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# Contents



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# CRITICAL SUCCESS FACTORS ON COMPANY'S BUSINESS PERFORMANCES THROUGH WEB-BASED SOCIAL NETWORKS

**Saso Josimovski, PhD**
*Faculty of Economics, University ss. Cyril and Methodius-Skopje, Macedonia*
*sasojos@eccf.ukim.edu.mk*

**Dimitar Jovevski, PhD**
*Faculty of Economics, University ss. Cyril and Methodius-Skopje, Macedonia*
*djovevski@eccf.ukim.edu.mk*

***Abstract***

*Since their introduction, social media sites (SMSs) such as Facebook, LinkedIn and Twitter have attracted millions of users, many of whom have integrated these sites in their daily practices. As of this writing, there are hundreds of SMSs, with various technological affordances, supporting a wide range of interests and practices. Social media are gaining popularity and are increasingly used in regular operations of many companies, including start–ups, small, medium-sized, and large organizations. The purpose of this paper is to explore the different critical success factors related to use of web based social networks that can improve business performance of companies in the Republic of Macedonia. This research will focus on the extent of impact that web based social networks have on organizational capabilities and business performance.*
*From the research it could be found that successful deployment of set of external and internal critical success factors can lead to the improvement of business performance (financial and nonfinancial) of the companies. According to the results, the successful use of web-based social networks can improve (1) CRM integration, (2) open communication within a company and (3) ICT integration.*

***Key words:*** *business performance, critical success factors, social media, social networks, e-business models*

## 1. Introduction

The world in which we are living and the balance between companies and consumers are constantly changing. Companies need to implement new information and communication technologies (ICT) to meet the needs of consumers. Web-based social networks are included in the lifestyle of many people in the world. This fact enables the companies to have another channel to communicate with their customers through these networks. Social networks like web - based services incorporate various technologies (blog, forum, and social games).

In today's digital environment web-based social networks are important in the everyday operations of the companies. Because of its unique ability to share information between users, the web-based networking slowly but surely transformed into a powerful tool with which companies can communicate with their audience. As a result, companies increasingly seek to create fun and informative pages on social networks and to maintain their presence. Their presence directly affects their business performance.

Emerging technologies gain popularity as enabling tools for cooperation among businesses in business networks (Ansari et al., 2011; Belleghem, 2013) whereas the applications market is flourishing (Eduardo, 2013). Companies that take advantage of the latest social media technologies seem to outperform their competitors and report benefits like lower costs and improved efficiencies (Agnihotri et al., 2012). In this context it is important to understand the specific impact that social media have on business performance(Fischer and Reuber, 2011). The identification of a direct connection between the two will support the shift towards Enterprise 2.0 – a new business environment in which the companies will maximize the benefits they can obtain by integrating social media suites into their daily operations.

The subject of research in this paper is the analysis of e-business models that include the impact of various critical success factors (CSFs) for successful web-based social network by organizations. This analysis involves a group of CSFs that directly or indirectly affect the success of enterprises. These groups of independent factors are: the use of ICT in organizations, organizational structure and architecture of business processes, strategy, affecting dependent variables such as increased sales and brand awareness through web-based social networking.

Empirical research includes exploratory and conclusive research with three parts. The first part is to create a conceptual model with set of CSFs for successful use of web-based social networks; the second includes testing the relationship between various internal and external dimensions of successful use of web-based social networks and the third part, what is a subject of this paper include testing of the relationship between set of CSFs and their influence on business performance.

Exploratory research used quantitative methods such as analysis of secondary data and interview techniques with experts. The primary data used statistical methods: structural equation modeling and confirmatory factor analysis and exploratory factor analysis.

## E-business models for social networks and  Inmpruvment of business performance

In this section we define social media as a part of Web 2.0 technologies (A), refer to the resource-based view of the firm and factors for successful use of social media and their impact on organizations (B)

### Defining social media

The term Web 2.0 was coined in 2001 by O'Reilly (2009) in a conference brainstorming session to reflect the transition from the manager generated content era to the user-generated era. O'Reilly identifies seven differences between Web 1.0 and Web 2.0: the web as a platform; the harnessing of collective intelligence; the data as the next Intel Inside; the end of the software release cycle; the lightweight programming models; the software above the level of a single device; the rich users' experience (O'Reilly, 2009). The term was widely adopted and definitions have been formulated for Web 2.0, all emphasizing collaboration and enhanced communication, as well as user involvement. Harris and Rea (Harris and Rea, 2009) define Web 2.0 as "a perceived second generation of Web development and design that facilitates communications and secures information sharing, interoperability, and collaboration on the Web".

Bell and Loane (Bell and Loane, 2010) define Web 2.0 as "a set of economic, social, and technology trends that collectively form the basis for the next generation of the Internet – a more mature, distinctive medium characterized by participation, openness and network effects".

Web 2.0 technologies share common characteristics that distinguish them from previous generations of Web development. Firstly, Web 2.0 brings about an emphasis on collaborative learning as well as on user engagement through participation. Secondly, Web 2.0 is regarded as user friendly, as it enables immediate publication and wide distribution of user generated content. The driving force behind the new wave of applications stands in their content and data management systems, as well as in their architecture of participation that encourages user contributions.

Further the new generation of applications uses the web as a development platform. Most Web 2.0 tools are based on the Software as a Service technology (Bell and Loane, 2010).

Web 2.0 and social media have different meanings, but they are directly connected, and it can be said that social media derive from Web 2.0. Kaplan and Haenlein (Kaplan and Haenlein, 2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content". In this paper we use Web 2.0 when we address the technology platform, but most of the time we will talk about applications that derive and use technological foundation of Web 2.0 that is social media.

Social media is a phrase that describes the platforms and other tools that connect people into social networks (of their choice) online. Some of the household social media names worldwide (other than Facebook) are MySpace, LinkedIn, Twitter, YouTube, Foursquare Google+ (Godin, 2008).

The individuals that make up these online networks use social media to organize themselves according to (1) their interests and (2) their preference for the way they choose to share, store and deliver information within their community (or "network") (Chaffey, 2008).

Individuals have made it clear they wish to connect with other individuals that they choose to, in the way that they choose to, and around topics and for reasons that they choose to. The individual is at the centre of the social media revolution. Companies must be present there, for sure it can be said that this is changing the way business is done.

**Improvement of business performance by use of web based social networks in companies.**

In the paper, the resource-based view will be pursued as a perspective on organizations to explain the impact of using web based social networks on company performance. The resource-based view states that organizations obtain a set of certain resources (like human resources or ICT infrastructure) that could be company specific. The particular combination of resources forms the basis for company's competitiveness and business performance. A distinction can be made between resources and capabilities. While resources serve as basic units of analyses, capabilities are repeatable patterns of action in the use of resources to create, produce, or offer value to a market (Barney, 1991). Note that resources (like Web 2.0 tools) may be obtained easily, but that it is not easy to develop business-wide capabilities to use the resources to enhance business performance. So, while any company can reach resources easily, capabilities embedded in business practice cannot be reached. We focus on Web 2.0 based capabilities, more on capabilities related to web based social networks, when a company is using them.

In the literature different models exist, describing different factors related to the use of web-based networks in companies. These different models are regarding the factors from different perspectives and views. Each of the models is defining a set of critical success factors that are directly connected to web based networks and responsible for improving business performance. Daniel Crain Smith (2009) defines several CSFs related to social networks that are crucial for a company when using Web 2.0 technologies such as social networks. These CSFs are: age of the employees, support from the top management, organizational structure and social pressