent variable  $Y_t$  is the real share of investments in GDP (denoted SI). Depending on which variables were included as independent, two different models were estimated. In the first one for independent variables we included only inflation (denoted as CPI) and in second, both inflation (CPI) and inflation volatility (denoted as VOLATILITY) were included. In this way we were able to determine which is more important for growth of investment share – the level or volatility of prices.

Before testing cointegration, it is necessary to examine the stationarity of the analysed series. Stationarity of the series is tested by applying unit root tests. Table 2 presents the results of unit root tests for series in the levels (CPI, SI and VOLATILITY) and in the first differences. To determine the stationarity of each variable, we applied ADF test (Dickey and Fuller, 1981) both with and without a time trend on each of the series.

The lag length is determined according to Schwarz criterion. The null hypothesis is that CPI, SI and VOLATILITY are nonstationary against the alternative hypothesis of stationarity. The results of unit root tests are presented in

*Table 2: The results of unit root tests for CPI, SI and VOLATILITY in levels and first differences*

Variable	Model without trend		Model with trend	
	ADF	p-value	ADF	p-value
CPI	0.94	0.99	-2.47	0.34
$\Delta$ CPI	-8.52***	0.00	-5.51***	0.00
SI	-2.61*	0.10	-1.16	0.91
$\Delta$ SI	-6.84***	0.00	-7.51***	0.00
VOLATILITY	-2.96**	0.05	-3.36*	0.08
$\Delta$ VOLATILITY	-6.21***	0.00	-6.14***	0.02

Note: \*, \*\*, and \*\*\* refers to statistical significance of 10%, 5% and 1% respectively.

Source: Authors' calculations

As can be seen from the obtained statistics, all series have a unit root when they are observed in the levels, while in the differenced series the null hypothesis of the existence of a unit root can be rejected, which means that all series are integrated of the first order.

As all series are integrated of the same order, we can further try to find long-run relationship among them. To test the existence of cointegration, in this paper, we used the Johansen's procedure<sup>74</sup>. Before we explain the procedure and the results obtained, we need to decide how many lags to include in testing. There are several ways to assess the optimal number of lags to be included in the Johansen test, but in this paper we used the following well-known method: we estimated the VAR model which includes a series of dependent variables among which we investigated the existence of cointegration and then using a variety of information criteria found the optimal number of lags to be included, i.e. the number of lags which is suggested by the most information criteria. According to most information criteria, optimal lag length for series in levels in both cases is 2 (1 lag for differenced series).

As mentioned above, for testing the existence of cointegration we used the well-known Johansen procedure. In the Johansen's procedure we tested different models: model without a constant and trend, model with a constant and without a trend, model with a constant and trend. These three models are related to the inclusion of a constant and trend in the cointegration relationship. In the first model, the cointegration relationship can be expressed by equation (1) in the second equation (2), in the third equation (3).

$$Y_t = \beta X_t + \varepsilon_t \tag{1}$$

$$Y_t = \alpha + \beta X_t + \varepsilon_t \tag{2}$$

$$Y_t = \alpha + \beta X_t + \gamma t + \varepsilon_t \tag{3}$$

where  $X_t, Y_t \sim I(1)$ , a  $\varepsilon_t \sim I(0)$ .

It is necessary to test all three cases, because the criteria for the existence of cointegration, i.e. the critical values of the test statistic, are different in all three cases and cannot be based only on graphic series to assess which model is appropriate for a given case. Johansen's procedure gives also two likelihood ratio tests for the number of cointegrating vectors: (a) the maximal eigen value test, which tests the null hypothesis that there are at least r cointegration vectors, as against the alternative that there are r+1, and (b) the trace-test, where the alternative hypothesis is that the number of cointegrating vectors is equal to r or less than r+1. For better and more reliable results both test statistics are included. The results obtained are presented in the following table:

*Table 3: Results of the Johansen's procedure for a set of variables SI and CPI (Model 1)*

	<b>Model with a constant and without a trend</b>	
Null Hypothesis	Trace Statistic	Max-Eigen Statistic
r = 0	36.04*** (0.00)	27.46*** (0.00)
r = 1	8.57* (0.06)	8.57* (0.06)

*Note: \*, \*\*, and \*\*\* refers to statistical significance of 10%, 5% and 1% respectively. P values are given in parenthesis. Source: Authors' calculations*

<sup>74</sup>In addition to the aforementioned procedures, a frequently used procedure is the Engel-Granger procedure, but it cannot be used for testing the existence of cointegration between more than two series.

*Table 4: Results of the Johansen's procedure for a set of variables SI, CPI and VOLATILITY (Model 2)*

Null Hypothesis	Model with a constant and without a trend	
	Trace Statistic	Max-Eigen Statistic
r = 0	31.94** (0.03)	22.09** (0.04)
r = 1	9.84 (0.29)	8.92 (0.29)
r = 2	0.92 (0.34)	0.92(0.34)

*Note: \*, \*\*, and \*\*\* refers to statistical significance of 10%, 5% and 1% respectively. P values are given in parenthesis. Source: Authors' calculations*

Table 3 shows the results for Model 1 which includes only CPI, while Table 4 shows the results for Model 2 which includes both independent series, CPI and VOLATILITY. As one can see from the tables, the results of the test suggest that there is one cointegration relationship among included series in both cases.

As we determined the existence of cointegration between the analysed time series, we estimated error-correction models (ECM). The results are shown in the tables below. Table 5 shows the estimated coefficients for long-run relationships for both models, while Table 6 shows the estimated coefficients for short-run relationships between series.

*Table 5: Estimated long-run relationships for Model 1 and Model 2*

Dependent variable: SI				
	Equations			
	(1)		(2)	
Variable	Coefficient	Std. Error	Coefficient	Std. Error
Constant	6.24***		4.72***	
CPI	-0.70***	0.42	-0.99***	0.38
VOLATILITY			-1.72***	0.42

*Notes: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.*

*Table 6: Estimated short-run relationships for Model 1 and Model 2*

Dependent variable: $\Delta$ SI				
	Equations			
	(1)		(2)	
Variable	Coefficient	Std. Error	Coefficient	Std. Error
Constant	0.05***	0.02		
$\Delta$ SI (-1)	-0.19	0.14	-0.17	0.14
$\Delta$ CPI (-1)	-1.31***	0.46	-0.87***	0.44
$\Delta$ VOLATILITY(-1)			-0.01	0.02
ECT(-1)	-0.07***	0.02	-0.05***	0.01
R2	0.27		0.27	
Adjusted R2	0.21		0.22	
SC	-2.67		-2.68	

*Notes: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.*

The estimated error-correction models take the following forms.

Estimated Model 1 is given by the following expression:

$$\Delta SI_t = 0.05 - 0.07 \cdot ErrorCorrection_t - 0.19 \cdot \Delta SI_{t-1} - 1.31 \cdot \Delta CPI_{t-1} + \varepsilon_t,$$

where

$$ErrorCorrection_t = SI_{t-1} + 0.70 \cdot CPI_{t-1} - 6.24.$$

Estimated Model 2 is given by the following expression:

$$\Delta SI_t = -0.05 \cdot ErrorCorrection_t - 0.17 \cdot \Delta SI_{t-1} - 0.01 \cdot \Delta VOLATILITY_{t-1} - 0.87 \cdot \Delta CPI_{t-1} + \varepsilon_t,$$

where

$$ErrorCorrection_t = SI_{t-1} + 1.72 \cdot VOLATILITY_{t-1} + 0.99 \cdot CPI_{t-1}$$

Results for the long-run relationship between the share of investments in GDP and inflation and its volatility are summarized in Table 5. Equation 1 from Table 5 suggests that there are negative and statistically significant long-run relationships between the share of investments and the level of CPI. This can be interpreted as follows: in the long run, higher inflation rates lead to lower propensity to invest.

The results of Equation 2 are quite interesting. By introducing inflation volatility we estimated the new model with one dependent and two independent variables. When inflation volatility is introduced into the model, though still estimated to negatively affect the share of investments in GDP, the inflation level now loses its statistical significance. Equation 2 is in accordance with the findings of Judson and Orphanides (1996) that state that in some cases high but less volatile inflation rates are preferred to lower but volatile inflation.

Table 6 summarizes the results of a short-term regression. Error Correction Model (ECM) test is essential to see whether an economy is converging towards equilibrium in the long run or not. The ECM also shows short-run dynamics. In both Equation 1 and Equation 2 from Table 6, the coefficient for lagged values of error correction term is negative and statistically significant, which means that in both cases there exists convergence towards long-run equilibrium. In the short-run, both inflation level and inflation volatility are confirmed to negatively affect agents' propensity to invest.

The Models presented in Table 5 and Table 6 do not formally test the threshold level above which an increase in inflation starts to affect investments negatively. For that purpose we estimated OLS regression with dummy variable that takes value 1 for y-o-y rates higher than 3% (around 12% y-o-y) quarterly in the period 2002–2009 and rates of around 2% quarterly (around 8% y-o-y) for the period 2009–2012. The change in value for dummy variable is in accordance with the adoption of the inflation targeting regime. The results from the OLS regression are presented in Table 7:

Table 7: Results from a test for a threshold level

Dependent variable: $\Delta SI$		
Variable	Coefficient	p-value
Constant	0.02	0.31
DUMMY	-0.06	0.04**
$\Delta CPI$	0.86	0.21

Notes: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.

Source: Authors' calculations

As can be observed from Table 7, the estimated coefficient for dummy variable is negative and statistically significant, which suggests that inflation above the level defined by dummy variable starts to affect negatively the propensity to invest, while inflation below this level may affect it positively.

During the period observed, y-o-y inflation rates were close to threshold level, which also suggests that a negative sign in the long run equations is expected.

### CAUSALITY

Having in mind diverging opinions among economists about the answer to the question of whether inflation causes economic growth or whether economic growth causes inflation, we tested the causality relationships among the variables used in the analysis. We used the well-known Granger procedure for testing the causality. As Granger test requires series to be stationary, we applied it on the first lag of differenced series. As mentioned earlier, the optimal number of lags was determined using the information criteria from unrestricted VAR. The table below presents the test results.

Table 8: Results of causality tests for Model 1 and Model 2

Null Hypothesis	p-value
$\Delta VOLATILITY$ does not Granger Cause $\Delta SI$	0.10*
$\Delta SI$ does not Granger Cause $\Delta VOLATILITY$	0.24
$\Delta CPI$ does not Granger Cause $\Delta SI$	0.09*
$\Delta SI$ does not Granger Cause $\Delta CPI$	0.32

Notes: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.

Based on the results presented in Table 6 we can conclude that the causality goes from CPI and VOLATILITY to SI, and not the other way round.

## **CONCLUDING REMARKS**

Empirical findings based on the data on share of investments in GDP, CPI level and volatility of inflation for Serbia in the period 2002–2012 suggest that there exists negative long-run relationship between propensity to invest and CPI level. In order to test if the volatility of inflation affects propensity to invest, we also developed a model that contains CPI and volatility of quarterly inflation rates as explanatory variables and concluded that besides the level of CPI, the volatility of inflation rates also negatively affects propensity to invest. Higher and more volatile inflation influence the investment environment, through increase in risks related to its economic flows.

In order to test the threshold level above which inflation starts to affect growth negatively, we estimated OLS regressions using dummy variable to control the inflation level. The threshold is estimated to be 3% quarterly for the period before the inflation targeting regime and 2% quarterly after the adoption of the inflation targeting regime. Since inflation rates were high during the whole period observed in the analysis, a negative sign in the long-run regression is expected.

The results of this research are in accordance with the generally accepted view that monetary stability is a precondition for stable and sustainable growth. Higher propensity to invest leads to an increase in potential output, which will result in increase in output itself. Higher output is, on the other hand, a precondition for increase in employment and decrease in unemployment rates.

The empirical contribution of this paper to the present body of literature lies in the fact that cointegrated analysis of this type has never been done before on data for Serbia.

This research may be further improved by implementation of more sophisticated econometric techniques for the estimation of long-run relationship, as well as for the estimation of the threshold level for inflation rates.

## **FIGURES AND TABLES**

Figure 1 Y-o-Y inflation and share of investments in GDP growth rates in Serbia (Q1 2002 – Q4 2012), in %

Figure 2 Y-o-y inflation rates in Serbia (Q1 2002 – Q4 2012), in %

Figure 3 Q-o-q inflation rates in Serbia (Q1 2002 – Q4 2012), in %

Figure 4 Volatility of q-o-q inflation rates in Serbia (Q1 2002 – Q4 2012), log values

Table 1 The correlation structure of CPI mean and variance

Table 2 The results of unit root tests for CPI, SI and VOLATILITY in levels and first differences

Table 3 Results of the Johansen's procedure for set of variables SI and CPI (Model 1)

Table 4 Results of the Johansen's procedure for set of variables SI, CPI and VOLATILITY (Model 2)

Table 5 Estimated long-run relationships for Model 1 and Model 2

Table 6 Estimated short-run relationships for Model 1 and Model 2

Table 7 Results from a test for a threshold level

Table 8 Results of causality tests for Model 1 and Model 2

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## NEW POSSIBILITIES FOR FINANCING SMALL ENTERPRISES

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**Abstract:** This paper focuses on small and medium enterprises (SMEs), and its main aim is to explore the possibility of financing small enterprises from domestic and foreign funds. We used desk research method for processing relevant literature and other data collected from the relevant financial institutions. Initial hypothesis is that micro, small and medium-sized enterprises are of great importance for an economy and its development, primarily due to their number and the number of people they employ.

Financial institutions, above all banks, are increasingly more inclined towards financing small and medium enterprises because of the aspect of the investment risk, too. It is considered that investing in large corporations carries a greater risk regarding the possibility to service and pay off credits and loans. The expected results and contributions of this paper are confirmation of the importance of the sector of small and medium enterprises and a systematic review of the most significant funds and identification of the steps to be taken into that direction.

**Key words:** Small and Medium Enterprises, Funding Sources, Financial Institutions, Risk

**JEL classification:** G01, G11, G15, G21, G28, G32

**UDC** 334.713:336(082)

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## ***INTRODUCTION***

There is a widespread and unchanged opinion that banking sector operates in order to make profit, but that is a motive and business objective of any business sector. Financial institutions develop new products in order to make profit and to satisfy their needs, as well as the needs of their clients. In other words, innovations, which can be very important for economy, originate in desire to acquire wealth.

This paper is an attempt to present possibilities for faster development of enterprises expressed through goals of economic policy and business policies of banks, and to offer an answer to some related questions.

This aim of the paper determined its structure and content. It consists of several parts in which the usual scientific methods were used in order to present the subject and to provide relevant results. Theoretical part of the paper presents concept of business policies of banks, as well as a critical review of positive and negative aspects of the issues and opinions covered. Practical part will cover the approach and practice of banks which operate in European countries and worldwide.

### ***BELIEFS AND POSITIONS ON THE RESEARCHED FIELD***

Parts of this paper which cover business policies of banks will present the issues of changes in European business banking, banking business in general, subject matter and business policies in practice with their clients. **Influences of economic crisis** on business banking sector are very severe in many parts of Europe. Over the course of last twelve months, there are some positive indices that the economic situation is slightly improving. For example, clear signs of increased demand for loans have appeared. This does not imply that there is a significant increase, but the fall in demand for loans has been stopped.

Overall predictions for 2013 are better than those for 2012 - it seems that the recovery has begun, but the environment is still unfavorable and there are great variations in Europe. At this point, it seems that profitability will remain low for a while.

Banks should consider what can be done with their own models of services in order to adapt to the situation. If we assume that in the short run there will be no dramatic improvements, one of the key questions will be how models of services can be redesigned and improved so that banks can adjust themselves to this level of profitability.

Three key problems in doing business with SMEs - **segmentation** and everything related to it (such as client relationship management), **loans**, and **services for micro enterprises** as important aspects of successful business, will be covered in this paper.

Small, medium and micro enterprises are among key pillars of the future increase of profit in banking. Banks should simply become more effective.

Apart from this, the paper will cover changes in business models of European banking. These changes of business models require radical changes in the way of

thinking. As for the segmentation, the question is whether banks which provide services to SMME sector do that within retail or corporate operations. Speaking about loans, many systems and loan processes are not designed for micro loans, even though they can be a vital part of everyday bank's operations. Processes are far too complicated and adjusted to corporate clients. The consequence of that is that small loans without high interest rates are not profitable, which in fact is the matter of business policy as the factor of successful operations of enterprises.

### *EXPLANATION AND RESEARCH METHODS*

For the purpose of this paper many analyses and researches, findings from Serbia and from the world, and relevant literature were used. The following methods were used: logical investigation, interdisciplinary approach, indicative method, general methods of research compatible with economic and social sciences with empirical and theoretical approaches, method of deduction, subjective method, comparative method and method of discrimination, statistical data, practice and practical achievements of business policies of banks.

Segmentation of business banking sector causes various reactions. Positions of European bankers in respect to the defined standards for segmentation set by the European Union differ, which imposes the necessity of investigation and additional explanation.

One solution can be segmentation according to turnover, which sometimes enables better correlation in terms of value for the bank. Globally, this is relatively loose method, but it still may be the best predictor of the current and future value. Small enterprise on the average may have turnover of less than 5 million €. Small enterprises are more numerous. For example, in Italy most companies (94%) have less than 1 million € turnover.

Investment banking is a significant means of providing funds for banking. Investment banking in Serbian market is pretty new and underdeveloped, and every unstable operation of the market and impacts of the existing financial and overall crisis have considerable influence on the stability and profitability of operations. How to organize banks and which measures should be taken in investment banking to do business with the smallest risk possible? This paper will intend to offer some solutions with the help of investigations done by the authors.

Markets in different parts of Europe fundamentally differ by their business with SMME clients and retail business. Many banks in Western Europe currently intend to take over clients from other banks, as it is extremely hard to increase profitability or margins.

Contrary to that, Central and Eastern Europe region to which Serbia belongs, too, is focused on increasing profitability. When the crisis appeared banks started restructuring and forced collection, but their sale was low. Some provided loans without personal guarantees. At this point only small percentage of clients is indebted by loans, so that some banks are engaged in strengthening their capacities to increase loan business since it is the biggest source of income. Decreasing business risk and achieving sufficient returns are the essence of each business and any legal entity including banks and their clients. (Vukosavljević. 2012).

This paper will try to provide adequate solutions for all the above listed issues.

## ***LITERATURE OVERVIEW AND TEHORETICAL GROUND***

In banks and other financial institutions, new products are developed in order to create profit and to satisfy their needs and needs of their clients. In other words, innovations - which can be significant for small, medium enterprises and entrepreneurs – arise out of the wish to acquire wealth. This interpretation of innovations leads to the following conclusion: changes in financial surrounding will stimulate financial institutions to search for the profitable innovations. (Mishkin, 2006).

Since 1960, changes in financial environment with which many financial institutions and individuals were faced are big. Significant increase in inflation and interest rates has made any prediction and business more difficult and it lead to the change of demand in financial market. In order to survive in the new economic surrounding, financial institutions were forced to search for new, profitable products and services which would satisfy needs of their clients, above all SMMEs, as well as to develop them. This is the process called financial engineering. Such a necessity of development was the foundation of innovations. (Mishkin. 2006).

Small, medium enterprises and entrepreneurs all want to invest their capital so that its yield has the highest value. Their intention is not to support public interest, and they do not know how much they support it. They care only about their own security, their own profit, and they are lead by the “invisible hand” to support the goal they did not intend to support. Working in their best interest, they frequently help the interest of society (public interest) far more effectively than they would have done deliberately. (Smith, 1776)

In different countries and different banks, the time necessary for making decision on a loan request for a small, medium and micro enterprise differs. Banks have realized that their greatest problem is inability of loan sector to understand and trust the risk model which is mostly taken care of by the risk management, so that it can efficiently make decisions and develop the appropriate procedure. Banks also wish to explore a more efficient use of risk model. Important issues are measure, risk control and its implementation into procedure of loan management. If banks do not know their clients well, perhaps they need to improve their client data bases and to explore the ways for evaluation of their rating.

Credit risk and other party risk are defined as the probability that debtor will not be able to pay interest or pay out principal according to the terms agreed upon by a credit contract. (Greuning i Brajović, 2006).

In spite of innovations in the field of financial services, credit risk is the most significant cause of bank failures. The reason is that more than 80% of banks' balance sheets are based on this type of risk management. (Greuning i Brajović, S. 2006). Preventing severe losses of deponents in case of credit institution failure is the key task of management and other bodies of a banking institution. (Klebener, 1990).

As for the levels on which operation risks occur, “the risks that issues will arise” which cause losses, they can be:

- Human factor
- Technical factor
- Process operations
- Information technologies. (Bassel, 2002).

## ***CHANGES IN EUROPEAN BUSINESS BANKING***

### *INFLUENCE OF ECONOMIC CRISIS*

Although circumstances in business banking sector are still difficult in many parts of Europe and Serbia as well, some positive indices that the economic situation improves have appeared in the past year. For example, there are clear signs of the increased demand for loans. This actually does not mean that the growth is significant, but decrease in demand has been stopped. There are also first signs of increase in demand for short term loans.

In general, predictions for 2013 are better than those for 2012 – it appears that the recovery has begun, but the environment is still unpleasant and variations in Europe are great. At present, it seems that profitability will remain low for a while.

All European banks consider what they can do with their own models of loans, services and business policies in order to adapt to the situation and their clients. If we assume that in a short period there will be no dramatic improvements, one of the key questions will be how service models can be redesigned and improved in order to adjust banks to the new level of profitability.

### *SIMPLIFICATION OF SPECIALIZED OPERATIONS*

Specialized operations are cautiously simplified due to the tendency of simple stuff cutting and simplification of an organization. Although there seems to exist a new paradigm which announces return of traditional banking model, specialization is an important element which should not be neglected.

Simplification could imply increased automation of procedures – for example, use of technologies which could help client relationship managers do their jobs with less help and smaller number of product specialists. This is an important subject implying not just the decrease in number of administrators, but also a shorter time client relationship manager has for sale. It could also improve bank's relationship with clients. However, there is a long way to go to achieve this. (Vukosavljević, 2012).

### *NEW MODELS OF SERVICES*

Remote small business client relationship management model is economical and will become more sustainable in the future. It has still not reached the mature phase. Variations of this model are still being tested. One possible solution is owning a small online business bank which can offer complete online service.

Many clients demand a more intense interaction through social networks etc. Very small number of clients, whether micro, small or medium enterprises (SMMEs), well-doing entrepreneurs or those from mass market segment, wish for approach through only one channel. It is hard to create one channel model. However, some online banks use the market niche, and they record growth.

### *NEW PROFIT SOURCES*

One new profit source according to market researches and analyses could be internationalization. There are several examples of prominent banks which operate in several countries. International banks should consider whether they operate as a group of independent banks in several countries, or as one bank which can provide international services and leverage strategies in different countries.

Another approach could be a model of service management, something inbetween one or two client relationship managers. Potential derivatives at this point are not popular, but it can be worthwhile trying with derivatives' leverage as an insurance in the environment of changing circumstances.

There are opinions that the main challenge in future will be finding new profit sources since banks depend on loans and their clients, but the risk and capital price could be very high in future, while demand at this point is relatively low. (Vukosavljević, 2012).

### *KEY PROBLEMS*

SMMEs are among key pillars of future profit increase in banking. Some members of Business Banking Advisory Council are of the opinion that nothing new should be introduced – banks should simply start operating more efficiently. Three key issues are underlined: segmentation and everything about it (such as management), loan business and services for small, medium and micro enterprises.

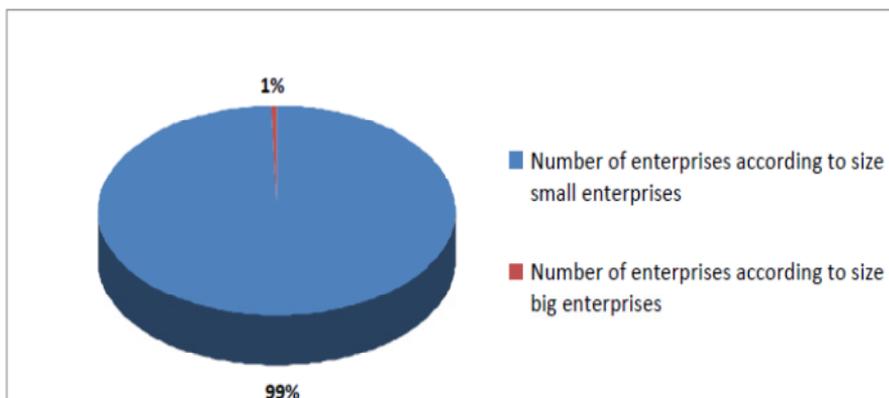
As for the segmentation, the question is whether banks operating with SMME sector are doing it within retail or corporate business. Speaking about loans, many systems and loan processes are not designed for micro loans, although they can be a vital part of bank's everyday business. Processes are far too complex and adjusted to corporate clients. The consequence of that is that small loans without high interest rates are not profitable.

Most SMME clients, especially in Central Europe, are micro clients. They cannot easily be fitted into client management model since it is too expensive, and they cannot be fitted into corporate loan procedure. Around 90 % of them cannot request loans from banks. However, it seems that banks are not doing almost anything to satisfy their needs. If they are not approved a loan, they do not belong to the model of client management. Their potential is not fully explored, even though it could be solved if banks would have done what they usually do, but in a better way. The facts that small, medium enterprises and entrepreneurs are key pillars of the increase in banks' profit on one hand, and that it is a large field for banks' credit activities on the other, are proven by the following data for the Republic of Serbia in 2010:

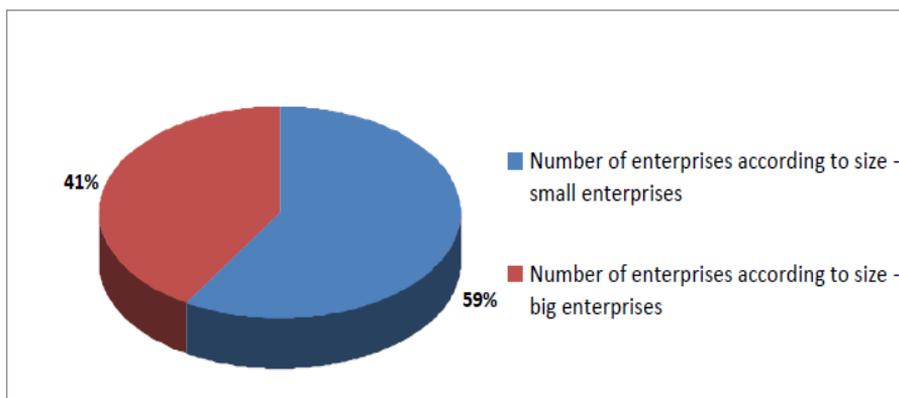
*Table 1: Number of Companies in Republic Serbia: accorsing to the size, number of employees, achieved turn over and gross value added.*

No.	Researched data	Micro, small and		Large
		medium enterprises	enterprises	
1.	2	3	4	5
1.	Number of enterprises according to size	333,500	667	98.80*
2.	Number of employees according to size	582,409	412,966	58.51
3.	Income according size (mil. RSD)	3,872,794	2,482,401	60.93
4.	Gross added value (mil. RSD)	632,118	645,309	49.48

Source: Statistical Office of the Republic of Serbia – Working document ISSN 1820-0141  
 Source: \*<http://www.bing.com/scard?q=Siepa+mala+srednja+srednja+privreda>, dana 13.3.13.



*Figure 1: Number of enterprises in Serbia according to size, Source: Republic of Serbia – Statistical Office of the Republic of Serbia ISSN 1820.20.0141*



*Figure 2: Number of employees according to enterprise size, Source: Republic of Serbia – Statistical Office of the Republic of Serbia ISSN 1820.20.0141*

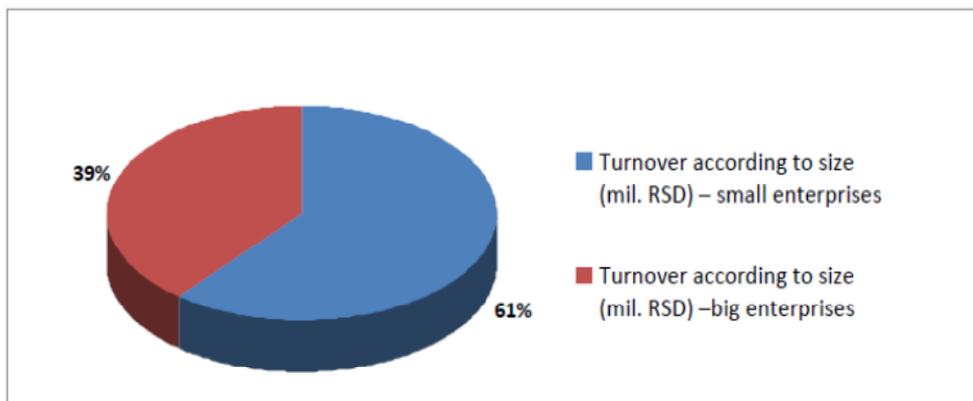


Figure 3: Turnover according to size of enterprise (mil. RSD) Source: Republic of Serbia – Statistical Office of the Republic of Serbia ISSN 1820.20.014

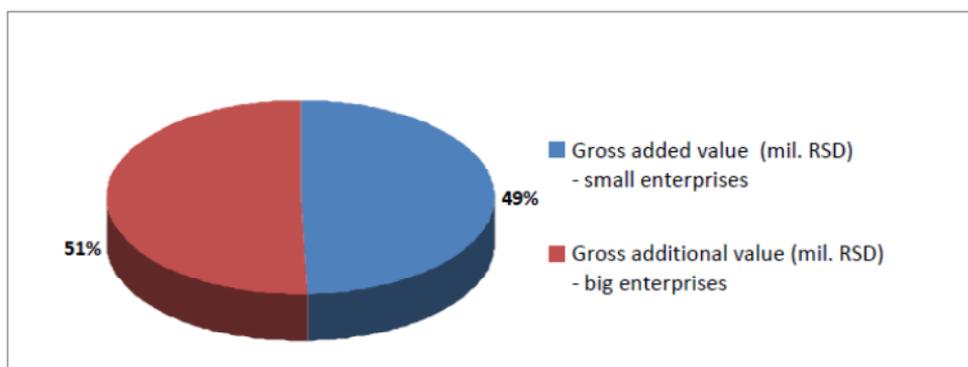


Figure 4: Gross added value according to types of enterprises (mil. RSD). Source: Republic of Serbia – Statistical Office of the Republic of Serbia ISSN 1820.20.0141

### CHANGES IN BUSINESS MODELS

A research investigating whether business models of European banks have changed showed that only one bank gave an affirmative answer. Transfer from loans towards a model largely based on transactions occurred. Loan approval cannot be the only solution for clients: they have to be offered some other solutions, such as transactions or something to do with liquidity – everything but loans.

This change calls for a radical change in the way of thinking. There are examples of banks in Europe which have changed categories of clients they do business with within the segment of small enterprises over past two years. The categories were previously based on turnover and loans, and all customers who used loans had client relationship manager. Their criteria are now primarily based on transactions. Loan business is usually not the highest priority in many countries.

Some banks have changed business model in theory. They have managers dealing only with services and client management for SMMEs. However, in practice, if the business model is more developed, client relationship managers are basically specialists for loans who never offer their clients any services. They are very good in filling in complicated documentation for processing and forms, but they are not good in meetings with clients. The consequence is that the business model is good on paper, but not in practice as well.

Practice showed that client relationship managers spend most of their time in meetings with clients, but that their results in selling products and services are the lowest in country. Another example speaks about group project dealing with contacts with clients and approach to selling. It was investigated how many times it takes a client relationship manager to contact clients, as well as what the percentage of successful meetings is in terms of products sold.

In Turkey, for example, relatively few changes to the basic model of services and business have been introduced. In many countries of Central and Eastern Europe almost 50 % of economy is within underground economy. Solely based on the insight into documents, banks cannot understand a client's business. They have to visit a factory or shop in order to understand the client's real needs.

Client management is essential for understanding a client. Financial reports do not reveal much, so in order to approve a loan a bank has to get to know a client. It has to talk to the client in person and to understand quality of his assets. For example, balance sheet can show turnover of 5 million €, but client relationship manager knows that it is actually 5 million € higher than presented in the official report. This is why conversations in person and management of the relationship are such important aspects of the business model.

Some banks believe into one banking model and one business model. Local characteristics of the model are always present, but a bank starts from similarities, instead from differences. For example, there are the same credit rating systems in four different countries. This is a process which is based in retail, instead of corporate banking. In Central and Eastern Europe region one financial institution tries to transform itself from the model of group of banks into a banking group. Group of banks model is based on banks which have local responsibility for their own activities with central support. Key issue is how to service and balance customers' needs as enterprises and natural persons as clients. In some countries, client relationship managers service both groups. In others, they service only enterprises as clients. Five years ago group of banks model was based on client's turnover and/or exposure to risk (and deposits in some countries). Although turnover is still a key element, nowadays client's profitability based on business with a bank and potential are used in some countries.

Banking group has micro customers which are serviced by managers and those who are not. Micro client relationship manager cannot be an expert in everything and he might need help from specialists in some fields. In some banks, there are specialized client relationship managers. In others, micro customers are serviced by front desk personnel. Other potential problem is age. Young client relationship manager can service micro enterprises, but from the perspective of a client, thirty-five of forty-five year old well-doing client does not want a twenty-five year old person telling him how to manage his money. This is a big issue in Eastern Europe. A possible solution offered by a bank from England is a coordinator who supervises different relationships in entire bank. (Vukosavljevic, 2012).

### *BASIC SEGMENTS OF SMME*

Segmentation is the key issue for business banking sector. Standard definition of European Union divides SME into micro, small and medium enterprises. Banks, however, use different criteria for segmentation.

One solution is segmentation according to turnover, which sometimes enables the best correlation in terms of value for bank. Globally, this is a relatively imprecise method, but it is perhaps the best predictor of current and future value. Small enterprise on average may have less than 5 million € turnover. Small enterprises are more numerous. For example, in Italy most companies (94 %) have turnover less than 1 million €.

According to criteria of one bank, SME sector consists of enterprises with turnover of 50 million €. Everything between 3 million € and 50 million € used to be covered by corporate sector, but now belongs to the retail sector.

Some banks use combination of size and turnover as criterion. For example, one segment can be comprised of micro businesses with big turnover. Other factor used for distinction between micro and small businesses is the chosen set of products. Nordic markets base segmentation on value, but a client can be transferred to a higher segment if he achieves higher turnover. This decision is based on individual circumstances and it can be made by client relationship managers since they know most about a client (particularly in sophisticated markets). Different banks estimate client's potential in various intervals. Some classify them twice a year, while others do not even evaluate every year. Client's potential mainly depends on the level of business, the sector he belongs to, and the profit bank makes in doing business with him. Portfolio managers often have tools which can be helpful when they decide on number of visits to a client, and with the help of which they make simulations which show how changes can influence a client's position. Small businesses as clients are frequently in industries such as trade, construction and production. Some 55 % of companies in retail trade in some countries have one employee. Small commercial businesses have between two and nine employees.

Small enterprises are frequently serviced by the segment of corporate banking, with assigned managers which have portfolio of 60 to 70 clients each. Small enterprises as clients are often serviced by a branch. Knowing a customer well is of vital importance – every system of credit rating will be inefficient if a bank does not know customers.

Sometimes a client's income is used as the key indicator for segmentation. Bank uses income in order to define service model within a segment. For micro enterprises one bank attempts to introduce a model cheaper than standardized. Other bank divides its customers into big, medium and small according to income, regardless of turnover. In that case, a bank can add potential profit from clients to the equation.

### *ENTREPRENEURS*

One large market, which banks sometimes do not investigate, are entrepreneurs who do not have current accounts and do not keep accounting records. How can a bank do business with these clients effectively? They can open a current account, but when it comes to services such as approving loans, what can a bank offer and how can it deal with risk? These questions are important since this is the market with potentially high growth in some countries.

In Central and Eastern Europe some entrepreneurs make a lot of money, while others barely make ends meet. In this case, the usual means for assessing potential or weaknesses cannot be used.

Contrary to that, many entrepreneurs, such as doctors, lawyers, dentists and accountants, frequently have stable incomes, but the question is whether these are those entrepreneurs. Some banks have a separate segment for entrepreneurs and a special approach for them in terms of products and approving loans. Some point out that entrepreneurs can easily be identified, but there is a large market of entrepreneurs who do not want to keep accounting records because of taxes and for some other reasons. This is a market hard to deal with.

### *SEGMENTATION IN VARIOUS FIELDS*

The degree of segmentation and criteria which are in used differ significantly in Europe. Banks are reconsidering business models for SMMEs for the market of Central Europe. At this point, in countries such as Bulgaria, there is no segmentation. Corporate clients, SMMEs and natural persons are all mixed. In Slovakia there is no management of SMME clients – there are only advisors and specialists for loans. In Czech Republic there is a clear segmentation, but SMME segment exists within retail segment. Living and working in Poland, Warsaw, and some other European countries author learned that one bank in Poland considers returning a part of SME segment into corporate sector and leaving the other in retail sector. Hungary considers existence of independent SMME sector. In spite of these differences, banks do not intend to introduce a standardized model.

The main segmentation in Turkey is based on turnover and risk exposure. Most of sub segments are based on business sectors. As for SMME market, one bank has developed new packages for different sectors, such as export packages, production packages, innovations for entrepreneurs and packages for farmers.

The main aim is to reach the right clients. Bank has the usual types of loans with different amortization periods. But as for industrial packages, there are differences in interest rates and the required securities.

Some banks in Italy have two segments for small enterprises: micro and SMEs, with different approaches. Other banks consider the possibility of only one segment in order to decrease expenses.

One bank divides its clients and services provided to them according to turnover. Those with turnover between 2.5 million and 5 million € have client relationship managers, while those below 2.5 million € turnover do not. The bank has special offers for products which satisfy needs of specific key parts of client's life cycle.

However, the question here is whether this implies a decrease in expenses of clients with lower income. In Central and Eastern Europe many banks used to have too many client managers and less than enough clients, they were not so firmly managed as banks in west. Gross income as criteria enabled them to manage clients who do not ask for loans since they sometimes have high incomes.

There are various models of segmentation and client relationship managers in different countries. Although every market is specific, many banks focus on differences and tend to forget that 90% of the problems they face in each country are the same. (Vukosavljević, 2012).

## *BUSINESS BANKING IN DIFFERENT PARTS OF EUROPE*

Markets in various parts of Europe differ fundamentally in doing business with SME clients and retail business. Currently, many banks in Western Europe try to take over clients from other banks since it is hard to increase profitability or margins.

Contrary to that, Central and Eastern Europe regions are focused on increase in profitability. When the crisis appeared, banks started restructuring and forced collection, but there were very few sales. Some of them approved loans without personal guarantees. Currently, only a small percentage of clients have loans approved, so that some banks work on strengthening their capacities to increase the number of loans as the largest source of profit.

Banks in the region also generate profit by introducing new services and packages for small enterprises. Approach to services for SMEs has so far been tightly based on products, without an attempt to achieve full cooperation with clients. Currently, one approach offers service packages to micro and small enterprises. SME and entrepreneurship are considered to be the leading ones in growth. Although corporations in universal banking model bring profit, a significant growth is not expected from them. However, small enterprises considerably contribute to profitability of branch network.

One European bank works on changing current principles of segmentation and transferring all companies to retail banking with the plan to have branches do all the services, by means of which operations will be simplified. It is expected that micro segment of the bank will grow more than SME segment in the course of next year or two, after which growth of small enterprise segment is expected. In a few years, micro and small enterprises will probably be in the same segment, and the bank will start segmentation of client base based on value (standard micro enterprises, premium micro enterprises, etc.).

Dividing banking business is an important question in Eastern Europe. There is also a big gray market. It faces typical challenges with which a bank is faced when providing financial services to SMEs in the region of Central and Eastern Europe. Thus a bank assigns a manager for client relationship management to the client who provides enough profit and value. Cost to income is about 50 - 60 % for small enterprises and the income per client is less than 1,000 €. However, there is a big difference in bank's SME segments: micro enterprises provide profit of around 500 € per client, while small enterprises provide around 5,000 €.

Distribution of service expenses is difficult because small enterprises differ greatly. Branches provide services to some of them (which utilizes the existing structure in a better way), but they do not provide services for many of them. Some banks provide services to small enterprises through corporate centers. The problem is that there are so many small enterprises that they require more centers.

In countries like Turkey, for example, estimated GDP is 7% in 2010. Appetites for loans for SMEs are big, but the competition is very strong. Increase in loans for SMEs in 2010 was about 28%. As margins decreased, profitability and income become more important, while banks search for the ways to increase commission base and secure client loyalty. Transaction banking business is also important in this country.

Things happen very fast in the world of banking in Russia. Their approach to risk is not conservative as it is in case of banks in west. In Baltic countries, there are many challenges, among others high unemployment rate, which could go up to 20% and which is

not good for banking business. The main challenges are how to keep good credit portfolios, how to stay profitable and preserve motivation of employees.

### *SIGNIFICANCE OF CLIENT RELATIONSHIP MANAGEMENT*

The key difference between banks which provide services for business sector is usually in client relationship managers. However, the question is whether clients are primarily in relationship with a bank or a client relationship manager. The answer could be that they are in relationship with a client relationship manager. Clients do business with the same client relationship manager for four or five years. But if that person changes, it could cause problems. One of the solutions is regular exchange of portfolios if it can be done without clients leaving to another bank.

It is important that a client and a client relationship manager trust each other. Clients frequently understand the meaning of trust and quality of a client relationship manager is perceived as one of their chief priorities. At the same time, both service and product have to be good.

Some banks say that client relationship manager is important, but that in relationship with a client bank is more important. In developing economies, bank is considered to be more important, while in the Western Europe relationship with a manager is considered to be more important.

A question poses itself how much for the choice of a bank a client relationship manager matters to a client. In Turkey, service quality is of key importance, so that client relationship manager becomes more important. Other key factors are expenses and bank's reputation. There have been several crises in Turkey so far. In each one of them it turned out that for their clients it was more important to have a bank that they thought would support them.

Some banks say that client relationship manager is less important. The truth is that clients sometimes change banks following client relationship manager. Many clients are satisfied with client relationship managers in call centre since they believe that they understand their needs and that they can satisfy their needs through online channels or in branches. Needs of these people usually do not require a lot of contacts and they occur occasionally. There is a large number of clients per portfolio. Banks do their segmentation by providing services for those at the bottom of the list by phone. Banks intend to understand clients and to sell them other products. It is obligatory to contact a client once a year. A huge system of monitoring provides monitoring over fulfillment of duties by client relationship managers.

### *CLIENT RELATIONSHIP MANAGER – ROLES AND INSTRUMENTS*

For a successful implementation of business policies of banks towards all the business segments, above all towards clients, the role of a manager is important.

Banks have to investigate the ways to improve capacity of their client relationship managers in terms of direct channel and meetings with clients. This means providing the necessary instruments for helping SME clients. The role of client relationship manager could change under the influence of the economic crisis. In past, many of them noted clients' demands and satisfied their needs that way, but there are far more economic ways

to do this. Focusing of client relationship manager on satisfying clients' needs instead on the possibility of their growth and development is not very productive. Their role has to be carefully examined in order to provide creation of maximum value from the relationship with a client. They have to point the client to complete potentials, present him challenges and provide leadership with clear vision. Client relationship manager will be able to use his skills and knowledge proactively in order to improve client's business. This will help to reestablish higher level of trust between bank and small, medium enterprises and entrepreneurs as clients. (Vukosavljević, 2012).

However, this changing of role imposes another problem – many client relationship managers do not have necessary skills and qualifications for satisfying these new demands. This is why banks should perhaps invest into support and administration in the time of limited budgets. Speaking about providing services to clients, it is no longer enough to be good – banks have to be excellent and to help and support clients in the short and long run. The consequence of that is that client relationship managers' work with clients is increasingly under evaluation so that the bank knows how they perform and whether they have the right information, data quality etc. This imposes additional pressure on them, but at the same time banks want them to stay in their positions longer. The main reason is clients' satisfaction. Clients want stability, and not the relationship which constantly changes.

One aspect which can be improved is disposal of client relationship manager's time with clients. They frequently spend too much time processing loans, or simply waiting for a client to come. A possible solution is improvement of the very procedures. One bank in Croatia decided to fix time necessary for procedures of renewal of personnel in charge of risk. This led to 30% more productive time from receiving request to decision, which in turn led to more meetings in person.

As for sale and acquisition, client relationship manager can sell products to small enterprises. However, one part of their business can be performed by other people. Most acquisitions still happen when a client comes himself, particularly in current circumstances when small enterprises visit banks in search for loans. When a new client is obtained, one of the problems banks face is how to encourage them to do transaction banking instead of just taking a loan.

Findings of a research show that in Eastern Europe there is always demand for clients. This means that at this point client relationship managers have to stick to their portfolios since there is no development.

Most banks have separate managers for personal and business transactions, but some have client relationship managers who cover both segments. They have to be trained for that, although they can be provided with specialists' support (such as support of loan experts or insurance experts).

In Denmark, for example, some advisors learn how to do both jobs, but they still focus on personal needs more. Contrary to that, in Finland business segment used to be primary. The challenge in both cases is maintaining a balanced approach. Bankers themselves in different countries have different previous work experience. In Finland, for example, they usually come from corporate sector, while in Denmark they come from retail banking.

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### *PROVIDING SERVICES TO SMALL, MEDIUM ENTERPRISES AND ENTREPRENEURS*

The most important services which are provided to small enterprises as clients are in four key fields:

- Quality of financial advisors
- Proactive nature and frequency of meetings with client relationship manager
- Time necessary for deciding on loan and approving loan
- Possibility of customizing solutions to their specific needs.

There are also for key areas in which client relationship managers are particularly important. Their knowledge of local circumstances helps in making decisions on approving loans and surveillance over fulfilling loan obligations. The second one is that they provide valuable contribution to the development of relationship with the right clients who need it. Third, they can identify and take over companies with big value from their competition. Finally, they can build a relationship with a company owner or a family.

Client relationship manager is crucial for many SMEs. He can play the most important role as long as a bank has appropriate quality of client relationship managers who do their jobs in the right way.

### *QUALITY OF HUMAN RESOURCES AND PROCEDURES*

Number of contacts and meetings are not equally important as their quality, which depends on the quality of training of client relationship managers or call center personnel. If too much pressure is put on them to sell products, clients will be annoyed with it. A possible solution can be “free contacts” which do not imply attempt to sell anything - client is simply called in order to ensure that he is satisfied with services. Quality of procedures is also an important factor. For example, clients can be contacted in order make sure if they are interested in another credit card. Their answers should be noted down and information on clients updated so that they are not asked the same question again since that may annoy them.

In most small enterprises, the key factor of client satisfaction is not a product price, but the quality of bank’s consultant. Another factor is price. It is ironic that only 14 to 15 % of clients are interested in the bank’s capacity to support the company: they still believe that bank is a reliable source of help for their company. In some cases brand is considered to be irrelevant, although bank spent a lot of money on its promotion.

There is a dispute on the question whether there is competition in fighting for people with specialized commercial skills. Some banks point out that it does not exist since banks do not introduce many changes, as they do not want to expand their personnel. People rarely come from other banks; they are usually hired after graduation from college of from market in general.

The only people who really change positions are client relationship managers, branch managers and business managers. There is need for people who know how to act and negotiate with clients and with expertise in this field, although less experienced people can be trained.

### Duration of engagement and keeping the same position

Some banks expect client relationship managers to keep their positions for two or three years, others want to prolong that period to four or five years. This could be another sign of “return to basics”. Twenty years ago people stayed in the same positions for much longer than today.

Attitude towards these changes depends on culture to some extent. In mature Nordic countries if a client relationship manager does not leave during the first year, he keeps his position pretty long. However, in markets of developing economies personnel is frequently changed, and many employees do not keep their positions even for a year.

One of the ways to encourage client relationship manager to stay in the position longer is offering incentives. Different banks have different approaches on this matter. Some still pay bonuses depending on the volume of the products sold. However, in many of them bonuses are based on the number of meetings of client relationship managers which lead to conclusion of business or services provided. This can be determined on the basis of number of meetings held or achieved client satisfaction level to some extent.

Other banks rather focus completely on final outcome. This can imply dividing of bonus with the team which helped in achieving a goal. However, the negative side of this approach is that it does not consider client’s needs.

Every change in incentive system based on products should be carefully introduced. It can be hard to explain to partners who sell products that there is no longer a specific goal in selling products. In some fields there is a lack of high quality client relationship managers, which can make keeping them more difficult. Bonuses are not always effective means of keeping them. A powerful motivation can be encouraging their employment through training programs (which enables changing positions), and a good career progress. One bank which hired many young people experienced a lot of problems regarding loyalty and staying. It was hard to create a career path interesting enough to them.

Some banks predict that client relationship managers in future will come from international resources. The challenge is how to create a career path for people who expect to make a career in two years, not twenty. The most important issues are how to recruit them, which training programs to provide, and which particular skills are necessary for SME client relationship managers. One bank employs many people who have previous retail sector experience, but whenever a financial analysis is required, it looks for people with experience in it.

Another problem in retaining personnel is that they frequently deem positions in corporate banking more glamorous.

Another bank said that it hires new client relationship managers. It encourages the existing manager to adapt to new demands. The bank wishes to develop phone skills of employees and the ability to sell simple packages so that it can use client relationship managers more effectively. In some fields, such as loan business, automated system can be used for making some decisions.

### *DIFFERENT MODELS OF CLIENT RELATIONSHIP MANAGERS*

There are several models of client relationship managers for small, medium enterprises and entrepreneurs. Micro or small enterprise as a client can be defined as enterprise which has less than 2.5 million € turnover (or in Eastern Europe less than 1

million €). About 50% of these clients probably have client relationship managers assigned, but there are significant differences among regions and banks. For example, banks in Italy, Portugal, Spain have a much higher level of client management than other markets.

Alternative approach to persuading client relationship managers to stay in their positions longer is development of “circle of trust” of clients. This happens when bank starts expanding its relationship with a client to a larger group of people, so that it becomes more a bank relationship instead of the relationship with only one manager. There are several ways to achieve this. Client relationship manager can be considered to be the primary and the only contact for most issues due to the best understanding of a specific client. However, if there is a doubt which requires a specialist’s knowledge, the client can be directed to a member of a specialized support team. Another approach is better exploitation of contact centers which have a team of individuals who support client relationship manager. Even if a client relationship manager leaves, there should be one or two members of the contact center team who have established contact with a client, particularly having in mind the fact that call centers have small staff turnover.

Clients are to be educated on this new approach and on ways people who support client relationship managers can help them if necessary. The advantage of support network is that a small enterprise as a client who has very little time will be able to communicate with somebody who can help him if he cannot reach client relationship manager.

Another option is a team of several client relationship managers, which means that one of them will always be available. This enables consistency in relationship with a client.

Some Russian banks have such a large number of clients and such a small number of client relationship managers that their basic problem is how to assign them. Clients who have client relationship manager assigned are chosen on the basis of their business with the bank and the possibility of their development.

One increasingly popular approach to decreasing expenses is cutting the number of client relationship managers and introducing a model of remote client relationship management. Positions on this model differ from country to country. For example, in Netherlands clients do not want client relationship managers because they do not want to pay for them. However, in France clients prefer personal contact. (Vukosavljević, 2012).

## ***CHANGES IN LOAN PROCEDURES***

### *LOAN TRENDS*

A recent EFMA/FINALTA research was conducted on secured and unsecured loans (the difference is in collateral) in all principal regions of Europe. Although there are differences due to loan amount or level to risk exposure for an unsecured loan in Western Europe, making decision takes about three and a half days, while in Central and Eastern Europe in general it takes eight or nine days. For secured loans and generally loans with higher value and greater risk exposure, the time is significantly prolonged because of the need to collect more information on the collateral. On the average, it is over nine days in Western Europe and over fifteen days in Central and Eastern Europe.

These periods are considered to be surprisingly long, particularly when banks with the best service can decide on unsecured loans within four hours. Some bankers think that micro segment procedure should not be more complicated than the one for personal loans. It appears that banks generally intend to shorten the decision making time. However, more complicated loans are frequently provided for better clients, who due to complexity of the situation have to wait much longer.

Some bankers think that a significant change in policy has not occurred in respect to considering loan requests after economic crisis. It still takes a lot of internal work in order to harmonize the existing procedure.

Other bankers say that many qualified men are lost due to restructuring and forced collection, so that loan department no longer has good or experienced staff as earlier. In some cases 90% of loan requests are rejected because employees received bonuses for filling in requests, so that they were filling in requests without actually understanding bank's terms. This indicates that banks lack vision. Loan business is back and it seems that banks are in the same position they used to be three years ago, and that they have drawn very few conclusions out of the crisis.

Market interest rates have decreased lately. In countries such as Romania, Croatia, Ukraine, deposit rates fall below minimum, so that banks do not make profit on deposits as they used to. If the crisis continues and loan business does not recover, these countries may will have problems in operations.

A big problem In Portugal was the fact that banks have limits to approving loans, which leads to increased defaults. The consequences for economy of the country will be felt during the next year. Unemployment rate is already about 11%, and during the next year it will probably reach 12% or more. Banks do not realize that they were frequently responsible for denying support to SMEs during the crisis. The question is whether there are changes in business sector now since many companies are not able to get loans. It appears that the worst period was the fourth quarter of 2009. Since then some fields have experienced mild improvements. (Vukosavljević, 2012).

### *PROBLEMS OF LOAN PROCEDURE – APPROVAL OF LOANS FOR SMES*

One of the problems banks face is recognition of the ways in which they can modify loan procedures for corporations in order to adjust them to the needs of small enterprises. Using corporate loan procedures for SME clients can only make the problem more complicated, while model for population could be more effective. The procedure also needs to be adjusted to specific clients.

There is a gap between people who are in charge of loans and those dealing with business policy. These two groups do not communicate effectively, and that is a root cause for delays in loan procedures. These two groups should be willing to communicate and understand each other, and thus come to an agreement.

In different countries and different banks the time necessary for making decisions on loan requests for companies greatly varies. In one case it was between two and forty days. Banks should focus on examples of inexcusably long procedures and find ways for cutting this time period shorter. The solution again could be in mutual effort of business and loan personnel for researching better ways of processing loan requests.

There are some banks which have realized that their worst problem is impossibility of the loan department to understand and trust their risk model, which is necessary for making decisions and developing appropriate procedures. They also want to explore a more efficient use of risk model. An important question is a risk measure and risk control, as well as its introduction into loan management procedure. If banks do not know their clients well, perhaps they need to improve their client data bases and find ways for evaluation of their rating.

Withdrawals and cards are one particularly complex field for banks which is sometimes neglected in SME sector, but there are great variations among countries. A significant question is the one of competition of telecommunication companies, big retail banks and some organizations for micro financing.

Data show that 50% to 90% of clients do not need loans because they use only transactions. This led to the development of specialized bank for SME clients, which mainly deals with transactions, including international transactions.

## ***FINANCING SMALL, MEDIUM AND MICRO ENTERPRISES (SMALL BUSINESS)***

There are several forms of financing small business, such as:

- personal funds
- loans
- pooled assets
- issuing and selling of securities (stocks, bonds and commercial papers)
- leasing (of goods and financial leasing)
- factoring
- securitization as a new form of financing SEMs.

**Leasing** as a model of alternative financing can usually be used by those companies, young entrepreneurs and natural persons who do not have funds for buying necessary and up-to-date equipment necessary for economic activities, and who cannot apply for a loan for other reasons. This model is particularly suitable for small, medium enterprises, entrepreneurs and citizens.

For the companies and entrepreneurs who want to establish and expand their activities, obtaining equipment through leasing is a better solution than loan for at least three reasons:

- the equipment can be used as long as profitability of its results (products) is at satisfying level;
- after expiration of lease contract the equipment can be replaced with the new;
- after expiration of lease contract the user will decide whether to keep the equipment in his possession or not.

The advantage of leasing as a form of financing investments is that it enables investors to use modern and expensive equipment even though they do not have capital of their own. The investor (legal or natural person), repays obligations under the lease contract for equipment and modern technology from the capital made by that new equipment. For some

investors this may be the only real and very suitable way for accomplishing a business venture. (Vukosavljević, Kvrđić, Vukosavljević, 2012).

Leasing is a new way of contract financing according to which owner of a certain asset (lessor) gives the other party (lessee) exclusive right to use the asset if he pays rental on predefined time intervals (Đuričin, Lončar, 2003). In other words, it is a legal transaction in which one party (lessor), who buys the asset from a dealer (party who delivers the asset), gives the third party (lessee) the right to use the lease object for a certain period of time, and in return lessor is entitled to a rental based on the lease contract.

Figure of the leasing parties can be presented in the following way:

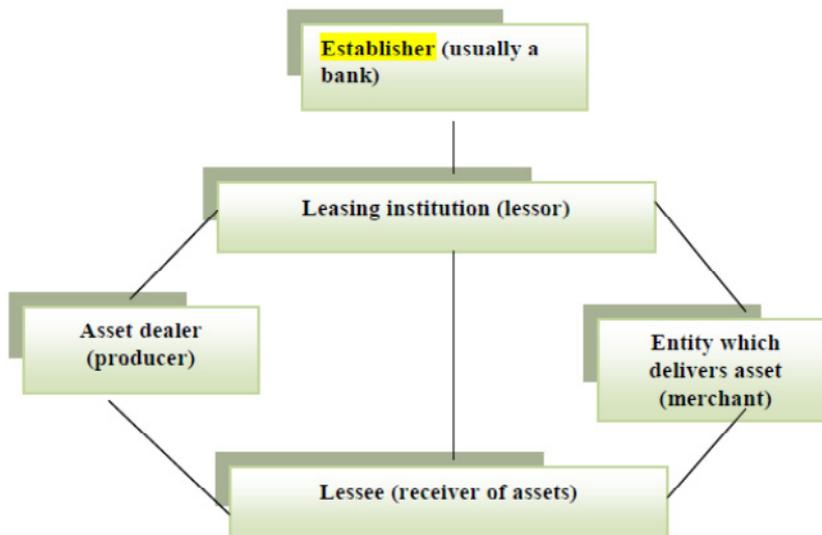


Figure 5: Lease contract parties: *Own reasearch*

**Lessor** is any legal entity which hands lessee over an asset to use it during a specific period in exchange for the agreed rental, but at the same time keeps ownership of the lease object. In exchange for the service provided lessor:

- enters into contract on delivery with the provider of the asset (by means of which lessor acquires ownership over the lease object), while lessee defines deliverer and object of leasing;
- enters into contract with lessee, by means of which lessor transfers to the lessee the right to hold possession of and use the lease object for a defined period of time, while the lessee pays the agreed rental in agreed installments.

Advantages of acquiring equipment and other assets under lease contract are great, particularly in case of small and medium enterprises and natural persons. In Serbia 17 leasing institutions have been established, and they have delivered goods (equipment and final products) worth 3 billion Euros so far. <http://www.seebiz.eu/dobit-lizing-kuca-u-srbiji-oko-3-miliona-evra/ar-31287/>

Potential investors can use lease contracts in many ways in order to equip small businesses and provide all sorts of services.

For the purpose of a clearer comparison of financing through loans and leasing, we present an example of acquiring equipment.

**Example** – Acquiring equipment through leasing and loan

*Table 2: An example of acquiring equipment (machine) through leasing*

1	Gross purchase value of the lease object	10 000.00
2	Purchase value of the lease object	8 474.58
3	VAT on purchase value of the lease object (18%)	1 525.42
4	Residual value (20% of gross purchase value)	- 3 000.00
5	Net financed amount	= 7 000.00
6	Remaining value of the lease object	- 0.00
7	Lease amortization	= 7 000.00
8	Total interest	+ 924.01
9	Total lease payments	7 924.01
10	Number of lease installments	/24
11	Lease installment	= 330.17
12	Total contract value (2+8)	= 9 398.59
	Other expenses of lease contract	337.15
	Approval expenses (processing of request) 1.5%	127.12
	VAT on expenses of approval procedure	22.88
	VAT on interest in lease rental	166.32
	Expenses of entering the contract into the Register of Financial Leases	17.56
	VAT on expenses of entering the contract into the Register of Financial Leases	3.18

*Calculation of lease expenses in EUR, annual nominal interest rate 12%, effective interest rate 18.6%.*

Payment at entering into the contract: residual value + sum of other expenses 3,337.15%

Insurance expenses: from fire, breakage and other dangers 800.00

Leasing expenses total: 4+9+ sum of other expenses + insurance expenses 12,061.00

*Table 3: Example of financing equipment through loan in EUR*

1	Gross purchase value of the machine	10 000.00
2	Purchase value of machine	8,474.58
3	Purchase value VAT	1,525.42
4	Residual value (30% of gross purchase value)	- 3,000.00
5	Net financed amount	= 7,000.00
6	Amount paid through loan installments	7,000 .00
7	Total interest	+ 1,803.6
8	Total loan installments	= 8,803.60
9	Number of installments	/24
10	Loan installment	= 366.82
11	Total contract value (2+7)	= 10,278.18
	Overview of other expenses occurring when entering into a loan agreement	172.68
	Approval expenses (processing of request) 2%	169.49
	Loan bureau expenses	3.18

*Annual nominal interest rate 22.7%, effective interest rate 36.7%*

Payment at entering into the contract: residual value + sum of other expenses  
**3,172.67**

Total loan expenses: 4 + 8 + sum of other expenses 11,975.00

Apart from the sum of total expenses in case of acquiring equipment under the above listed conditions, from the aspect of an entrepreneur, financial leasing is a more expensive than loan. The expense of insurance, as well as VAT on interest contained in leasing rental, are the main causes of this. The influence of these factors has to be stressed particularly if we notice significantly lower interest rate in leasing (12%) relative to loan interest rate (22%).

When making a final decision it is certainly necessary to thoroughly examine and compare other benefits and flaws of these sources of financing. Sometimes the speed of acquiring leasing object may prevail in respect to its price - which is lower in case of loan, as demonstrated in the example.

One new model of financing small business can be through securitization. Securitization is a model of financing business activities through conversion of unsaleable securities into saleable if there are investors interested in such a model of financing on one hand, and issuing new securities based on pull of quality securities or mortgages as securities for the purpose of financing companies through loans.

Securitization as a model of financing was developed in world economy and financial markets, while in Serbia there are no legal grounds for it yet, that is there are no regulations, so it definitely needs to be regulated.

## ***CONCLUSIONS***

Banks and banking business with financial, money flows and financial transactions and operations which occur in money flow, securities and loan business, and through banking system and banks, are very important and vital segment of monetary finances and financial mechanism of any country and small, medium enterprises and entrepreneurs as legal entities.

In relationship with a bank and in business of bank deposits, loans, payment service and various financial operations in bank is the essence of knowledge on bank as financial institution of contemporary and modern economic business. For that purpose any contemporary enterprise and entrepreneur need knowledge on resources a bank has in infrastructure of its basic roles and functions. Without this knowledge there is no good or efficient business.

Banks and banking system can, in accordance with their own initiatives, knowledge, signals and interests in economic segments and entities, help and solve many of their problems, problems of small and medium enterprises.

Ever present dilemma is how to achieve the necessary liquidity and maximum rentability with minimizing risk and uncertainty which are very much present in banking business. Initial risk is in the essence of banking business. Namely, the greatest share of bank's duties is payable at deponent's demand (a vista deposit). If banks want to survive, they have to be permanently capable to pay on demand.

Particularly, banks' business policy has an established segment of business policy which relates to a very significant and mass segment of work - the segment of operations with small and medium enterprises. The following is important to know:

Overall predictions for 2013 are better than those for 2012 – it appears that the recovery has begun, but the surrounding is still unpleasant, and there are great variations in Europe. At the moment it seems that profitability will remain low for a while.

Banks should consider what they can do with their own models of services in order to adapt to the situation. If we assume that on the short run there will be no dramatic improvements, one of key questions will be how to redesign and improve models of services in order to adapt to the new level of profitability.

New models of services: In order to make the necessary changes and apply new models of services, primarily in crediting SMEs and offering other non-credit services in banking sector, a system must enter into transformations and undergo through:

- establishing the feeling that changes are urgent and necessary, i.e. it is necessary to prove to people that unless the bank goes on the road of transformation, it is evident that entities will disappear, in which case financing of small business is possible;
- there is a need for a powerful team with sufficiently large group in sufficiently powerful positions in the banking system itself and companies that will govern changes;
- a clear vision of the changes must be introduced;
- communication on the vision should be established;
- systematic planning and monitoring of implementation of the vision;
- new rules should be implemented into corporative culture.

New income sources: One new income source should come from internationalization. There are several examples of prominent banks operating in several countries. International banks should consider whether they operate as a group of independent banks in several countries, or as a bank which can offer international services and leverage strategies in several countries.

The main challenge in future will be finding new income sources since all the banks depend on loans, but prices of risk and capital in future could be very high, while the demand at the time is relatively low.

There are three key problems, and the fact is that small and medium enterprises and entrepreneurs are among key pillars of future income rise. Some members of Business Banking Advisory Council are of the opinion that there is no need for anything new – banks should simply start operating more efficiently.

Credit procedure problem: One of key problems with which banks are faced is recognition of the ways in which they can modify credit procedures for corporations in order to adjust them to small enterprises. Credit procedures for corporations applied on SEM clients can make the problem worse, while retail model could be more efficient. The procedure also needs to be adjusted to a specific client.

There is a gap between people who are responsible for loans and those in charge of business policy. These two worlds do not communicate efficiently, and there lies the key cause of delaying in credit procedures. These two parties should be willing to communicate and understand each other, and this to reach an agreement.

Banks have realized that their worst problem is inability of credit department to understand and trust the bank's risk model, so that it can make decisions and develop the appropriate procedures. They also want to explore a more efficient use of risk model. An important question is the measure of risk, risk control, and its implementation into the procedure of loan management. If banks do not know their clients well, perhaps they should expand data bases on their clients and find ways to evaluate their credit rating.

Analysis of European banking lead to a hypothesis that in the field of automation and decrease of operation expenses banks' practice needs to be changed. Economic climate left banks facing with the problem of liquidity and lower incomes, or falling incomes. This imposes obligation to redesign procedures of work and decrease expenses both in IT and automation and introduce new technological solutions for scanning and processing of documents.

Future goals: banks perhaps need only to decide to do things other way instead of trying to make a radical shift in market, which has already occurred. Banks which can introduce these changes can soon achieve huge advantage relative to their competition. It is hard to achieve it because of the risk, and the bigger bank is, the more time it will take it.

However, with margins continuing to fall, it seems inevitable. The question is how banks will deal with the increasing need for specialization and the need to cut expenses, while at the same time staying closely in touch with local community. Efficiency is also an important question, some experts say that higher efficiency in operations and better procedures are required. The solution may be transferring to direct channels.

So, what is the future of SME banking? At the moment, appetites for loans are not what they used to be, profits are low and all banks are in search for good clients. This influences margins. Market rates fall, while credit risks still exist.

The truth is that small enterprises and entrepreneurs as a segment of economic activity have solid and real chances to be supported by banking sector for at least two reasons- a) they are the companies with the greatest potential for banks to make additional profit, in banking terms, b) because they are the companies in which risk is the lowest since dispersion of loans is maximal.

Banks might have more benefits from researches investigating clients and target groups, which indicate what has to be changed. They should also reconsider whether they have the appropriate staff in sale, which can really talk to clients and understand them. An important element for making profit is complete defining and setting up of operating procedures in all bank's segments, which has serious effects on quality of work, operating expenses, qualifications of staff, reputation and prestige of every bank.

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# TRANSMISSION MECHANISMS OF MONETARY POLICY IN SERBIA WITH EMPHASIS ON THE INTEREST RATE CHANNEL

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*Natasa Vujadin*<sup>80</sup>

**Abstract:** The Central Bank during the creation and conduct of monetary policy must have clear goals in order to establish the desired macroeconomic stability. Serbia, though already in the process of transition, still faces problems that were current in the 90-ies (high inflation, a high degree of dollarization, the budget deficit). Objective of this analysis was to examine to what extent the instruments and mechanisms of monetary policy of Serbia are effective. Special attention will be devoted to the movement of the interest rates in order to determine its impact on the movement of interest rates at the money market and the movement of the interest rates of commercial banks. The aim of this study was application of descriptive comparative method to assess the impact of the channel of interest rates on economic activity and inflation in our country. Actuality of the theme is undeniable. Inflation and its control is a long-standing problem of the Serbian economy. Its stabilization would be a proof of the success and effectiveness of the monetary policy of the National Bank of Serbia.

**Key words:** Reference Rate, Inflation, Interest Rate Channel, The Economic Activity

**JEL classification:** E58, E43, G21

**UDC** 338.246.2:336.74(497.11)(082); 336.781.5(082)

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## ***INTRODUCTION***

The Republic of Serbia led a monetary policy without an actual strategy for a long period of time. Even though the Central Bank could choose among the three monetary strategies: inflation targeting, monetary aggregates or exchange rate, it did not choose any of them, actually it applied each strategy to a certain extent. The reason for this approach can be justified by the fact that the National Bank of Serbia was burdened by many problems. It was expected that the central government will provide successful solutions in the respect of prices stability, financial system, decrease of unemployment rate, stability of exchange rate, encouraging production, competitiveness etc. Is it realistic to expect the National Bank of Serbia to solve all the problems? Because of this the economists have agreed that it is realistic to expect the National Bank to have achieving of prices stability as a goal, and in accordance with that to choose monetary strategy.

The choice of a particular monetary strategy depended, first of all on exchange rate. Even though many theoreticians advocated the choice of fixed exchange rate, the National bank of Serbia gave advantage to the regime of floating exchange rate, that is, independent monetary policy.

New monetary framework in Serbia becomes active in 2006, according to which the National Bank of Serbia applies the strategy of inflation targeting.

Through a transmission mechanism, the monetary policy has an effect on the real sector. At the moment, monetary policy does not have an effect on the real sector with a certain aim and that is why it is necessary to consider the time and effects of the chosen policy it has on the accomplishing the previously set goals, in advance.

This paper is divided in two parts. In the first part we will give a short theoretical analysis of transmission mechanisms of monetary policy.

Special attention will be given to the channel of interest rates as the most important channel of transmission mechanism of monetary policy. In the second part we will analyze the movement of the reference rate. We will try to determine if the application of the new regime of monetary policy of National Bank of Serbia enabled the strengthening of interest rates channel. By using descriptive and comparative method we will investigate if and to which degree the change of reference rate influences the movements of active and passive interest rates of business banks as well as the movement of interest rates in the money market (belibor and beonia ). We will try to determine the influence of interest rates on the economic activity and inflation because they are used as the instruments of monetary policy.

## ***TRANSMISSION MECHANISMS OF MONETARY POLICY: THEORETICAL FRAMEWORK***

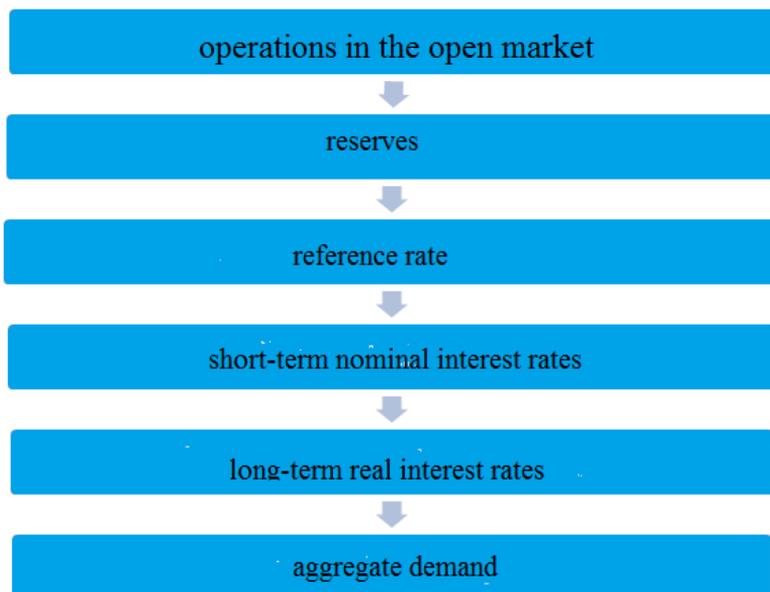
The process through which the monetary policy influences macroeconomic aggregates (production, aggregate demand and inflation) is called the transmission mechanism of monetary policy (Miletić, Kvrđić, Vujadin, 2012, p213 ). Monetary policy can influence the prices and economic growth using several most important channels: interest rate channel, exchange rate channel and credit channel. Besides these

there are rarely used channels of transmission like: channel of wealth effects on consumption, cash flow channel and the liquidity channel.

Expansion of monetary policy is accompanied by different levels of reference rate. Expansive monetary policy implies the low reference rate while restrictive monetary policy implies the higher level of reference rate. The change of reference rate affects:

1. The change of short-term nominal interest rates on the money market
2. Through inflation expectations of short-term nominal interest rate, the short-term real interest rates are changed.
3. The changes in the movement of short-term real interest rates will influence the movement of long-term real interest rates.
4. Long-term real interest rates affect the scope and the structure of consumption, and especially the tendency to saving and investments of economic subjects.

The mentioned transmission channel can be schematically presented in the following way:



*Scheme 1: Interest rates channel*

Generally speaking the interest rate channel could be interpreted as the channel through which interest rates affect the prices. If the real interest rates change under the influence of reference rate there will be the changes in the aggregate demand (consumption and investments). The changes in the scope and the structure in consumption and investments will result in changes in resource usage. After a certain time period, the above mentioned will reflect on the level of process. What would that mean exactly? The increase of interest rate stimulates the growth of population's savings and refraining themselves from spending. Also, if the interest rates are higher the sector of population avoids new borrowings, that is, taking new bank loans. How do the interest rates affect the companies? Almost the same as the sector of population. If the interest rates are higher the companies will not make new investments because the bank loans are more expensive. Less consumption and fewer investments lead to

the decrease in demand. Demand is in the relation of positive correlation with the production activity. The decrease in demand will lead to the decrease in production. The level of production activity influences the movements of prices and salaries. The decrease in production does not always affect the movement of prices and salaries. The decrease of production is not always followed by decrease in prices and salaries. The harmonization usually happens in a certain time frame. The decrease in production activity is followed by the decrease in level of prices and salaries after a certain time period (Sljivic et al., 2013).

From this theoretical discussion we can draw two main assumptions about the influence of interest rate channel:

1. The short-term interest rate which is directly controlled by the central bank influences the other interest rates and loans and deposits with longer maturities (the so-called transfer curve).

2. This changed interest rate from savings and loans, in the long run, really represents the element in citizens' and companies' decision-making process about their expenses/savings and investments. Along with this, it is necessary that the changed level of production affects the companies, that is, their decisions about the level/changes of prices and salaries (Dimitrijević, 2007).

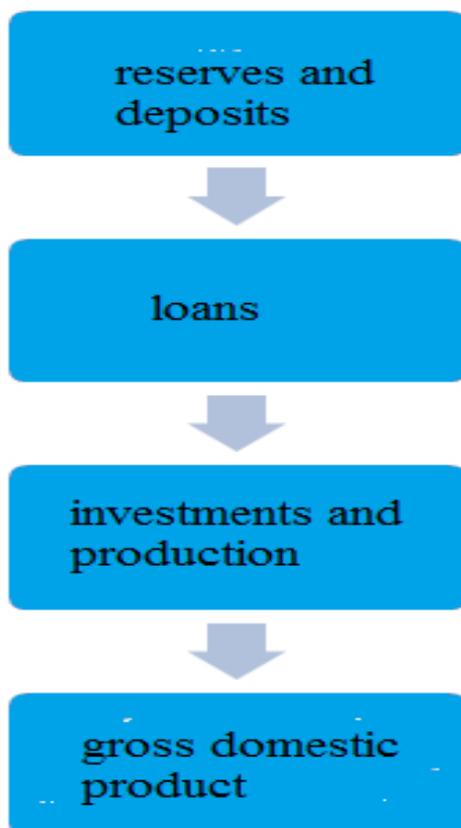
Existing empirical research in countries of Central and Eastern Europe, confirm that the influence of changes in reference rate on all other interest rates (at the money market and bank interest rate) in the beginning was really low and in time it grew and became stronger. It is noticed that the influence of changes in reference rate on other interest rates is in time lower. (empirical results for Czech Republic, Poland and Hungary for the period of 1994–2002; Crespo-Cuaresma et al. 2004). Researches showed that there are differences in harmonizing interest rates among banks, as well as among different types of loans. The higher flow was seen with the banks that are less profitable and less capitalized, probably because of the less maneuver space, and higher dependence on the money market and lower margin. (Chmielewski, 2003). One can also notice the greater effect of change with short-term in relation to long-term loans, and with companies' loans in relation to citizens' loans

The traditional interest rate channel always increases by the action of loans channel. According to the loans channel the measures of monetary policy affect the supply of loans. Loan channel is significant in those systems in which business banks dominate, that is, in those in which the subjects have narrowed sources of means, and they can be reached through bank loans. The bank loan channel acts in the following way:

1. When the monetary policy is expansive, the reserves and the deposits of banks increase and they affect the increase of volume of loans, that is, of loans granted. More granted loans results in the investment growth and the volume of productivity. Higher production activity undoubtedly increases gross domestic product.

2. With restrictive monetary policy reserves and bank deposits are decreased and the volume of loans granted decreases as well. Less loans show the decrease in investments. Less investment activity negatively affects the production and the movement of gross domestic product.

The action of loan channel will be shown through the scheme 2.



*Scheme 2: Loan channel*

This channel, most often, functions through the change of market value of the company or personal wealth. The change of company's market value will influence the decisions about investments and investment projects while the changes in personal wealth influence the volume of consumption first of all.

Nowadays the influence of loan channel is smaller. The reason for that lies in the fact that bank is no longer the only source of finance for companies. The securities market development and the existence of non-bank agents lead to smaller company's loan dependence on banks. Also, the emergence of loan lines in the world decreased the significance of the mentioned channel.

The increased usage of these delays the effect of monetary policy because the companies have agreed in advance about the level of loans so their total amount does not change to a great deal.

The loan channel, besides the fact that it can arise in the form of previously described channel of bank loans, emerges as a balance sheet channel. Interest rates affect the balance sheet, cash flows, net worth of companies and consumers. Higher interest rates bring the smaller cash flow, less loans, smaller net worth of companies and drop of aggregate demand. All mentioned above influences the increase of

possibility of wrong selection of financial portfolio and a moral hazard. In these situations companies are prone to various investments even though they own a significantly smaller amount of means which they can assign to being a safety net, that is, collateral. Then the banks lower the loan offer. Less loans, less investments, less economic activity.

In small, open economies the exchange rate has a key role in transmission from monetary policy to inflation. It is even more important to those economies which are highly “dollar-oriented“ (Leiderman et al, 2006) that is, “euro-oriented“ in the case of Serbia, when a large number of transactions, prices, demand and obligations is summed up and expressed in foreign currency.

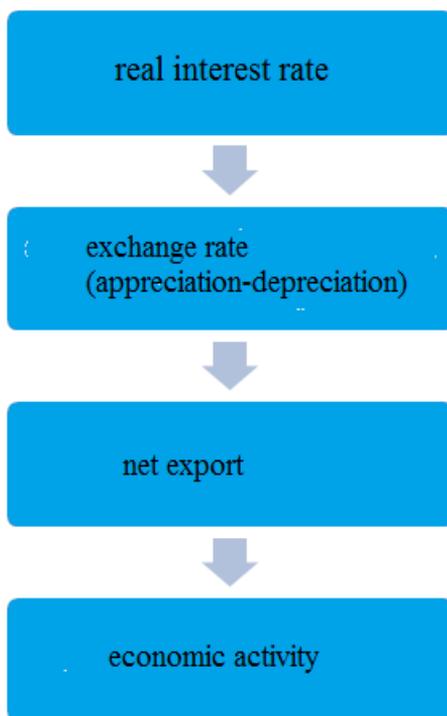
Exchange rate channel relies on the effects of interest rates changes. Monetary policy, through interest rates influences the exchange rate which is reflected on net export. In which way does the mentioned channel function? While leading the expansive monetary policy the reference rate decreases. Decreased interest rate makes loans more accessible, so the amount of national currency in circulation is increased through the increase of placement. Higher amount of national currency shows the weakening of her value, depreciation. Depreciation of national currency negatively reflects on inflation movement in the country. The growth of exchange rate instigates the growth of inflation and vice versa.

Exchange rate changes influence the prices through direct and indirect channel. Direct influence of the exchange rate implies that the exchange rate changes all the prices in an open economy through the influence on the prices of exchangeable goods. In case of depreciation of the national currency, national prices of exchangeable goods and services have a tendency of growth by the depreciation rate. This is the direct effect of the exchange rate on the prices which influence the growth of a general level of prices, in accordance with the exchangeable goods’ share in GDP. Indirect influence of exchange rate implies that the changes of prices of exchangeable goods and services in relation to the prices of the unexchangeable, influence the level of economic activity which creates the indirect pressure on the prices. Nominal depreciation, combined with inelasticity of prices to become lower, makes domestic goods cheaper than the imported ones, the export grows because of the competitiveness growth, which influences the growth of net export, aggregate demand and production. ( Dragutinović, 2008).

Exchange rate influences the competitiveness of an economy. Depreciation of national currency instigates net export and economic activity by making the economy more competitive but in the short term. The effects are opposite if the central bank leads restrictive monetary policy.

To sum up, while the interest rates influence the investments and consumption, the exchange rate influences the economic activity connected to foreign trade.

The influence of exchange rate channel will be shown in scheme 3.



*Scheme 3: Exchange rate channel*

Empirical research of existence and intensity of this channel's influence – which is measured on so-called pass-through of prices – in countries in transition, have showed that it is higher with production than consumer prices. The important finding of these researches is that by time, from the mid eighties until now, the strength of transmission of changes of exchange rate on prices has been decreasing. Before it was connected with stabilization, that is, the reduction of inflation in those countries, which contributed to reduction of exchange rate transmission (Frankel et al, 2005 and Bitans, 2004). Pass-through effect on the index of base prices (prices that are freely formed at the market and NBS uses them as the target rate) in Serbia, is relatively high and it is around 50%. Almost 30% of total prices from the goods that are in the index of base inflation – are imported and under assumption of competitive market, depreciation (appreciation) of domestic currency causes automatically higher (lower) expense for importers and therefore the increase (decrease) of product prices which is imported and sold at the national market. (Dimitrijević, 2007).

All of these three analyzed channels have their own significance while creating and leading the monetary policy. In Serbia, really significant are the exchange rate channel and loan channel, whereas the interest rate channel, which dominates in the world's developed economies, in Serbia, does not have an important application. Because of this reason, in the next part of the paper we will research it in detail, in order to find out the way in which it functions in Serbia and the reasons for low level of its presence.

## ***TRANSMISSION MECHANISMS OF MONETARY POLITICS IN SERBIA: INTEREST RATE CHANNEL***

Serbia is a small, open and highly euro-oriented country. The level of euro-orientation is measured by the share of currency deposit in total deposits, that is, by the share in M3 is 80% and 75% respectively; measured by the share of currency and indexed loans in total loans of non-government sector is below 70%, measured by the share of public debt in currency sign in total public debt is 95%. ( Dragutinović,2008. )

By introducing the new frame of monetary policy, interest rate begins to be used intensively as an instrument of monetary policy. By analyzing the movement of reference rate and its influence on bank interest rates and interest rates on money market, we will try to determine if the interest rate channel started to strengthen in transmission mechanism.

In table 1. we will give the monthly movement of reference rate of National bank of Serbia in 2012. .

*Table 1: Reference rate of NBS in 2012*

Month	Amount in %
January	9.5
February	9.5
March	9.5
April	9.5
May	9.5
June	10.00
July	10.25
August	10.50
September	10.50
October	10.75
November	10.95
December	11.25

*Source: www.nbs.rs*

From the previous table it is clear that the reference rate had a constant tendency of growth from May last year until December. Its constant value was marked only in the first six months of 2012. In table 2 we will give the overview of weighted active bank interest rates<sup>81</sup> on loans and passive bank interest rates<sup>82</sup> on deposits in 2012.

<sup>81</sup> We will take into consideration the values of total loans given to population, non-profit institutions which provide services to population and non-financial legal entities.

<sup>82</sup> We will take into consideration the values of total deposits of people, non-profit institutions which provide services to population and non-financial legal entities.

*Table 2: Weighted active and passive bank interest rates in %*

Month	Active interest rates	Passive interest rates
January	10.26	4.19
February	10.13	4.14
March	10.21	4.12
April	10.27	4.06
May	10.16	4.02
June	10.28	3.99
July	10.19	3.98
August	10.12	4.03
September	10.28	3.96
October	10.33	3.87
November	10.23	3.88
December	10.05	3.86

*Source: www.nbs.rs*

Since the movement of interest rate of central bank influences the movements of interest rates on money market ( belibor and beonia ), it is natural to expect that their change will reflect on the movement of active and passive interest rates of business banks. That is why we will give the overview of movement of belibor and beonia in order to see to what degree the movement of all mentioned interest rates is harmonized.

*Table 3: Average values of beonia and belibor in 2012. in %*

Month	belibor	beonia
January	9.768	8.526
February	9.688	8.568
March	9.434	8.680
April	9.632	9.075
May	10.080	9.844
June	11.443	11.009
July	10.979	10.520
August	10.413	9.781
September	10.98	10.301
October	10.584	9.757
November	9.352	8.777
December	9.322	9.306

*Source: www.nbs.rs, Author's calculations*

From these tables we can see the inconsistency of movement of reference rate, interest rates on money market and active and passive bank interest rates. Inconsistency can be seen in the sense of inconsistency of movement of the mentioned interest rates. The growth of reference rate was not always followed by interest rates

growth on money market or the growth of interest rates of business banks. Values of the interest rates are around base value which can be seen in reference rate of the central bank. Movements of the passive interest rates of business banks are completely unaffected by the change of the value of reference rate. Business banks often do not rise their passive interest rates even when there are real parameters which indicate that possibility. In 2012 they had a constant fall except in August.

What is the reason for this movement of interest rates and incomplete action of the interest rate channel of monetary transmission in Serbia?

1. Besides the national sources a large part of the banks refines from the foreign sources. In that sense the reference rate of national bank of Serbia represents possible investment for the mentioned banks, and not the price of the source of means. The mentioned rate, business banks use as a frame for parting of their own interest rates, but it does not represent the costs of financing. The financing costs for these banks are represented by interest rate at the money market of European Union (euribor) or reference rate of Central Bank of Europe. Most of the loans in Serbia is indexed in euros, that is, has a currency clause so that the banks have constant incomes in foreign currency, which makes them not sensitive to domestic monetary conditions.

2. Incomplete competition in the domestic bank sector. Business banks do not change their interest rates in accordance with the changes in the money market because they have high margins. One can see great disparities in interest rates in the same type of loans as well as unjustifiably high interest rates for certain types of loans. This is usually explained by the monopolist position of banks and insufficiently sensitive demand for the financing price.

3. Population's demand for loans mostly is not sensitive to changes or the level of interest rates. The population in Serbia usually takes care of the height of the monthly payment, then of the total amount that should be returned and then of the interest rate. The criterion when it comes to loans for our citizens is how quickly a loan can be granted.

4. Companies react more to the changes in interest rates, but in two cases: if they are taking loans that are directly connected to the movement of reference rate of National Bank of Serbia and if they change a financial source (e.g. foreign loans) for financing from bank loans.

Interest rate channel is insufficiently active in our country that is the inevitable conclusion.

It is far more difficult to determine the influence of the mentioned channel on inflation and economic activity. In table 4. We will represent the monthly movement of the inflation rate in 2012, in order to determine their harmonization with the changes in movements of reference rate of Central Bank.

*Table 4: Inflation rate movement in 2012. in %*

Month	Inflation rate in %
January	5.6
February	4.9
March	3.2
April	2.7
May	3.9
June	5.5
July	6.1
August	7.9
September	10.3
October	12.9
November	11.9
December	12.2

*Source: www.nbs.rs*

Reference rate, in the first five months, did not change because the inflation was within the planned values. From June 2012 inflation rate is moving upwards. National Bank of Serbia uses the reference rate as an instrument of monetary policy in order to influence the reduction of inflation. With that goal, if we consider it at a monthly level, it brings the decisions by which it increases the reference rate. By increasing the reference rate, National Bank of Serbia influenced the amount of money in circulation which certainly reflects on inflation as well.

Theoretically speaking the increase of reference rate influences the reduction of amount of money which results in reduced economic activity. In table 5 we will show the movement of gross domestic product in quarters in 2012.

*Table 5: The movement of gross domestic product in 2012. in %*

Quarters	GDP in %
The first	- 2.70
The second	- 0.30
The third	- 2.10
The fourth	- 2.00

*Source: Statistical office of Serbia*

In 2012, as it can be seen in the previous table, gross domestic product had a negative movement. The growth of economic activity, seen through above mentioned parameter, has not been achieved. Negative movement of inflation resulted in the decreased production and economic growth.

Preliminary empirical research has shown that the gap in real interest rates does not affect GDP, just like the gap in GDP does not affect inflation (Dragutinović, 2008).

## ***CONCLUSION***

Serbian economy is still small, open and highly euro-oriented. In such economy the central bank has a very difficult task of running an independent monetary policy. The above mentioned analysis have shown that the exchange rate channel is still dominating, while all other channels of transmission mechanism of monetary policy, except the inflation expectation channel, almost do not function at all. Interest rates channel does not have an application, like it does in developed countries in the world.

The reference rate is not in line with the movement of bank lending and deposit rates as well as the interest rates on the money market. Our commercial banks are mostly foreign-financed and that is the main reason why the lending and deposit interest rates have a greater impact reference rate of the European Central Bank than the reference rate of the National Bank of Serbia. The reduce of eurization degree in the country will improve the effect of the channel of interest rates. Commercial banks do not normally align their interest with the interest rates on the money market, which further reduces the effect of the mentioned channel.

Imperfect competition in the banking sector in Serbia is certainly present. There are also large disparities in rates the same type of loan as unreasonably high interest rates for certain types of loans. This mainly explains the monopoly of certain banks and insufficiently sensitive to the cost of financing demand. The inefficiency of the credit channel is present due to insufficient sensitivity of loan demand sectors of the economy and the population to changes in interest rates. Reference interest rate used by the National Bank of Serbia as the dominant instrument of monetary policy in order to maintain inflation within the targeted limits.

To influence policy rate increase is necessary to consider measures that can help the process of de-dollarization (euroization). In addition to ensuring macroeconomic stability, continued restoration of confidence in the domestic currency of the monetary authority to respond to the dollarization prudential measures as well as measures to improve development of financial markets. (Aleksić, Djurdjević, Palić and Tasić, 2008). Applying prudential measures can achieve more bank borrowing dinars. One possible measure is the maximum level of security in the market for foreign-currency loans in relation to the dinar loans. However, the key contribution of de-dollarization provides macroeconomic and price stability. The application of inflation targeting regime, with a clear commitment of the central bank to maintain price stability in a transparent manner (and thus ensuring strengthening the credibility and accountability of monetary policy) may contribute to the process of de-dollarization.

Dollarization reduces the efficiency of monetary policy, including Serbia on this issue is no exception. Had a similar experience and other central banks were still able to secure the strengthening of the transmission channel. True, in the case of Serbia, the task is much more difficult because of the long history of high inflation and lack of confidence in the domestic currency (Aleksić, Djurdjević, Palić and Tasić, 2008).

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## ***STATE AND POTENTIAL OF SERBIAN BANKING SEKTOR FOR FINANCING REAL SECTOR***

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**Abstract:** The quality and capacity of the finance sector affects the dynamics and quality of structural changes in the real economy, and consequently SMEs. The real sector of the economy in Europe is very dependent on financing through bank loans. This is especially the case in small and medium-sized enterprises making up a large part of the real sector in the region. Having this in mind, the threats and opportunities of the banking system are directly reflected to the functioning of the small and medium enterprises as the pillars of the Serbian economy. Starting from the hypothesis that a healthy banking sector is vital for development of real sector, (especially in countries where the banking system plays a major role in the financial system.) in the paper is detailed analyzed the status and operations of the banking sector in Serbia. Consolidation of domestic banks at the beginning of the transition process through the liquidation of large insolvent banks enabled strengthening the financial position of the banking sector, confidence in the banks, improved balance sheet structure, as well as capital adequacy ratio. The downward trend in the real credit growth started in early 2008, with the beginning of global economic crisis. The change of behavior patterns of banks subsidiaries operating in Serbia adversely affects the flow of capital due to the lack of liquidity in the international market. The banks, which until then had been the bearers of lending industry, have significantly reduced their lending, particularly to small and medium-sized enterprises. Although profitable, commercial banking sector, measured by the ratio of total assets, total loans and total deposits to GDP, is lagging behind in comparison with the banking systems of Central and Eastern Europe. Increased cost of capital, reduced availability of financing, slow credit activities, currency-induced credit risk, high interest rates remains the main problems witch directly affect the SMEs.

**Key words:** Banking System, Development, Reform, Credit, Global Economic Crisis, SMEs, Real Sector

**JEL classification:** G21

**UDC** 336.711(497.11)(082); 338.1:336(497.11)(082)

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## ***INTRODUCTION***

The primary function of banks and financial institutions is to transfer financial savings through direct and indirect financial flows, from lenders to borrowers. They are a vital part of the development and future growth of the real sector and consequently SMEs. Performing their functions, these institutions of financial intermediation process, enable the reduction of transaction costs, provide the necessary information, and create the appropriate portfolio strategies depending on the risk and return, all thanks to great knowledge of the conditions and opportunities in the market.

Banks and financial institutions in general create an environment that suits the owners of funds, because it can make their surpluses more profitable. The users of financial funds can realize their entrepreneurial ideas. Also a state is emerging as an investor and the beneficiary of these funds, which can be used to conduct a monetary policy. Well-functioning financial institutions, and therefore banks and their reform are, on the one hand, the objective of macroeconomic policy, but on the other hand, they are a basic requirement for the further growth of the real sector.

Ownership, competition, capital adequacy and stability of financial institutions, especially banks, is of great importance for the development of a real sector. Starting from this position, as axioms, examining the status and limitations of the banking sector we are finding an indirect answer about the possibilities of the real sector of Serbia for growth and development. The justification of this initial attitude is in the other works that illuminate the role of the banking sector on the level of development, growth and convergence process. King and Levine (1993) in their work proved that financial intermediation has a positive impact on economic growth. Observed period is 1860-1989. Aghion et al. (2005) explain the speed of convergence directly affects the level of development of the financial sector. Rousseau and Sylla (2001) concluded that financial development stimulates development of the economies, based on the experience of 17 developing countries in the period in 1850-1997. Jayaratne and Strahan (1996) argue that the liberalization of the banking sector is positively correlated with the increase in real GDP per capita. To get a complete answer of the impact of financial intermediation of the banking sector to the real sector in Serbia, it is necessary to examine the impact of changes in credit supply on nominal aggregate demand and therefore the level of realized GDP and employment, which we leave for another research (Urosevic et al. 2011).

## ***THE ACHIEVED BUSINESS RESULTS OF THE BANKING SECTOR AND CONTRIBUTION TO REFORMS IN SERBIA***

Reform of the Serbian banking system started in 2001 with comprehensive diagnosis of the existing situation. The banking sector has undergone significant changes starting with this year. Insolvent banks were taken a license (at the beginning of 2001 there were 86 licensed banks (NBS, 2003)), even to the larger ones (in early 2002 was initiated bankruptcy proceedings against four largest banks, with 57% share in

total assets of the banking sector). Less capitalized banks merged or joined the larger and as a result of these activities at the end of 2002, fifty banks operated licensed by the National Bank of Serbia (NBS, 2004). During the 2003 and 2004 the NBS revoked the license for two banks; one bank decided to close; over other bank was initiated bankruptcy proceedings; three banks merged with other banks. At the end of 2004, 43 banks were operating. By 2005 the number of banks was reduced ones more (one bank's license was revoked and two banks merged with other banks). Only at the beginning of the reform of the banking sector the number of banks was halved. In the 2003-2005 attention was focused primarily on the consolidation of state-owned banks and the process of their privatization, revoking licenses of insolvent banks, merging or acquisition of smaller banks, as well as a rigorous assessment of the creditworthiness of potential acquirers of bank's shares. In this period a comprehensive analysis of the ownership structure of the banking sector was done, from the ultimate owners to the individuals - shareholders of the bank (NBS, 2006).

Major threat to the banking system, as well as the entire financial and economic system, was the crisis impact in 2008. However, the banking sector in Serbia during the 2008 was stable in spite of a number of risks, which was compounded by spillover of the crisis on the region of Southeast Europe. Conservative prudential policy of the central bank has provided strong capitalization of the banking sector, high capital adequacy ratio and high liquidity of assets, which greatly contributed to the resilience of banks. Psychologically induced withdrawal of old foreign currency savings and limited access to funds from abroad had the negative impact on foreign currency liquidity. Maturity structure of funding sources should be further improved. The rapid credit expansion was slowing down over the years due to measures of the central bank. In this sense, even a slowdown in capital growth in 2009, an increase in non-performing loans and extremely slow credit activity did not question the solvency of the banking sector. We can note that at the end of 2006 the capital of the banking sector doubled. What is particularly significant is that the equity in the period increased by 85% (NBS, 2010).

The transition of the banking sector, based on the new Law on Banks (Službeni glasnik RS, 2005, 2010), developed extensively in the past. The consolidation and growth of the banking sector has been achieved, as well as increased efficiency, but also appeared the risks associated with credit expansion. In addition to the rapid growth of deposits, the threat have been inadequate confidence in the national currency and the national banking sector. The transition of the banking business has brought consolidation through a process of mergers, acquisitions and recapitalizations, and the entry of foreign banks in the banking sector increased the supply and the quality of banking services.

Although there are still major problems we can conclude that the main results of the banking sector consolidation and structural reforms of the banks so far are higher efficiency and better financial performance of the sector, improved quality of balance sheet exposure by risk criteria and improved quality of the loan portfolio. This enabled a dynamic bank lending to corporate sector and householders. Banks have been able to mobilize substantial deposits and increase lending at high interest margins and achieve positive economic results.

## **PROFITABILITY OF THE BANKING SECTOR OF THE REPUBLIC OF SERBIA**

In the last period of transition, banking sector had a dominant share in the financial system of Serbia. Changes in the ownership structure of banks with majority foreign ownership, have contributed to the improved quality of the banking sector. Serbian banking sector is fragmented considering the fact that there is a large number of banks with a small share in categories of total assets, loans, deposits and revenues. In the banking sector in Serbia, there were total of 33 banks, employing 29,228 people, at the end of the fourth quarter of 2011. Total net assets of the banks amounted to RSD 2.650 which billion, while total equity amounted to RSD 546 billion. Furthermore, 21 banks are owned by foreign entities, 12 banks are owned by local people, 8 are state-owned (state is the largest individual shareholder) and 4 bank are owned by private individuals. Bank owned by foreign entities are prevailing by 74% of total banking sector assets, 75% equity and 70% of employees and generated a profit of RSD 22.9 billion.

*Table 1: Overview of selected parameters of the banking sector in Serbia (National Bank of Serbia, <http://www.nbs.rs> [accessed 31.12.2011])*

		Profit (loss)*	Assets	%	Equity	%	Staff	%
		Billions RSD	Billions RSD		Billions RSD			
Banks owned by domestic entities	12	(21,7)	685	26	135	25	8,705	30
State owned banks	8	(24,6)	472	18	75	14	7,216	25
Private banks	4	2,9	213	8	60	11	1,489	5
Banks owned by foreign entities	21	22,9	1,965	74	411	75	20,523	70
Italy	2	15,7	591	22	123	22	4,177	14
Austria	4	9,3	493	19	118	22	4,227	14
Greece	4	(0,7)	393	15	85	16	5,364	18
France	3	(0,5)	263	10	45	8	2.588	9
Other countries	8	(1,9)	255	8	40	7	4.167	14
TOTAL	33	1,3	2650	100	546	100	29, 228	100

*\*Pre-tax*

Majority of banks owned by foreign persons as a share of total banking sector assets are from Italy and Austria with 22% and 19% share respectively, followed by Greece with 15% and France with 10% and all other countries with 8% share. State-owned banks and domestic private entities in late 2011 accounted for 26% of total assets, with 25% of the total equity, 30% in the number of employees, performing the negative financial result - a loss of 21.7 billion, mostly caused by one bank. Confidence in the banks has been returned, foreign exchange savings have been increased, the total assets has grown. All that encouraged the growth of lending and deposit potential, which is accompanied by a strong recapitalization of the banking sector.

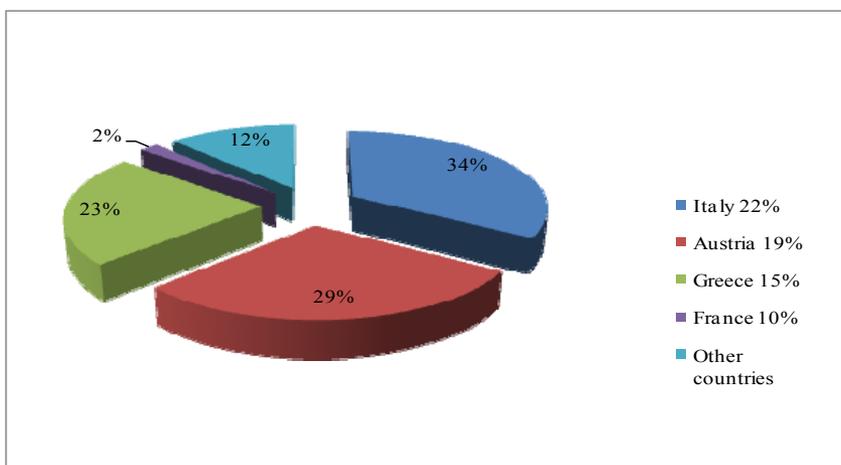


Figure 1: Ownership of foreign banks (Fitted by authors based on NBS data)

For several years, banks in Serbia had a positive financial result, and all indicators were pointing to the further growth and development, better quality and more diversified services. The banking sector in the 2009 and 2010 was stable, despite many risks as the spillover of the crisis to the region of Central, Eastern and Southeastern Europe. The first effects of the global financial crisis on Serbia were reflected through a reduced inflow of foreign direct investment, the reduced availability of funds from abroad, a psychologically-induced decrease in confidence in the banking system and significant withdrawal of savings. The impact of the global financial crisis on the banking sector has been reflected through the increased cost of capital, reduced availability of financing, deteriorated asset quality, slow credit activities. Currency-induced credit risk remains the main risk to the stability of the banking sector, and the crisis is further enhanced due to depreciation pressures. In the late 2011 the profitability of the banking sector in Serbia was at a somewhat higher level than at the end of 2010. With the actual return on assets of 1.3% and a return on equity of 6.1%, the Serbian banking sector was among the more profitable in the region in the late 2011. Looking at the change in profitability, compared to the period before the crisis, it is evident, although profitability is reduced, that this reduction is lower than in most countries in the region.

Table 2: Profitability indicators of the banking sector in Serbia

	2008	2009	2010	2011*
Return on assets (ROA)	2,1	1,0	1,1	1,4
Return on equity (ROE)	9,0	4,6	5,3	6,8
Financial result (in bln) 9,6 17,8 25,1 31,0	34,7	20,0	25,4	20,9
Financial result (marginal growth rates)		-42,4	26,8	24,6
Net income from interest compared to an operating profit	74,5	75,9	76,2	77,4
Net fee and commission income compared to operating profit	24,0	23,9	23,2	22,4
Net interest income in relation to average assets	5,7	5,3	4,6	4,8
Net fee and commission income in relation to average assets	1,8	1,7	1,4	1,4
Personnel expenses to total operating expenses	41,2	41,9	41,1	42,2
Operating expenses compared to an operating profit (cost-to- income)	68,5	70,9	70,9	64,6
* From ROA, ROE financial results excluded loss of Agrobanka.				

Source: National Bank of Serbia, <http://www.nbs.rs>

Serbia's banking sector during the 2011 was being adequately capitalized. With the exception of market challenges, the biggest challenge to the banking sector in the past year was the switch to a new bank regulatory framework, in line with Basel II principles. This process, along with operational adjustments, contributed to the recapitalization of a large number of banks in Q4 2011. Full implementation of the new regulatory framework is planned for January 2012. Total (net) assets of the banking sector in Serbia at the end of the fourth quarter of 2011 amounted to RSD 2649.9 billion, and increased to RSD 116.4 billion (4.6%) since the beginning of the year. There was a similar upward trend in previous years.

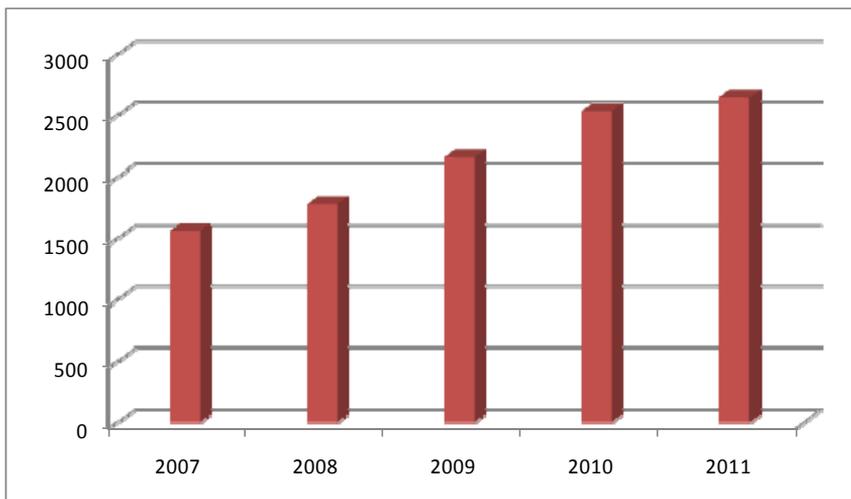


Figure 2: Total assets in billions (Fitted by authors based on NBS data)

Assets of the banking sector in Serbia reached in the late 2011 the level by 83.5% of GDP. The dominant share of the bank's assets still has a credit portfolio, who participated at the end of the year with approximately 60% of total banking sector assets. Required reserves of the National Bank of Serbia and repurchase securities constitute 21% of assets. Investment in government securities recorded a steady growth since 2008 and reached a share of 5.8% late 2011.

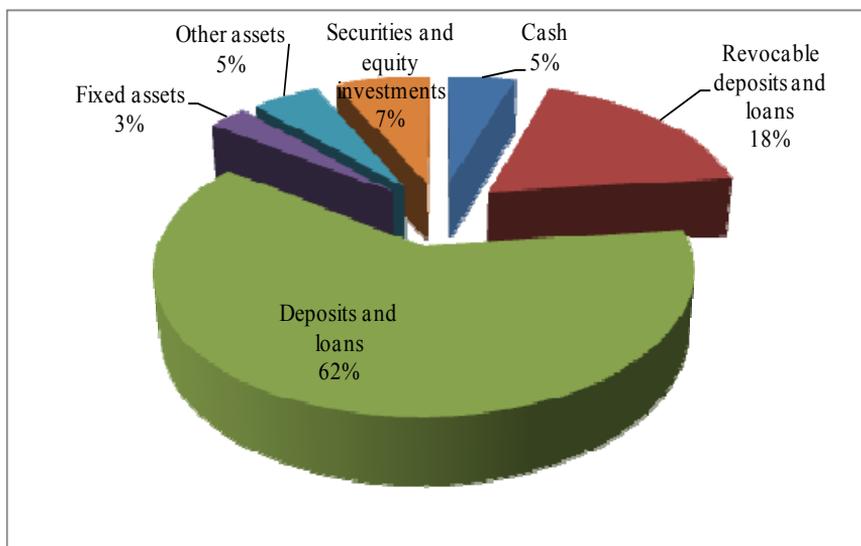
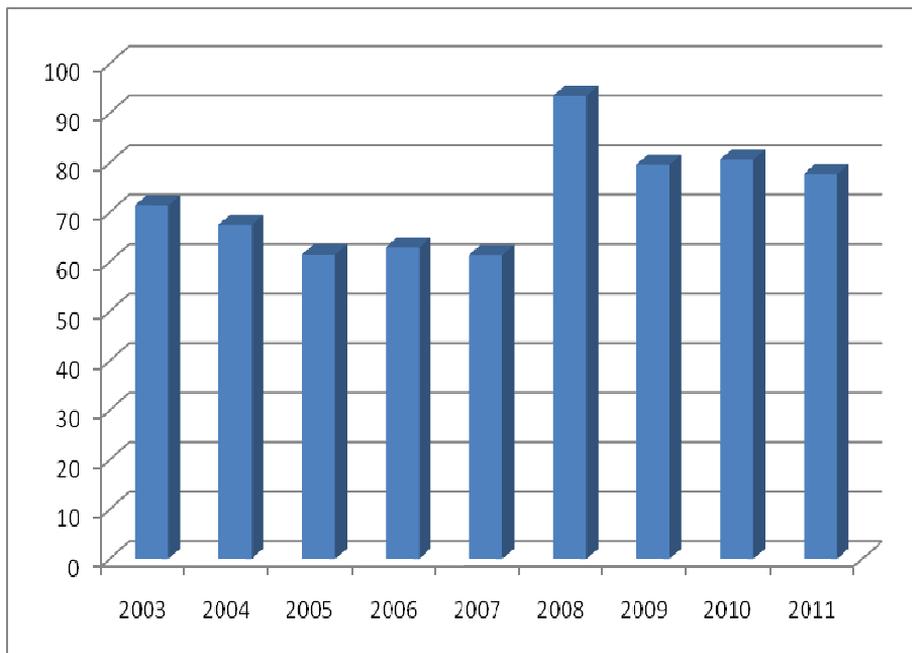


Figure 3: Structure of total assets on 31 December 2011 (Fitted by authors based on NBS data)

After the fall recorded in the 2009 the share of risky assets in the total assets of the banking sector remained relatively stable until the fourth quarter of 2011 when significantly reduced, as a result of a new regulatory framework. Changing share of risky assets in recent years can be seen on the next graph.



*Figure 4: Share of risky assets in the total assets of the banking sector in % (Fitted by authors based on NBS data)*

During the 2011 the real credit growth is slowing down, although remains positive. The downward trend in a real credit growth started in early 2008. Temporary acceleration in the 2010 is the result of subsidizing the interest rate on liquidity loans, consumer loans and loans for investment in accordance with the Decree of the Government.

From 2008 there is a tendency of growth of NPLs to total loans of the banking sector. In late 2011 the NPLs accounted for 19.0% of total loans. However, in order to neutralize the disturbance, in accordance with the requirements of regulators, reserves for potential losses were established. In the late 2011 the level of these reserves were sufficient to cover 129.2% of gross NPLs. Due to the high coverage of reserves for estimated losses, NPL, although significant in nominal terms, do not pose a threat to financial stability. The share of NPLs in the corporate sector is the largest (24.6%), while in the retail sector this share is stagnant (9.1%). Foreign exchange risk, which banks have transferred to the borrower through indexation of loans indexed in foreign currency, is returning to the banking system as a foreign currency induced credit risk.

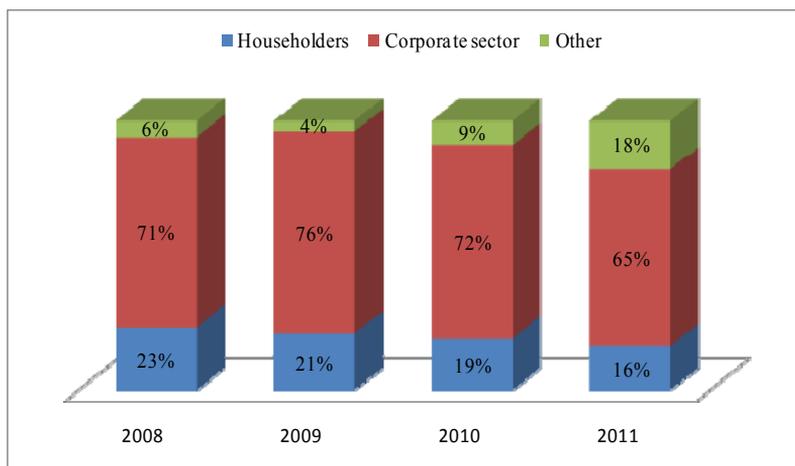


Figure 5 :Structure of NPLs,

Source: National Bank of Serbia, <http://www.nbs.rs>

Serbian banking sector, despite the great risk, was relatively stable due to the high liquidity, capital adequacy, strong domestic deposit base and low dependence of banks borrowing abroad, the lack of direct risks of investing in mortgage loans and other high-risk financial instruments. Timely appropriate measures supported by the Government and the NBS, prevented the potential impacts and mitigated the negative effects of the crisis, which would be in the future a basic obstacle for destabilizing banking sector.

Table 3: Indicators of liquidity in the banking sector in Serbia

	2008	2009	2010	2011
Loans / Deposits	1,22	1,15	1,27	1,29
Liquid assets to total balance sheet assets	43,3	41,5	35,1	36,7
Liquid assets to short-term liabilities	68,6	63,6	56,3	59,9
Liquid assets (narrowly defined) with respect to the balance sheet total	31,1	28,7	23,8	24,8
Liquid assets (narrowly defined) with respect to short-term liabilities	49,3	43,9	38,1	40,5
Average liquidity ratio	1,81	1,86	1,96	2,08

Source: National Bank of Serbia, <http://www.nbs.rs>

Thus, the banking sector is relatively liquid, and liquidity risk is the least pronounced in the system. At the same time comes to the significant improvement in the quality of funds in Serbia, primarily through the increase in the share of long-term sources, substantially due to the activities of the National Bank of Serbia on the introduction of differentiation reserve requirements in relation to the maturity of the obligation. Long-term sources currently account for about 70% of all loans. The refinancing risk is reduced, considering that the share of short-term credit lines from parent to subsidiaries fell from 12% in the 2009 to 2% in the mart 2012.

Still, the high percentage of funding was obtained from the group members, and from borrowing abroad. The change of behavior patterns of banks subsidiaries operating in Serbia, due to the lack of liquidity in the international market, could adversely affect the flow of capital. Therefore, it is necessary to strengthen domestic sources of financing for further credit growth.

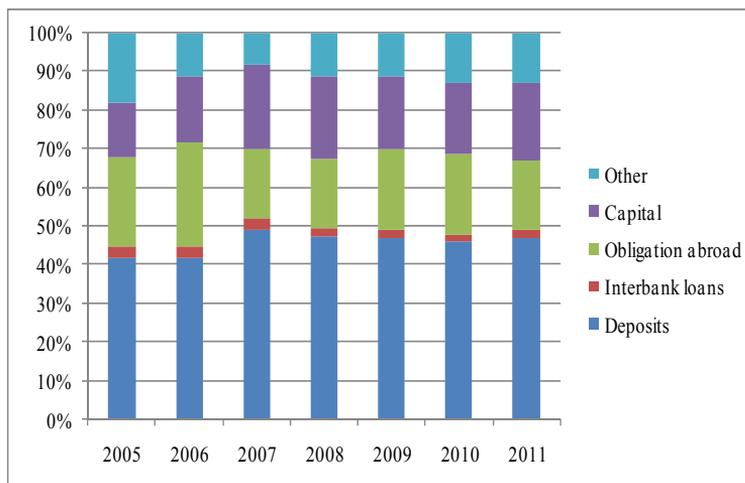


Figure 6: Structure of the resources of the banking sector in Serbia

Source: National Bank of Serbia, <http://www.nbs.rs>

In addition, attention is drawn at somewhat inconsistent maturity and currency structure of assets and liabilities due to increasing local currency lending and the lack of long-term local currency resources. Currency structure is largely unchanged, and the foreign currency (euro) deposits remain the dominant source of funding.

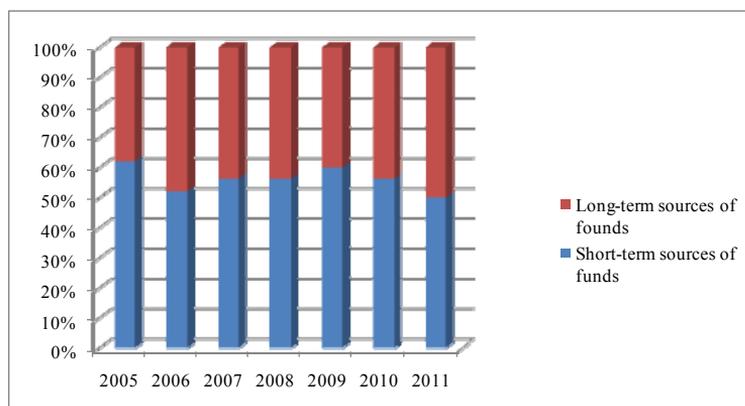


Figure 7: Maturity structure of the total resources of the banking sector in Serbia

Source: National Bank of Serbia, <http://www.nbs.rs>

Foreign exchange reserves are insurance against extreme earthquakes in conditions of a high euroisation and high external imbalances. It can be said that they

represent the only insurance if the support to structural change and fiscal policy fails. Due to large fluctuations in the foreign exchange market, the National Bank of Serbia intervened in the foreign exchange market during the 2012. The gross foreign exchange reserves, regardless of the model used for the evaluation of their relevance, are sufficient protection against extreme economic earthquakes.

With the change in the ownership structure of banks, which occurred over a period of reforming the banking system in Serbia, somewhat was improved capital management of these banks and strengthen their capital base. Total balance sheet and capital value of the banking sector is increasing more systematically, with a clean balance of bad debts and the presence of high credit risks associated with new bank lending. Reducing the risk in bank operations will contribute significantly to the harmonization of banking supervision with the principles of Basel III.

## **THE DEVELOPMENT TENDENCY OF THE BANKING SECTOR IN THE REGION**

Consolidation of domestic banks at the beginning of the transition process through the liquidation of large insolvent banks enabled strengthening the financial position of the banking sector, confidence in the banks, improved balance sheet structure, as well as capital adequacy ratio. From 2003 liquidity of the banking business has been increased, strengthened bank lending and increased the nominal value of the capital. The privatization of state-owned banks has progressed and competition between banks has been established. Comparative comparisons in the period 2007-2010 show that a regional market was turbulent. Loans to households in the countries in the region have reached 25-30% of GDP, while in Serbia; this ratio is lower, about 14%. Although credit debt of citizens in Serbia is constantly growing, it is still lower than in neighboring countries. During 2007 and mostly 2008, countries such as Serbia, Montenegro, Bulgaria and Romania, partially Macedonia and Bosnia and Herzegovina had a very high level of economic growth, which resulted in the increase of the population able to borrow additional funds and led to an increase in the level of indebtedness.

*Table 4: The debt per capita in USD and the pace of growth in% (Association of Serbian Banks, <http://www.ubs-asb.com>)*

	2007	2010	Growth %
Serbia	503	650	29,2
Montenegro	963	1.500	55,8
Macedonia	358	580	62,0
BIH	609	850	39,6
Slovenia	3.280	3.570	8,8
Croatia	3.495	4.000	14,4
Greece	7.920	8.100	2,3
Romania	795	1.200	50,9
Bulgaria	805	1.150	42,9

Basic tendencies that are present in dynamics of household debt in the region in the period 2007-2010 were as follows: the most indebted residents were of Greece and

Croatia, and the biggest increase in household debt recorded Macedonia, Montenegro and Romania. The population of Serbia remains one of the less indebted compared to neighboring countries. Only in Macedonia, the average debt per capita was lower than in Serbia. The average debt per employee in 2010 in Serbia (2,000 \$) was lower than that of other countries in the region: Greece (14,000€), Croatia (10,000 €), Slovenia 7,200 €, Montenegro and Bosnia and Herzegovina around 5,500 €, and Macedonia 1,700 €.

Commercial banking sector, measured by the ratio of total assets, total loans and total deposits to GDP, is lagging behind in comparison with the banking systems of Central and Eastern Europe. The rapid growth of the banking sector, particularly in credit expansion, encouraged the growth of the economy and the domestic demand and inflation. High eurisation of deposits and loans and monetary policy measures have increased the costs of financial intermediation.

The regulatory capital of the banking sector in Serbia was at an adequate level in the 2011 as well as after adjustment of the domestic regulatory framework of Basel II standards. Similar situation were found in all the countries in the region, as can be read in the following chart.

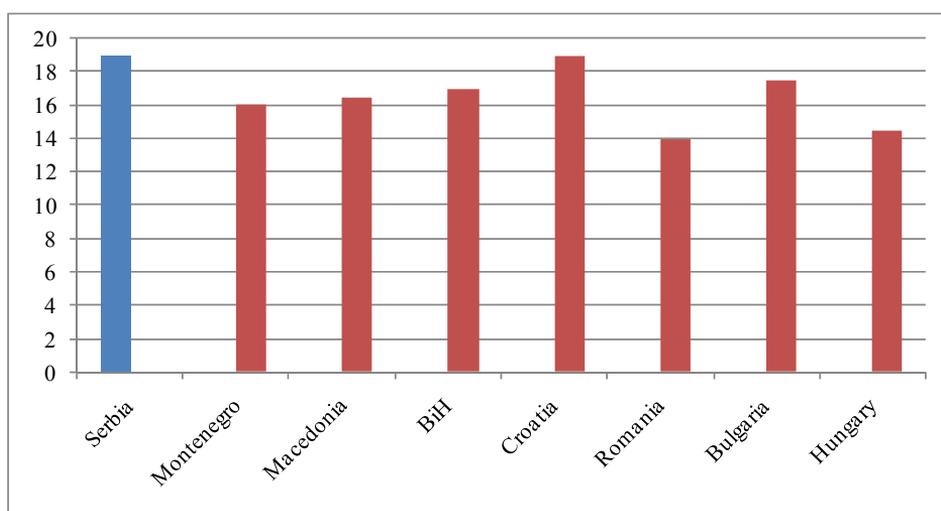


Figure 8: The countries of the region: regulatory capital to risky assets in %, (2011, the latest available data.) (National Bank of Serbia, <http://www.nbs.rs>, 2011)

Overall level of dependence of banks in Central Eastern Europe of foreign funding is less than in the EU. In the countries in our region, the banks have been increasingly reliant on domestic deposits. As mentioned above, there are no indications of withdrawals of deposits to the same extent during the economic earthquake of 2008, although the situation should be closely monitored. The range of the credit default swap transactions (CDS) has increased what could lead to higher interest rates.

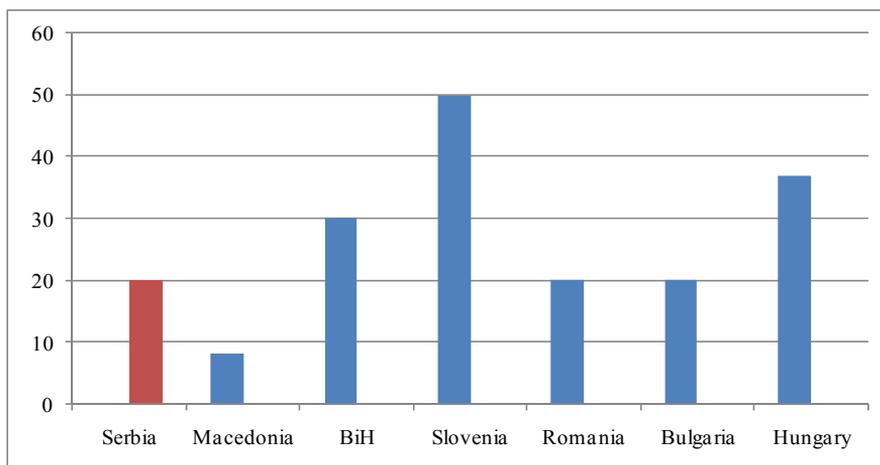


Figure 9: Foreign banks source of funding in neighboring countries in 2010 (% of GDP) (IMF, The World Development Index (WDI))

Interest rates have remained at a relatively high level, and it can be concluded, among the highest in the region. Lending interest rate is too high in nominal and real terms, because it exceeds the rate of inflation. The population is burdened with much higher interest rates from the company, which is obviously a consequence of a *price taker* market position and low interbank competition. In an international context it can be seen that the share of non-performing loans to total loans of the banking sector in Serbia is largest in the region, followed by Montenegro, and Romania and Bulgaria. The lowest share of NPLs in total loans to the domestic banking sector has Macedonia.

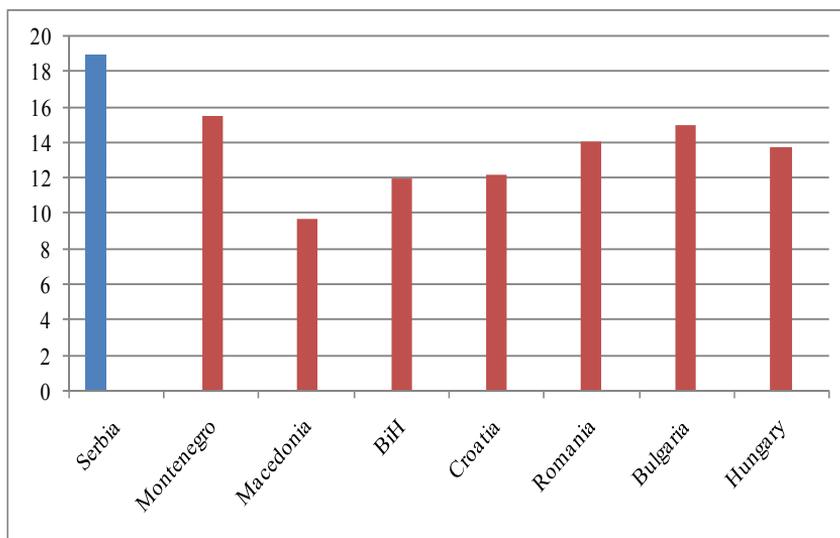


Figure 10: The countries in the region: gross non-performing loans to total gross loans in % (2011, the latest available data,) (National Bank of Serbia and the IMF: GSFR)

Although the share of non-performing loans to total loans of the banking sector in Serbia is the largest in the region, there is also the highest level of reserves to cover potential losses on these loans. Regionally speaking, the increase in the share of NPLs to total loans in the period from the beginning of the crisis to the 2011 is significantly lower in Serbia than in most neighboring countries. Montenegro has the lowest percentage of coverage of these loans, followed by Croatia and Hungary, while Macedonia and Romania are just behind Serbia.

## **CONCLUSION**

Serbia's financial system has been rapidly developed in the past decade. An entry of foreign banks and new system development, enabled significant expansion and rehabilitation of commercial banking, traditionally dominant financial intermediaries. The banking sector absorbs 90% of the financial assets and shows signs of a rapid expansion. Transition and reform of the banking sector is supported by high credit growth rates in comparison with other countries in this part of Europe, while the share of bank lending to GDP is below average. However there is still a structural imbalance of the banking group. This resulted in a leading position in the market of only a few banks and the relatively large number of banks with modest results. This confirms the view that there is room for a process of mergers and acquisitions to facilitate cost-effective operations and efficient use of resources. The banking sector can be characterized as relatively stable in spite of the fall in aggregate demand, foreign direct investment and a slowdown in lending activity. Savings growth is also present. Hence, the restructuring of banks is seen as most successful part of the economic transition in Serbia, although the reform process in the sector has not yet been completed. Continuation of reforms in order to obtain cost-effective and efficient banking system is a priority in next period.

From the above it can be concluded that a well-organized banking sector in Serbia has been a foundation for the further development of real sector and consequently SMEs. The obstacles that should be avoided in the future are: increased cost of capital, reduced availability of financing, slow credit activities and currency-induced credit risk. These remain main problems which directly affect the SMEs. The banking monopoly in financing the SMEs is not in danger, but entrepreneurship in Serbia is burdened with much higher interest rates which is obviously a consequence of a *price taker* market position and low interbank competition. High cost of banking intermediation, are the most serious obstacle to any rational real sector investments.

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## ***PERFORMANCES OF DIFFERENT INVESTMENT POLICIES OF OPEN-END FUNDS IN REPUBLIC OF SERBIA***

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**Abstract:** The importance of determining the adequacy of various investment strategies of open-end funds seen through the aspect of required rate of return and risk level which is crucial for all potential investors. This research paper aims to determine the effect of selection of the investment objective of open-end funds on investment performance. Research results indicate that the limits of restructuring the portfolio, determined by investment policy, represent a fundamental factor for the performance in the observed period from February 2007 until November 2012. For the purposes of the research, indices were created in order to represent indicators of the value of investment units based on different types of funds and their risk aversion.

**Key words:** Open-End Funds, Investment Units, Financial Market, Portfolio Choice, Investment Policy

**JEL classification:** G23

**UDC** 336.714(497.11)(082)

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## ***INTRODUCTION***

Investment funds represent very important financial intermediaries in countries with developed financial markets. Their importance derives from the collection of financial resources of many small individual investors and concentrated funds invested in a multitude of other financial instruments. Investment Fund Law defines the institution as the institution of collective investment that accumulates and invests funds in various types of assets in order to generate revenue and reduce investment risk.

Investment fund offers various benefits to its investors such as optimal portfolio diversification, partial reduction of asymmetric information, reduction of transaction costs based on economies of scale, as well as performance of administrative tasks. However, the main benefit, from the aspect of an average investor, is higher level of competence of portfolio managers. This is as well the main motive for investing in investment funds due to expected higher rate of returns, in comparison to the rate of return that an individual investor could expect for the same level of risk.

The financial sector of Serbia is still under the strong influence of the banking sector, which is a characteristic of the stereotypical financial system in continental Europe. Start of operations of the investment fund is linked to the end of the year of 2006 and the creation of the first investment fund "Delta Plus" and the Fund Management Company "Delta Investments". During the formation of the first investment funds dominant were the Assets Growth Value Funds. In the pre-crisis period, before the manifestation of global financial crisis on the Serbian financial market, the popularity of these funds for individual investors was related to favorable developments on the Belgrade stock exchange, i.e. appreciation of the values of Belex 15 and Belexline. From the manifestation of the crisis and anticipated negative corrections on the financial markets rational investors have decided for more conservative investment policy. Given the global aspect of the crisis, this trend of investing has also taken on a global character. The permanent growth of deposits in the banking sector during the crisis in certain countries was characterized by the phenomenon of "fly to safety" also this period was characterized by a sudden rise in prices of gold and other precious metals as a result of seeking "safe investments" investors withdrew their capital out of the funds that have portfolios with significant portions of stock in them. Although the first mentioned point was absent in Serbia due to mistrust of the population in the stability of the banking sector. However, these effects were offset by increasing the insured deposit sum from 3,000 to 50,000 euros and the suspension of capital gains tax on savings in foreign currencies.

Basic classification of investment funds, in accordance with the Law of Investment Funds, is the open-end investment funds, closed-ended investment funds and private funds.

Open-end fund operates on the principle of raising funds through the issuance of shares and buying back the shares at the request of members of the fund. Open-end

funds invest in liquid securities whose daily market value can be determined and investors can invest funds daily or withdraw from the fund.

Closed-end fund raises funds by selling shares through a public offering. When the public offering is completed, the investors who bought shares of the fund can trade on the organized market at the market price of shares which may be lower or higher than the value of the fund's assets. These funds may invest in real estate as well as commercial companies that are not traded on an organized market and may be riskier than open-end funds. The possibility of part of a portfolio invested in assets with less liquidity stems from fundamental difference in relation to open-end fund, and that is the absence of obligation of redemption of own investment units, but their trade takes place in the secondary market.

Private fund is organized as a limited liability company and such funds have no restrictions when investing. Are intended for experienced investors, and the minimum investable amount 50,000 euros.

For the purpose of this research essential is the legal classification of investment funds in accordance with the investment objective, the following types of funds:

- 1) Assets Growth Value Funds;
- 2) Funds Revenues;
- 3) Balanced Funds;
- 4) Asset Preservation Funds.

From the types of funds based on the previously presented classification stems the investment policy of the fund, which contains the following elements:

- 1) The method of implementation of the investment objectives;
- 2) The biggest and the smallest portion of the investment fund that can be invested in certain securities and real estate;
- 3) The amount of the funds that can be kept in the cash account of the investment fund;
- 4) The way that investment policy can be changed.

The value of investment units of open-end investment funds that are of interest to us is always equal to NAV (net asset value). This stems from the fact that this type of investment fund is required to redeem their investment units. NAV is defined as the difference between and liabilities denominated per share.

The relatively high yield of return on foreign currency term deposits and government notes ensured the investors higher rate of return for investments that can be traditionally characterized, in accordance with the security market line (SML), as risk free return. These higher returns in comparison to the returns in countries such as EU and SAD can be characterized as risk premium that investors require for investing in the Republic of Serbia.

The rest of this research paper is structured as follows. Presented is the overview of the research performance of investment funds, with a special focus on Serbia (Chapter 2). Followed by, Chapter 3, the use of data analyzed and the analysis of the methodology. The results are presented and explained in the 4th chapter. The conclusion can be found in chapter 5 of this research paper.

## ***LITERATURE REVIEW***

Provided is the overview of relevant research in the field of investment funds in the Republic of Serbia.

Dekić (2011) concludes the perspective of investment funds in Serbia is unclear. Main reason for that is the situation that interest rates for savings are higher than those in neighboring countries and in the EU as much as five times. In such conditions it is difficult for mutual funds to compete with a return of seven percent per annum, which is the rate of return of savings. Continuing decline of the Dinar and the very high rate of inflation further complicate the business environment.

Djordjevic and Cvetkovic (2010) analyzed in their research paper the performance of investment funds in Serbia, based on the comparison of performance of investment portfolios, by size of assets, investment funds in the Serbian market. The aim of this paper was to demonstrate the connection of investment funds and the stock market Belgrade Stock Exchange, based on measurements of basic performance indicators such as - risk and return.

Dogandžić and Stosic (2009), in their paper, analyzed the impact of the government package, which was analyzed on the basis of prices of investment units of investment funds in the financial market in Serbia. It was pointed out that many authors believe that the launch of investment activities in the areas of financial markets institutionalized embodied in the stock market may indicate the return of investor confidence and a sign of entering the economy and the national economy in general in the recovery zone.

Milačić and Šiljković (2009) in their analysis, have suggested that the dominant line of movement of investment units in Serbia were under the influence of the current economic crisis in the world, the signs of the Belgrade Stock Exchange crisis as consequence of significant decline and ultimately the unwillingness to profit from long-term by their investors, since mutual funds are actually kind of just such an investment. Mutual funds have the situation in Serbia that have appeared in the 'bad' time in the market (Kastratovic et al., 2013). The hardest 'shock' of the global economic crisis in the countries of the Balkan region in terms of the situation with the fund industry were submitted by Hungary and Romania, while in a better position for the Croatian and Slovenia.

Živaljević (2011) analyzes the emergence and development of investment funds in the capital market of the Republic of Serbia. Movement in value of investment fund units is directly related to the movement of the index on the BSE. Undeveloped and 'shallow' market prevents the release of funds easily 'undesirable' actions. The lack of political stability in Serbia makes it difficult for serious investors to invest large resources in the long term.

Also studies that concerned the large number of countries indicate absence of active investment strategies, particularly in developing countries.

Murhadi (2010) has conducted empirical assessment of the performance of mutual fund managers in terms of "market timing" and "selectivity". The relevant data set had a balanced panel of fifty five mutual funds, over a seventeen-month period beginning on February 2008 until June 2009. The result find that only four mutual fund have a

good performance in market timing and four mutual fund have a good performance in stock selection.

Paula (2001) results show that a large percentage of well-diversified international funds outperform their passive benchmarks in a statistically significant manner, but regional and country funds do not. In addition, emerging markets funds exhibit volatilities that are generally higher than those of developed market funds but do not exhibit significantly higher average or abnormal returns. These findings indicate that the attractiveness of emerging markets investment should be revisited in more detail. This study evaluates and compares funds using four different methods to characterize or measure performance:

- the arithmetic average of the monthly returns for each fund over the sample period;
- the standard deviation of the monthly returns for each fund over the sample period;

• the Sharpe ratio, computed as  $\text{average}(R - R_f) / \sigma(R - R_f)$ , where  $R$  is the return on a given fund,  $R_f$  is the monthly rate on three-month U.S. Treasury

bills, and  $\sigma$  is the standard deviation of excess return,  $R - R_f$ ;

• Jensen's alpha, computed as the intercept from

the regression  $(R - R_f) = \alpha + \beta(R_b - R_f) + \varepsilon$ ,

where  $R_b$  is the monthly return on the benchmark index.

The average monthly return smoothens out the time series variation in a fund's return history while the standard deviation of monthly returns highlights the time series return volatility. These two measures are more properly termed return characteristics than performance measures since each does not, by itself, provide a risk-averse investor with a measure to evaluate and rank funds.

A fund's Sharpe ratio is a scale-free reward-to-total variability ratio. It answers the question, How much additional average return per unit of volatility does this fund provide? The ratio analyzes returns in excess of a benchmark, usually the risk-free rate, and so is not the same as the ratio of the average return to the standard deviation of return.

A fund's Jensen's alpha measures its risk-adjusted performance compared to a passive benchmark portfolio representing its universe (global, region, country, etc.) The alpha thus provides a measure of a fund manager's ability to outperform his relevant market.

Research of evaluating mutual fund performance in Denmark has been done by Christensen (2003), who estimated the Jensen measure of performance based on the standard CAPM security market line. He estimates the security market line for each of the 44 mutual funds as well as for equally-weighted portfolios within each investment category.

The regressions can be formalized as:  $r_{it} - r_{ft} = \alpha_i + \beta_i(r_{mt} - r_{ft}) + \varepsilon_{it}$

where  $r_{it}$ ,  $r_{ft}$  and  $r_{mt}$  are the returns at month  $t$  of the  $i$ 'th fund (the  $i$ 'th equally-weighted portfolio), the risk-free return and the benchmark return, respectively,  $\alpha_i$  is the Jensen measure, and  $\beta_i$  is a measure of the systematic risk of fund (portfolio)  $i$ . Finally,  $\varepsilon_{it}$  is a white noise error term. Equation indicates that the excess return on fund (portfolio)  $i$  is linearly related to the excess return on the benchmark.

## ***DATA AND METHODOLOGY***

Data used for research is related to specific investment unit of all currently active investment funds in the Republic of Serbia, from the date of their foundation until November 2012. Also it is necessary to note that in recent years some investment funds have stopped operating.

Frequency data is expressed on a monthly basis. We believe that this will avoid significant differences in volatility in shorter intervals that could affect larger price fluctuations of certain actions due to block purchases of larger investors. This is a characteristic of underdeveloped financial markets, with low levels of liquidity. On the other hand, the use of the longer periods of time would create a problem of lack of necessary number of observations and thus bring into question the significance of the conclusion, because of the relatively short period of operations of investment funds in Serbia.

Due to the inadequate data provided by the Securities Commission of Serbia intended for investors, the data is obtained directly from investment management companies.

Of the 15 Open-end funds 3 funds are balanced 7 funds are value growth assets funds, and 5 funds are funds of maintaining the value of assets.

Historical movement of values of investment fund units have been used since their creation, November 2012. Analyzed are the following funds from the date of establishment which is indicated in parentheses:

- Balanced Funds: Erste Balanced (March 2009), Ilirika Plus (February 2007) i Triumph Balance (August 2008);

- Assets Growth Value Funds: FimaProActive (May 2007), Ilirika Global (December 2007), KombankInFond (May 2008), Raiffeisen World (August 2010.), IlirikaGold (January 2011), Ilirika Dynamic (January 2008.) i Triumph (February 2008);

- Asset Preservation Funds: Citadel Novčani Fond (October 2008), Erste Cash (November 2009), Raiffeisen Cash (March 2010.), Erste Euro Cash (April 2011) i Ilirika Cash (June 2009).

After collecting the data it is analyzed as follows:

Calculated is the price change on a monthly basis

$$\frac{inv\ unit\ t_0 - inv\ unit\ t - 1}{inv\ unit\ t - 1}$$

(1)

where,

*inv unit*– the value of the investment unit

*t<sub>0</sub>*– observed month/time

*t<sub>-1</sub>*–period from 30 days before

Calculation of accumulated yields:

$$CR_{t_0} = \left(1 + \frac{\text{inv unit } t_0 - \text{inv unit } t-1}{\text{inv unit } t-1}\right) * CR_{t-1} \quad (2)$$

where,

$CR$  – cumulative return.

Based on the data collected generated are three separate indices that are equally weighted in cumulative return in a given period, as well as indices of growth of value of investment units during the whole observed period.

Indices for different types of funds in each group of investment funds are calculated in the following way:

$$\text{Value of the index} = \sum_{i=1}^n CR_i * \frac{1}{n} \quad (3)$$

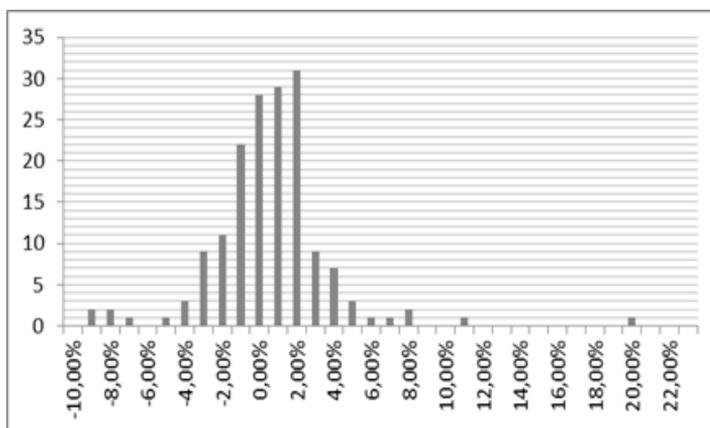
While the value of growth rate of investment units for particular funds type was calculated in the following way:

$$\text{Growth rate value index} = \sum_{i=1}^n \Delta \text{inv unit } i * \frac{1}{n} \quad (4)$$

## **RESULTS AND DISCUSSION**

### *BALANCED FUNDS*

Balanced investment funds aim to achieve relatively higher yields than those offered by the conservative methods of investment. Given this investment objective, the difference in the required rate of return is equivalent to the risk premium that investors require.



*Figure 1: Distribution of monthly HPR for Balanced Funds*

*Source: Authors*

Table 1: Descriptive statistical measures for Balanced Funds monthly return

Mean	0,06%
Median	0,17%
SD	3,20%
Skew	1,178487031
Kurtosis	9,385633224
Max	19,66%
Min	-9,31%

Source: Authors

Figure 1 gives an insight into the distribution of 164 observations of monthly changes in the value of investment units in 3-balanced investment funds. Arithmetic mean monthly return is 0.06% with a standard deviation of 3.2%. This means that the effective annual rate of return is 2.01%, which is well below the average annual rate of inflation during the period. Moreover, an additional de-motivational factors for investors is the amount of fees for investment funds. These fees are charged when buying and selling investment units, as well as annual management fees.

Testing the Sharpe ratio, which tells us whether portfolio's returns are due to smart investment decisions or a result of excess risk. This measurement is very useful because although one portfolio or fund can reap higher returns than its peers, it is only a good investment if those higher returns do not come with too much additional risk. The greater the portfolio's Sharpe ratio, the better its risk-adjusted performance has been.

In case where portfolio annual return for Balanced Funds has smaller value than risk free assets value of Sharpe ratio is also negative.

That is because:

$$S(x) = (r_x - R_f) / \text{StdDev}(x) \quad (5)$$

where,

x – investment

$r_x$  - average annual rate of return of x

$R_f$  - the best available rate of return of a "risk-free" security

$\text{StdDev}(x)$  is the standard deviation of  $r_x$

A negative Sharpe ratio indicates that a risk-less asset would perform better than the portfolio being analyzed.

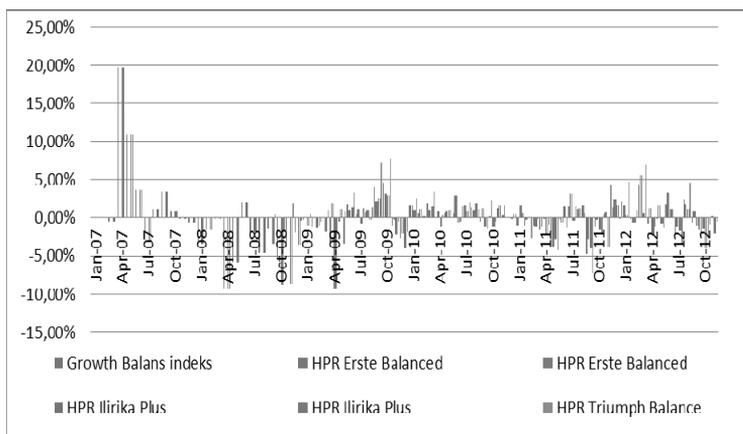


Figure 2. Monthly growth rates (holding period returns) for balanced funds

Source: Authors

According to their investment policy, Balanced Funds had significant portion of their portfolios invested in shares in Belgrade stock exchange. That explains strong growth during 2007 year and after that when Belex15 and Belexline value start to decline, same happened to value to portfolio “Balans-Index” due to the fact that the majority of Belex15 shares are also components of Balanced funds’ portfolios.

On the other hand, Investment Funds Law ordering that balanced fund invests at least 85% of assets in equity and debt securities, with at least 35% invested in debt securities and maximum 65% of total fund assets. This fund carries a moderate rate risk and moderate income.

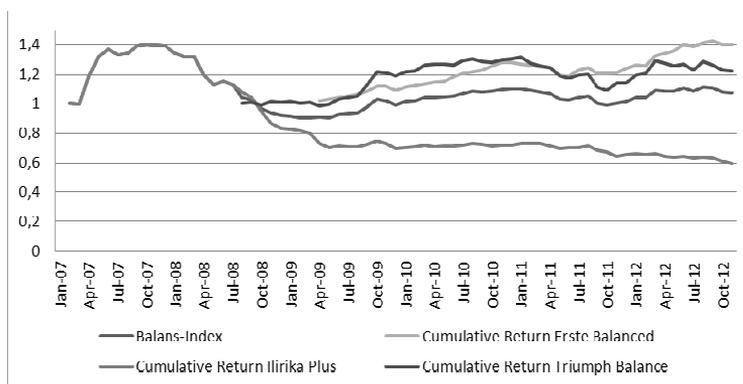


Figure 3. Cumulative returns for Balanced Funds

Source: Authors

### ASSETS GROWTH VALUE FUNDS

Assets Growth Value Funds have goal to achieve high growth value of portfolio and Net Assets Value. In order to achieve this goal portfolio manager should choose portfolio that lies on “north-eastern” point from risk-free portfolio on the Capital Market Line.

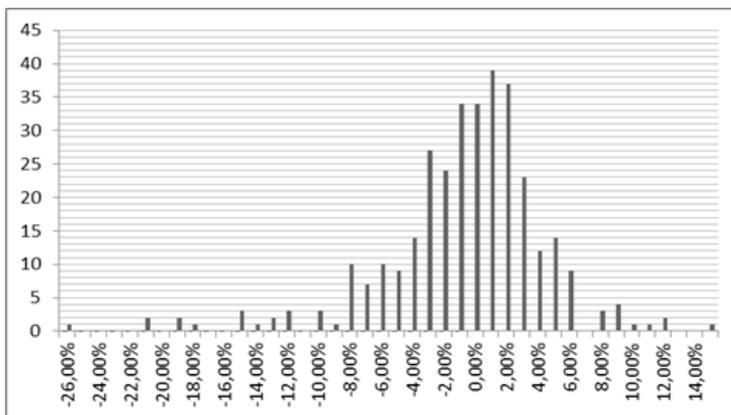


Figure 4 : Distribution of monthly HPR for Assets growth value funds

Source: Authors

Table 2: Descriptive statistical measures for Assets Growth Value Funds monthly return

Mean	-1,10%
Median	-0,50%
SD	5,29%
Skew	-1,12946511
Kurtosis	3,456883277
Max	14,11%
Min	-26,77%

Source: Authors

From the Table 2 it can be seen that both mean and median of monthly returns have a negative value. The highest standard deviation of returns among all three fund types was expected due to the investment policy of Assets Growth Value Funds assumed construction of aggressive portfolio, in terms of risk aversions.

A performance of Growth Index Portfolio is highly correlated with well-diversified stock exchange portfolio. That explains the sharp decline of Growth index than the indices of other two funds types.

The same pattern of cumulative returns and high level of similarity of monthly returns between funds is the effect of relatively narrow domestic financial market in terms of selection of shares with appropriate liquidity level.

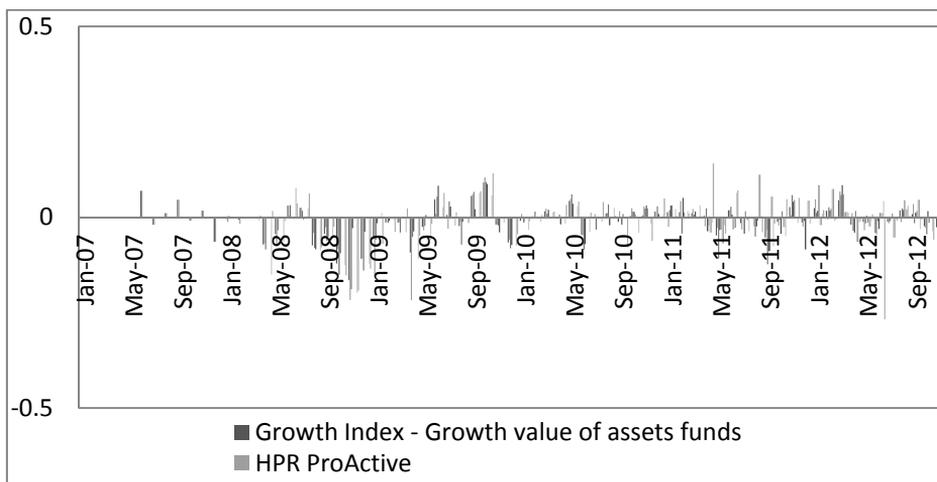


Figure 5: Monthly growth rates (holding period returns) for Assets growth value funds

Source: Authors

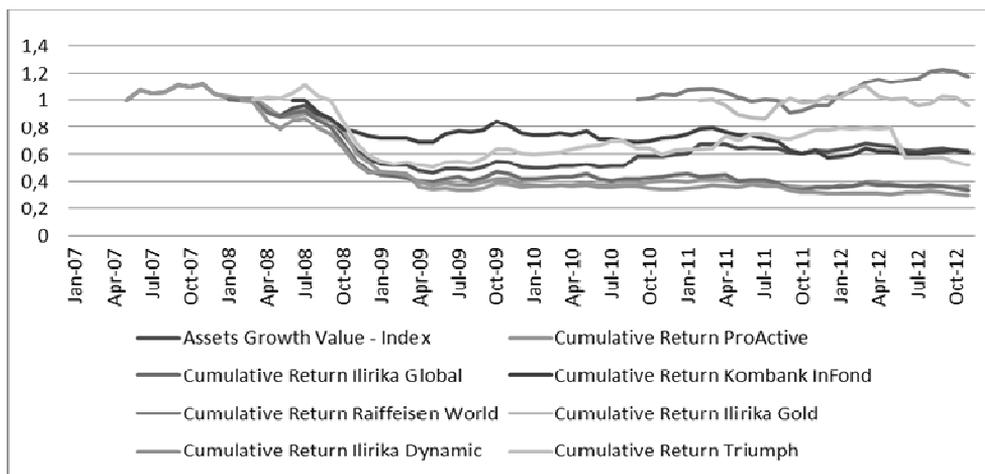


Figure 6: Cumulative returns for Assets Growth Value Funds

Source: Authors

### ASSET PRESERVATION FUNDS

Asset Preservation Funds are the funds with most conservation portfolio in term of risk aversion. The goal of theses types of funds is to achieve growth which is higher than inflation rate, but also with lower risk level.

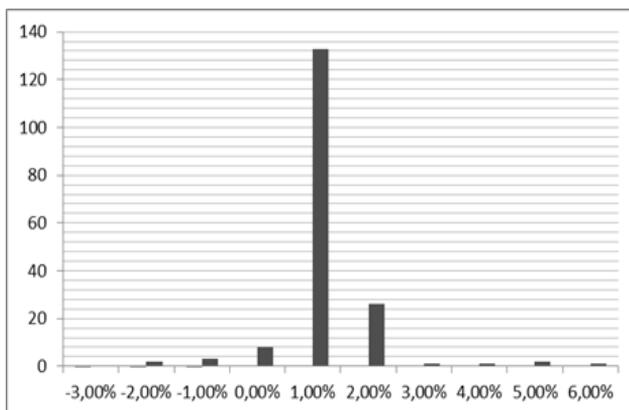


Figure 7: Distribution of montly HPR Asset Preservation Funds

Source: Authors

Table 3: Descriptive statistical measures for Asset Preservation Funds

Mean	0.78%
Median	0.80%
SD	0.80%
Skew	0.837718918
Kurtosis	12.60271251
Max	5.04%
Min	-2.89%

Source: Authors

With monthly average return of 0.78% Asset Preservation Funds has annual effective rate of 9.77%. This is still lower than RSD treasury bills returns of 10%.

The funds with the highest annual growth rate from all three groups are the Asset preservation fund with cumulative return of 31.64%.

From five Asset Preservation Funds two of them have negative monthly return after correction for risk free rates ("Citadel Novcani Fond" and "Ilirka Cash"). Treasury bills annual return is 10%, so monthly return with compound rate is approximately 0.7974%. That leads to negative Sharpe ratio.

Funds with positive Sharpe ratios are:

“Raiffeisen Cash“ Sharpe ratio = 1.0601467

“Erste Euro Cash”.Sharpe ratio = 0.032124029

“Erste Cash“ Sharpe ratio = 0.211734511

Fund with highest Sharpe ratio is the fund with extremely risk-aversion portfolio composition. Namely, 64.17% of “Raiffeisen Cash“ fund portfolio are term-deposits, 16.13% Treasury bills, 7.66% Government coupon bonds, 7.07% Corporate bonds and 4.97% Demand deposits (Raiffeisen Invest, 2013).

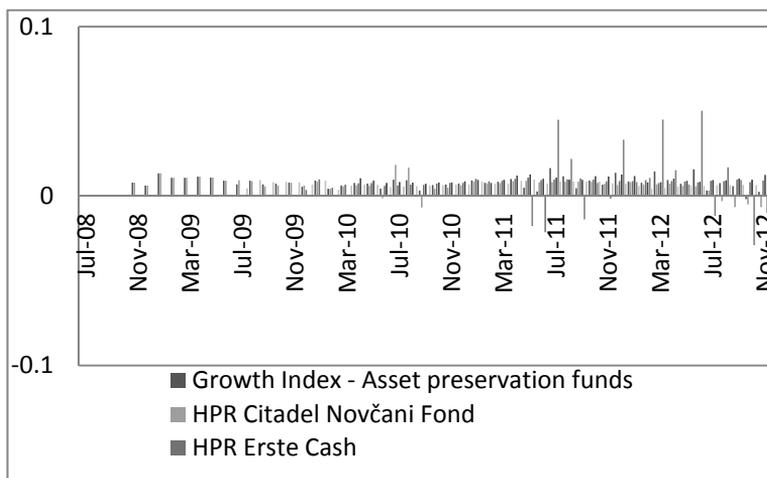


Figure 8: Monthly growth rates (holding period returns) for Asset Preservation Funds  
Source: Authors

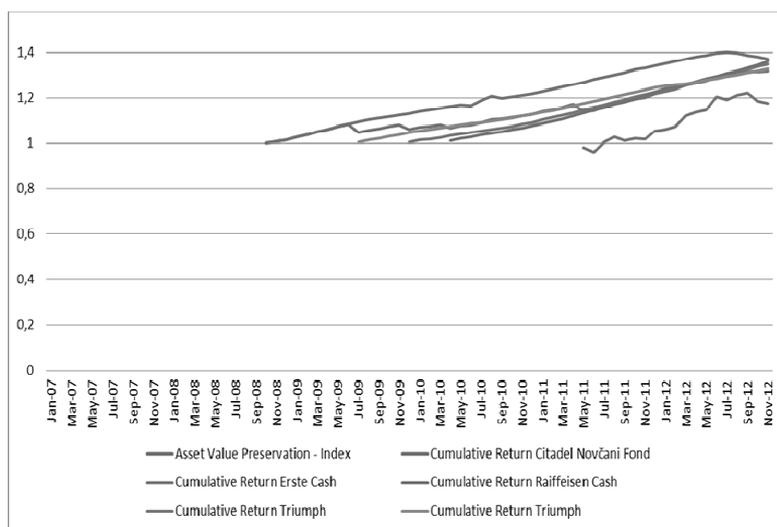


Figure 9: Cumulative returns for Asset Preservation Funds  
Source: Authors

## ***CONCLUSION***

Large shocks of the financial markets all over the World have a major impact on investors' behavior. They were looking for a "safe shelter" for their investments throughout bank deposits, commodities, especially gold, and any other form of conservative portfolio choice.

Pre-crisis year 2007, was the year when investment funds emerged in the Serbian financial market. Many of them had investment policy with a goal of high return, which lead to construction of high risk portfolios whose return was in a very high positive correlation with a Belex15 return due to the limit of relatively high selection of liquid stocks at Belgrade Stock Exchange.

As the crisis of the stock market continued and majority of investors became more risk averse, funds with more conservative portfolio structures emerged. Balanced funds were a solution for investors who still had partially optimistic expectations of stock market recovery, but with significant part of portfolio invest in fixed income instruments, mainly issued by the government.

The well know business cycle theory was the main factor for returns among different assets types. Returns on stock market indices have declined at global level. Serbian stock market index Belex15 was not an exception. Defensive investment style was a better solution for investors during previous examined period.

The main factor for funds performance among open-end investments funds is the type of fund according to investment policy. Among funds of same type there are homogeneous performance patterns due to the fact of relative small financial market with scares of different financial instruments, with appropriate liquidity level, particularly for fixed income instruments.

Negative values of Sharpe ratio for both, Asset Preservation Funds and Balanced Funds are without the doubt signal that they were bad investment choice in previous period. On the other hand Asset Preservation Funds had partially positive Sharpe ratio (three of five funds).

This reward-to-variability ratio should be tested with different assets class returns in order to have a better understanding of usefulness of investment funds and their comparative advantages as institutional investor over personal investment decision making in Serbian market. Moreover, different investment strategies, according to risk aversion investment policies, should be tested in particular phases of business cycle.

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## ***THE SPECIFICS OF VALUE PERFORMANCE MEASURES BASED ON CASH FLOW: CVA AND CFROI - GERMAN EXPERIENCES***

***Ivana Beslic<sup>89</sup>  
Dragana Beslic<sup>90</sup>***

**Abstract:** In the new economy of the 21st century, new markets and technologies require new strategies and redesign of the traditional system of measuring performance in the domestic business environment. The enterprises from Serbia should implement effective system measurement performance modeled on foreign companies because it is a key determinant of successful implementation of corporate strategy, their growth and survival in the future. Modern measuring performance should provide an accurate assessment core values, of the company and values for the owners (shareholders).

This paper indicates the importance of implementing value performance measures based on cash flow such as CVA and CFROI in business and management to the enterprises from Serbia. In addition, authors are represented by positive world experiences in applying these modern concepts by holding company Bayer AG Group from Germany. The concept of CVA (cash flow added) helps managers and investors, giving them an idea how that company generates the cash. Higher CVA is not desirable only for managers, investors and owners (shareholders), but also for society as a whole. The profitability of the company and its of service companies is measured with cash flow return on investment (CFROI). The objectives of this study are: 1. promote new business strategy – value oriented management and 2. explain the specifics of performance measures based on cash flow: CVA and CFROI on example of a holding company Bayer AG Group from Germany. This study uses following methods of research: an overview relevant scientific literature, the method of analysis, the method of synthesis, the method of induction, method of deduction, historical method, mathematical method, comparative method, a case study.

**Key words:** Value of The Company, Value for The Owners, Modern Measures of Performances, CVA, CFROI

**JEL classification:** M21

**UDC** 005.52:330.133.1(430)(082)

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"We want to create value through: innovation, growth and high earning power."  
*The mission of Bayer Group AG*

## **INTRODUCTION**

The new business strategy oriented on the value of the company (value-oriented strategy) emphasizes that companies should seek investments that will bring a higher rate of return than the opportunity cost of capital and thus will create value for shareholders. The traditional approach to determining a company's value is based on traditional accounting measures of performance such as return on assets (ROA) and return on invested capital respectively return on action capital (Return on Investment - ROI or Return on equity - ROE), earnings per share (P/E ratio), net income etc. which arising from regular financial statements. Such an approach in the new economy of the 21st century, leave a string of dilemmas in connection with: 1 different possibilities of expressing the effects and the amount of investment, 2 ignoring of the concept time value of money, 3 disregard of the risk to the achievement of expected profit.

Traditional financial performance measures (Return on Assets (ROA), Return on Investment (ROIC) or Return on Equity (ROE), Earnings per Share (P/E ratio), net income etc.) have short-term orientation and serve as a basis for rewarding of managers and other employees in company. The establishment of compensation to accounting income is flawed. For example, management is responsible for the preparation of financial statements and this gives to management the opportunity to with the application of different accounting policies shapes the profit and other accounting variables that serve as the basis for his compensation. Ambitious managers expecting rapid progress, can shape a short-term profit by reducing capital expenses (expenses of research and development, expenses of restructuring and maintenance etc.) and ignoring their long-term benefits in the future.

In the new economy of the 21st century, the main goal of every company should be directed towards the achievement of the business in the interest of the owner or generate value for its owners. Modern strategic management requires information about business plans, opportunities, risks, and increasingly relies on contemporary performance measures such as CVA and CFROI and analysis of expected cash flows.

The main goal of this paper is primarily to managers, investors and business owners in Serbia highlight on the importance of contemporary performance measures based on cash flow: cash value added (CVA) and cash return on investment (CFROI) through review positive experiences in their application of the Bayer Group AG from Germany. It helps managers and investors to create a picture of the ability of the enterprise to generate cash from one period to another. Total process management with value is referred as value-based management. Appropriate performance measures should assess how management actions affect the value of the company. In order to this happen performance measures must include least three things: the amount of invested capital, income which is achieved with invested capital, WACC (weighted average cost of capital).

From this arise and goals of this study: 1. promoting new business strategy - value-oriented enterprise management, 2. explaining the specifics of contemporary performance measures based on cash flow: CVA and CFROI. This study used the following research methods: an overview relevant scientific literature, the method of analysis, the method of synthesis, the method of induction, method of deduction, historical method, mathematical method, comparative method, a case study.

## ***MEANING AND THE ESSENCE OF A VALUE CREATING PROCESS IN COMPANIES***

From an accounting perspective, profit can be defined as the amount by which revenues exceed costs. Profit measured over a single period cannot capture whether value has been created because investments in businesses typically provide returns over a longer time period. This period, known as the economic life of the investment is the relevant period for value measurement. Therefore, for corporate managers in Serbia need a new economic framework that better reflects the value and profitability of the company. The estimate successful work of the management of the modern company is largely based on generating value for shareholder, which includes long-term growth of enterprise value through the increase prices of its shares.

Modern strategic management requires information about business plans, opportunities, risks and uncertainties and it increasingly relying on contemporary performance measures such as cash value added - CVA, cash flow return on investment - CFROI, economic value added - EVA, market value added - MVA etc. This financial performance measures (Beslic, Beslic, 2010) are used as a means of motivation and control activities of managers, so they are concentrated on increasing the overall value of the business or the value of which will belong to the owners (shareholders). The company's management should be in accordance with the factors of value and chosen competitive strategy (leadership in costs, product differentiation, etc.) establishes a better competitive position in the industry in which he operates. Business units that contribute to the creation of value for shareholders should be rewarded with the most resources, and those business units that do not contribute to the creation of shareholder value should be restructured. Appropriate performance measures should assess how management actions affect the value of the company. For this to happen, performance measures must include at least three things:

- amount of invested capital,
- income achieved with invested capital,
- WACC (weighted average cost of capital).

In the new economy of the 21st century managers are facing with challenge of more efficient and competitive capital markets in the future, which requires the implementation of a value-oriented management of the company. Modern systems of performance measurement are trying to meet the current needs of management as a whole and to provide a more sophisticated economic instruments for support investment decisions in the future. Any investment should provide a refund greater

than the cost of capital. This requires of the manager to manage the property in accordance with the following:

- Money is as important, if not more than the profits;
- New investments in the funds have to be profitable, ie. to generate a positive net present value;
- Existing assets of the company are subject to regular review. The focus is on the measurement and monitoring of economic performance;

Value-oriented management concepts evolved from cost and profit controlling towards value based management concepts. Most modern corporations around the world have some sort of capital budgeting process in place to evaluate their opportunities for investment. While the metrics used vary widely, they typically revolve around calculations of the net present value of the future benefits associated with the investment. They may also include measures of internal rate of return or payback period. Strategic investments are pursued because they are expected to deliver economic profits and create value.

Economic profit is different from accounting profit (Jednak, Tomić, 2011). Accounting profit ignores the opportunity cost of the firm's own resources used in the production of goods. Accounting profit is the firm's total revenue less its explicit costs. Economic profit equals total revenue less all economic costs both explicit and implicit. Explicit costs are input costs that impose a monetary outlay for the company. Implicit cost include use of firm's own building, use of its own capital and the business owners time given for the production of goods. Implicit costs not impose a monetary outlay for the company.

The path to value creation requires that economic profits be earned. Economic earnings are defined as the amount by which cash inflows exceed the costs associated with all of the factors of production. If the business is profitable from an accounting perspective but not profitable enough to provide economic profits, the business will be worth less than the amount invested in it and value will have been destroyed. Similarly, if the business is profitable and provides a fair return on the amount invested but nothing more, the business will be worth an amount equal to that invested and value will not have been created. An integrated value chain management concept needs to provide the platform to integrate value - and volume-oriented management concepts.

### ***THE MODERN ECONOMIC CONCEPTS: CVA (CASH VALUE ADDED) AND CFROI (CASH FLOW RETURN ON INVESTMENT)***

A new system measures of performance: measuring of performance on based economic criteria rather than on basis of financial measures (starting from cash flow rather than accounting concept of profit). Value-based economic measures such as: cash value added, cash return on investment etc. are experienced a significant expansion in the last 15-20 years in the world, because they express a more accurate process of creating and enhancing the value of the company. These modern economic concepts provides to manager relevant feedback informations about financial results of

previous investment decisions, help him to escape and repeat the bad investment decisions in the future and to identify indeed profitable investment.

Cash value added (CVA) is a concept developed by the Swedish economist Erik Ottoson and Fredrik Veissenrieder in the mid-1990s. This concept classifies investments into two categories (Čupić, 2010) strategic and non-strategic investments. The goal of strategic investments is that create new value for shareholders and non-strategic investments to maintain the value which are created by the investment strategy. Strategic investments are related with development new product and development of the market and it always refer to the future. They are taken in order to create new value for shareholders. Under the strategic investments are considered marginal strategic investments in order to extend the economic life of the initial strategic investment or expansion of business capacity. Non-strategic investments are related with past decisions of managers and need to prevent the reduction of expected cash flows and the value strategic of the investment below a preset level.

CVA model can be calculated at divisional level and the company as a whole. This measure shows the creation of value for the owners (shareholders) on a monthly, quarterly or annually. Cash flow added (CVA) is a key measure for measure the value and success of the business company as a whole. It can be used to assess future performance of a company. CVA measure which promoted the company BCG (Boston Consulting Group) can be determined in two ways.

I. Under the first method CVA is determined (Dinca, S. M., Dinca, Gh., 2005, 165):  $CVA = OCF - OCFD$ ;

Where is:

CVA - cash value added,

OCF - operating cash flow or cash flow from operating activities,

OCFD - operating cash flow demand or required cash flow which the company must generate with implementation of strategic investments to be satisfied the requirements of investors.

Instead of measuring the opportunity cost of capital in the percentage, CVA model uses the opportunity cost of capital investors in cash terms (OCFD), for example: in euros, dollars, etc.. OCFD remains unchanged in all the years of the economic life of the strategic investment.

II. Another way of calculating CVA is represented by the following formula (Dinca Sorin M. Dinca, Gh., 2005, 165):

$CVA = (CFROI - WACC) \times GI$ ;

Where:  $WACC$  (Weighted Average Cost of Capital) =  $K_{equity} * (Equity / (Debt + Equity)) + K_{debt} * (1 - t) * (Debt / (Debt + Equity))$ ;

Where is:

CVA - cash value added,

CFROI - cash flow return on investment,

WACC - weighted average cost of capital,

t (tax) - tax rate,  
 GI - gross investment,  
 $K_{\text{equity}}$  - price (cost) of own (equity) capital (expected return on shares),  
 $K_{\text{debt}}$  - price (cost) of debt.

Problem with this variant of calculating CVA is not to establish any direct connection with the operational activities of the company, so it does not point to specific ways in which the company can improve its operational efficiency as a basis for enhancing competitiveness and adding economic value of a company.

Starting from:

$CFROI = (GCF \text{ (Gross Cash Flow)} - ED \text{ (Economic Depreciation)}) / GI \text{ (Gross Investment)}$ ,

Formula  $CVA = (CFROI - WACC) * GI$  can be expressed as follows:

$CVA = ((GCF - ED) / GI - WACC) * GI = GCF - ED - WACC * GI$  (Holler, A., 2009, 85-87);

Where is:

CVA - cash value added,  
 GCF - gross cash flow,  
 ED - economic depreciation,  
 WACC - weighted average cost of capital,  
 GI - gross investment.

In the literature per other authors are presented next the formulas for calculating CVA (Cash Value Added):

$CVA \text{ (Cash Value Added)} = OCF \text{ (Operating Cash Flows)} - GI \text{ (Gross Investment)}$  and

$CVA \text{ (Cash Value Added)} = OCF - (WACC * GI)$  (Matt, 1999).

To corporate managers need conceptual tool for managing with business activities and capital expenditures in an efficient manner so there is a trend of integration of performance measures. Some authors such as William Hubbell and Narciz - Roztocki (Hubbell, W., Roztocki, N., 1998) are proposed an integrated system of measuring performance on based activity based costing (ABC) and the concept of economic value added (EVA), which can be used to increase wealth of shareholder and improving structure of the cost. Recently, this issue is attracted european authors such as Moissell (Mademoiselle, AM, 2005.) who is also an advocate of integration of the ABC method and the concept of EVA. According to other authors such as Marius Sorin Dinca and Gheorghita Dinca (Dinca, Dinca, 2005) integration is possible even between ABC method and cash value added (CVA). These authors observed that the management of

the company can get a distorted picture of the profitability of the company if he takes in consideration only accounting profit and ignores residual income which is obtained using an integrated system measuring of performance.

CVA concept can also be used as a tool for future assessment of the economic performance of the company, for example, if the strategic investment made now or in future years, assuming that the expected inflation rate is constant, OCFD for the first year of investment can be calculated starting from next formula (Ottosson, Weissenrieder, 1996):

$$I \text{ (Investment amount)} = \frac{\text{OCFD}_{\text{Year 1}}}{r - \text{Inflation}} - \frac{\text{OCFD}_{\text{Year 1}} * (1 + \text{Inflation})^n}{(1 + r)^n}$$

Where is:

- I - investment amount or initial investment,
- n - economic life of the investment of n years,
- Inflation – expected (future) inflation,
- r- required rate of return (cost of capital).

So, OCFD for the year of the initial investment is calculated using the following formula (Ottosson, Weissenrieder, 1996):

$$\text{OCFD}_{\text{Year 1}} = \frac{I \text{ (Investment amount)}}{1} - \frac{\frac{(1 + \text{Inflation})^n}{r - \text{Inflation}}}{(1 + r)^n}$$

OCFD for the company or its part is equal to the sum OCFD for each strategic investment for any period in the past, in the present and in the future. The expected return of an investment provides compensation to investors for hold (time dimension of money) and risk. If a company creates added value for shareholders, CVA (NPV investments) must be positive. If we estimate the expected strategic investments, strategic investments CVA is calculated as the present value of all expected periodic CVA that need to incurred in the economic life of investment (Ottosson, Weissenrieder, 1996):

$$\text{NPV(Investment)} = \text{PV}(\text{OCF}_{1..n}) - \text{Investment};$$

So, CVA (Cash Value Added) = OCF (Operating Cash Flows) – OCFD (Operating Cash Flow Demand);

Given that accurate assessment of company cash flows and the selection of appropriate discount rates are a very difficult task for managers, DCF analysis is often abandoned in favor of assessment valuation by dint of multiples. Assessment by dint of multiples implied calculation of the multiplier specifically for a set of comparable companies and then finding value multiplier of the company on based benchmarking multiplier. As the most frequent value multiplier companies use P/E ratio (Katz, E., R. MComm CA (SA)). P/E ratio some authors call and the term "multiplier of profit," because it shows how many times a company profit is expressed in the current market price of shares. The ratio price/earnings (P/E ratio) - the ratio between the current market price (P) and earnings per share (EPS). This indicator is relevant to shareholders because it tells how many units of currency must invest to achieve a monetary unit of earnings on based share ownership. Therefore, P/E ratios reflect investor expectations regarding the potential growth and development of the company. It's why linked to the development possibilities of the company, as reflected investors' optimism or pessimism. In other words, the P/E ratio reflects the willingness of the buyers for them to pay a certain market price in order to achieve an appropriate return of the acquisition of shares. P/E ratio as a multiplier is not suitable for the valuation of companies that have most part of their values expressed through intangible assets such as high-tech or for companies with significant research and development activities, because a large part of their value is uncertain due to further growth in the future. Another argument in favor of this is that the high costs of research and development will reduce current earnings, and in this case, the current earnings may be bad predikator of the values.

CVA index provides another dimension to the CVA model. It is fully in line with profitable index. CVA index is calculated (Ottosson, Weissenrieder 1996):

$$\text{CVA index} = \text{OCF}/\text{OCFDt};$$

In the case of cost-effectiveness evaluation of strategic investments CVA index is calculated using the following formula (Čupić, M., 2010, 126):

$$\text{CVA index} = \text{PV (OCFt)}/\text{PV(OCFDt)};$$

Where is:

PV (OCFt) - present value of expected OCF in certain periods of the economic life of strategic investment,

PV (OCFDt) - present value of expected OCFD in certain periods of the economic life of strategic investment.

Strategic investments will have CVA index greater than 1 when are the most competitive, respectively in the earlier part of their economic life. CVA index above 1 (CVA index > 1) indicates that strategic investments produce enough of operating (business) cash flow or OCF. CVA index greater than one indicates that in the analyzed period is created the value for shareholders. CVA index will help managers to accumulate knowledge about the long-term capacity of their strategic investment that will generate cash. Using CVA index as a measure of performance, managers better recognize the relations between financial performance and fundamental business reality.

Another approach to measuring the value based on the cash flow statement is a cash return on investment, or CFROI. Developed by the consultant HOLT Value Associates. The rate of cash return on investment (CFROI) compares cash flow that

belong to investors with a gross investment. The focus is on comparing the after-tax cash flows and the value of investments, aligned with the inflationary trends. This method of measurement values takes into account the cash flows adjusted for inflation and compares them with investments that were adjusted for inflation (Matt, 1999):

CFROI = Inflation adjusted cash flows (cash in)/inflation adjusted investment (cash out);

The specificity of CFROI approach in comparison to ROIC approach is: The performance measures such as return on invested capital (ROIC), and cash return on invested capital (ROIC Cash) are based on the carrying value of invested capital.

ROIC (Return on Capital) = EBIT\* (1-tax rate)/book value of invested capital (Damadaran, A., 2007, 7) or

ROIC = net operating profit after taxes (NOPAT)/book value of invested capital (Grant, L. J., 2003, 63)

Cash ROIC (Cash Return on Capital) = annual operating cash flow after taxes (EBIT \* (1-tax rate) + annual depreciation)/(gross fixed assets + non-cash working capital) (Damadaran, 2007).

Gross fixed assets = net fixed assets + accumulated depreciation

Non-cash working capital = current assets without cash and cash equivalents – short-term liabilities;

CFROI concept (Copeland, Dolgoff, 2005) adjusts the cash ROIC ratio using the GDP price deflator, so that the book (historical) value of invested capital is adjusted for inflation (invested capital increases with the increase of inflation). Assuming no inflation indicators cash ROIC and CFROI would have the same value.

CFROI for the company or their part shall be calculated using the following formula (Hejazi et al., 2007):

CFROI = (GCF (Gross Cash Flow) - ED (Economic Depreciation))/GCI (Gross Cash Investment);

Gross cash flow is cash flow generated from the gross investment (gross investment). Gross cash flow (Viebig et al., 2008) using data from the income statement can be expressed as follows:

Net profit after tax  
 + Amortization / depreciation  
 + Interest expense  
 + Research and development costs  
 + Tax costs  
 = Adjusted gross cash flow.

Gross cash flow (Gross Cash Flow) using data from the balance sheet can be expressed as follows:

Adjusted Gross cash flow = net current assets + net fixed assets+ accumulated depreciation + inflation adjustments of fixed assets.

Economic depreciation =  $[WACC/(1+WACC)^n - 1] * \text{Depreciable assets};$

Where is:

n - the expected life of the asset,

WACC - weighted average cost of capital.

Economic depreciation (Čupić, 2010) is the amount which need every year in a century of using resources invest in a depreciation fund of the companies (invest money at a rate which is equal to the price of capital). According to IAS 16 - Property, plant and equipment depreciation is the systematic allocation of the depreciable amount of the costs over the useful life of the asset (SRRS, 2007, 1004). According to IAS 16 - Property, plant and equipment, depreciation is calculated when the asset is available for use ([http://svetprava.com/pdf/vlada\\_maric/racunovodstvena\\_amortizacija.pdf](http://svetprava.com/pdf/vlada_maric/racunovodstvena_amortizacija.pdf))(investment in development if they have a limited lifespan, concessions, patents, licenses and similar rights if they have a limited lifespan, other intangible assets if they have a limited lifespan, buildings, plant and equipment, including tools and inventory to be written down calculative, investment property if the accounting policy provides that an investment property is carried at cost in accordance with IAS, other property, plant and equipment, provided that it is not about assets held for sale, investment in property, plant and equipment.

Termination of calculating depreciation in the following cases:

- when the asset has been fully depreciated,
- when the asset in any way alienated,
- when IFRS 5 – fixed assets held for sale and discontinued operations which are classified as assets held for sale.

The basis for calculation of depreciation of property, plant and equipment depends on the applied of models valuation of fixed assets. Using the model of purchase value the basis for calculation depreciation is: purchase value less residual value. If we apply the method of revaluation, assets are stated at revaluation value, and then the basis for depreciation is equal revaluation value less residual value. During the process of revaluation is is performed and the remaining residual value adjustments for price changes.

The Calculating CFROI is similar as to the internal rate of return IRR (Internal Rate of Return - IRR). The internal rate of return of the project (IRR) is known as the rate of return of discounted cash flow (discounted cash flow - DCF - rate of return). It is a measure of the profitability of the investment project. The internal rate of return of a project is the discount rate at which the net present value (NPV) of the project is equal to zero:  $NPV = PV$  (present value of the sum of all future cash flows) – initial investment = 0

According to CFROI concept necessary (Zakić, 2011) is:

- Estimate the value of fixed assets which are the subject of the amortization and estimate their period of use; Adjust the cash flows (inflows and outflows) with inflationary trends;
  - Estimate the value of investments;
  - Estimate the value of assets which not the subject of the amortization (goodwill, intangible assets, land, forest and growing crops, breeding stock, investment property);
- Calculate the cash return on investment (CFROI). CFROI is based on the methodology of calculation of internal rate of return (IRR) which measures the expected future cash yield of potentially profitable investments.

The useful life of an asset (SRRS, 2007, 1004) is the period during which it is expected that the asset available entity for use or number of production or similar units that an entity expects to produce with that asset. If the physical life cycle of the asset is longer than the useful life cycle, asset after useful life has a certain value that the market can be evaluated. That determined market value is a residual value of the asset. The residual value of an asset is the estimated amount that an entity would receive today if it means alienating, after deducting the estimated costs of disposal, and assuming that means, but at the end of its useful life in a state that is expected at the end of its useful life (SRRS, 2007, 1004).

Benefits of CFROI (Matt, 1999) are:

- CFROI can be used to monitor long-term trends in the company. It is expressed in a percentage. Corrected for inflation, CFROI allows comparability over time and space. CFROI is often calculated and graphically represents in the economic life cycle of business company. When a company has a high CFROI relative to what investors demand, the company will be sold with a premium, and when CFROI drops below the required rate of return investors, the company will be sold with a discount. CFROI is based on the market rate, which is essentially required rate of return on the market which investors expect in long term. Therefore, CFROI tends to be more accurate than the EVA measurement values.

- CFROI is a very popular tool for the analysis of the target (target) company in business combinations (acquisitions). CFROI monitors economic cash flows over the life of the business entity. Investment and portfolio managers also use CFROI determination of enterprise value in an attempt to predict future economic performance and stock price.

Some problems (defects) with CFROI (Matt, 1999) are:

- It is very difficult to calculate. Basic deficiency are numerous corrections, and is not suitable performance benchmark for enterprise-level and large business units. Adjustments are related to the estimated economic life of the assets that are depreciated and residual value of assets that are not amortized;

- CFROI provides information on cash return, and does not inform how value is created or destroyed. Any investment with a positive rate of return will increase the value.

- CFROI suffers from the problem of reinvestment. It may be that the two projects have the same net present value but different cash flows. In this case, you get to ignore a good investment project.

## ***VALUE-BASED PERFORMANCE MEASURES ON BASED CASH FLOW FOR THE BAYER GROUP AG FROM GERMANY***

Bayer Group AG is a holding company with core competencies in the fields of health care, nutrition and production of high-tech materials. Holding company Bayer AG Group is represented worldwide and within it there are about 300 companies. Central place is Leverkusen, Germany. Its products and services are designed to benefit people and improve their quality of life. At the same time, the Group AG Bayer creates value through innovation, growth and high earning power (<http://www.bayer.com/en/Profile-and-Organization.aspx>). Bayer Group AG defines common values, goals and strategies for its three subgroups or three service companies that operate within it: 1. Bayer HealthCare AG, one of the most important innovators in the world in the fields of pharmaceuticals and medical products, 2. Bayer CropScience AG, with its highly effective products, pioneering innovations, a global leader in crop protection of agricultural pests, 3. Bayer MaterialScience AG is a renowned supplier of high-performance materials such as polycarbonates and polyurethanes.

One of the main goals of Bayer Group AG of Germany is constantly increasing the company's value. In 1994th year became one of the first German company that has engaged in the development of value management, which has been implemented across all of its service companies far 1997th year. The system is used for planning, control and monitoring of all companies. The primary value indicators Bayer Group AG and value-performance benchmark for a reporting period are: gross cash flow (GCF), cash return on investment (CFROI) and add the cash flow (CVA). Value-based performance measures help management of the company in decision making, especially in terms of strategic portfolio and optimization of allocation of funds for acquisitions and capital expenditures. The focus is to monitoring of key drivers of the company's value: growth (sales), cost-effectiveness and efficiency of use capital, because they directly affect on the generation (creation) values. In Table 1. that follow are presented value-based performance measures to the cash flows from 2011th and 2012th year for three service companies that operate within in the Bayer Group AG:

Table 1: Value measures performances per subgroups for 2011/2012 year

	HealthCare in million € and and %		CropScience In million € and %		MaterialScience In million € and %		Bayer Group In million € and %	
	2011	2012	2011	2012	2011	2012	2011	2012
<b>Gross cash flow hurdle (GCF hurdle)</b>	2.205	2.214	857	824	1.033	1.079	4.339	4.337
<b>Gross cash flow (GCF)</b>	3.254	2.614	900	1.320	939	947	5.172	4.599
<b>Cash value added (CVA)</b>	1.049	400	43	496	(94)	(132)	833	262
<b>Delta cash value added (Delta CVA)</b>	392	(649)	378	453	(179)	(38)	446	(571)
<b>Cash flow return on investment (CFROI)</b>	12,7%	10,1%	8,2%	12,4%	6,0%	5,6%	9,7%	8,3%
<b>WACC</b>	8,1%	8,1%	7,5%	7,5%	7,1%	7,1%	7,8%	7,8%
<b>Average capital invested</b>	22.757	22.156	8.772	9.194	10.157	10.678	43.348	43.403

Source: <http://www.annualreport2012.bayer.com/>

Calculating of value measures of performance for Bayer Group AG in the previous Table 1. includes:

- Bayer Group AG calculates the cost of capital using the formula for the weighted average cost of capital or WACC equation:  $WACC = K_{equity} * (Equity / (Debt + Equity)) + K_{debt} * (1 - t) * (Debt / (Debt + Equity))$ . The cost of capital is the opportunity cost of capital for existing assets of the company. Taking into account the different types of risk and different offerings of equity and debt for service companies in the Bayer Group AG, are calculate on individual amounts to the cost of capital after tax for the three subgroups within in parent company: Bayer HealthCare AG, Bayer CropScience AG and Bayer MaterialScience AG . The 2012th year they amounted for Bayer HealthCare 8,1% (2011: 8,1%), for CropScience 7,5% (2011: 7,5%), for MaterialScience 7,1% (2011: 7,1%). The minimum required contribution Bayer Group AG in 2012th year was 7,8% (2011: 7,8%);

- Taking into account the data on the funds invested and the cost of capital, Bayer Group AG determines the expected cash flow (Gross cash flow hurdle or GCF hurdle). In his calculation, the changes compared to the previous year, mainly related to the appreciation of requirements for intangible assets; The gross cash flow hurdle for 2012 was 4,337 million € (2011: 4,339 million €). Data on gross cash flow (GCF) is taken from the Bayer Group statements of cash flows. Actual gross cash flow came in at €4,599 million, exceeding the hurdle by 6,0%. This means Bayer Group AG earned entire capital and asset reproduction costs in 2012.

- The calculation of CVA, which shows the extent to which the cash flows needed to cover the cost of equity and debt, as well as to generate value (create cash). If the CVA is positive, the Bayer Group AG has created value. For example, the CVA for 2011th year for the Bayer Group AG is calculated starting from the formula  $CVA = GCF - GCF \text{ hurdle}$  or  $CVA = 4.599 - 4.337 = 262$  million €, what shows that the company Bayer AG Group created value. The positive CVA of 262 million € shows that Bayer exceeded the minimum return and reproduction requirements and created value for the company. Comparing two consecutive years is followed the change CVA, which is the difference between the CVA in two consecutive periods. For example, the following data from the 2011th and 2012th for the company Bayer AG Group, negative changes in  $CVA = 262 - 833 = 571$  million €. Since the CVA in 2011 was 833 million €, the Bayer Group therefore recorded a delta CVA of minus 571 million € in 2012. Negative changes in CVA shows that value creation has deteriorated from one period to another. Positive changes in CVA would showed that the creation of value improved from one period to another.

- Profitability of the holding company (group) and its individual businesses (subgroup or service companies) are measured over a cash return on investment (CFROI). The CFROI is the difference between the gross cash flow and the cost of reproducing depletable assets, divided by the capital invested. The capital invested is calculated from the statement of financial position and basically comprises the property, plant and equipment and intangible assets required for operations (at cost of acquisition or construction) plus working capital, less interest-free liabilities. To mitigate the effect of fluctuations in the capital invested during the year, the CFROI is computed on the basis of the average capital invested for the respective year. The CFROI for 2012 amounted to 8,3% (2011: 9,7%).

Table 2: CVA index per subgroups for 2011/2012 year:

	HealthCare		CropScience		MaterialScience		Bayer Group	
	2011	2012	2011	2012	2011	2012	2011	2012
<b>Gross cash flow hurdle (GCF hurdle)</b>	2.205	2.214	857	824	1.033	1.079	4.339	4.337
<b>Gross cash flow (GCF)</b>	3.254	2.614	900	1.320	939	947	5.172	4.599
<b>Cash value added index (CVA index = GCF/GCF hurdle)</b>	1,5	1,2	1,1	1,6	0,9	0,9	1,2	1,1

*Source: Author's calculation*

CVA index above 1 (CVA index > 1) indicates that strategic investment produce enough gross cash flow (GCF). CVA index greater than one indicates that in the analyzed period, the value created for shareholders. CVA index will help managers to accumulate knowledge about the long-term capacity of their strategic investment that will generate cash. Using CVA index as a measure of performance, managers better recognize the links between financial performance and fundamental business reality.

## **CONCLUSION**

Central role in corporate strategy receives a value-oriented management of the company (Value Management). Corporate strategy must to incorporate directly create value, ie. increase value for shareholder. Management should be focus on four actions that create value: cash flows, growth rates, length of duration of growth period and the cost of capital.

CVA measure takes into account the cost of capital and allows measure the performance in the past, present and future at different organizational levels of the company. It is suitable for assessing the anticipated profitability of investment projects

and valuation of business units or companies. CVA classifies investments in strategic and non-strategic investments. Strategic investments create new value, and non-strategic investments more strive to maintain the value created by the investment strategy. It is desirable for investors and for the company to be the larger CVA. CVA index will help managers to accumulate knowledge about the capabilities of their strategic long-term investment that will generate cash.

CFROI can be used to monitor long-term trends in the company. It is expressed as a percentage. Corrected for inflation what allows comparability over time and space. CFROI monitors economic cash flows over the life of the business entity. Investment and portfolio managers also use CFROI in determining the value of a company in an attempt to predict future economic performance and stock price.

One of the main objectives of the Bayer Group Holding AG of Germany is constantly increasing value. Gross cash flow (GCF), cash return on investment (CFROI) and cash value added (CVA) are performance measures that are determined for a reporting period to help managers and investors to create a picture of a company's ability to generate cash from one period to another. It is desirable that the CVA be higher. CVA index will help managers to accumulate knowledge about the long-term capacity of their strategic investment that will generate cash. Profitability of the holding company and its individual businesses (subgroup or service companies) are measured over a cash return on investment (CFROI).

Corporate managers in Serbia require a new economic framework that better reflects the value and profitability of the companies. In the new economy of the 21st century, corporate managers are facing the challenge of more efficient and competitive capital markets in the future, which requires that a large number of Serbian companies turn to performance criteria based on values such as those applicable to the Group of Bayer AG of Germany.

Modern systems of performance measurement are trying to meet the current needs of management as a whole and to provide perfect economic instruments for the support of business and investment decisions in the future. Further steps that must be realized in order to implement those value performance measures in Serbian business environment: 1. Top management, employees, supervisors, engineers and other key personnel must be the driving power for value oriented enterprise management; 2. The focus must be on the measurement and monitoring of economic performance; 3. Members of funkcional team must be leaders of change and commit to their work will be based on value-based management; 4. Providing formal training for managers is very important; The changes existing standards of work of managers. The focus is on the realization of cash or economic profit; 5. Managers will act in the interests of shareholders only if given adequate stimulation. Compensation in accordance with created value; Traditional incentive plans that are tied to accounting profit or budget should be abolished; 6. Important is harmonize the interests of shareholders and managers; 7. Adjustment and correction of potential problems between higher and lower levels of the business unit etc..

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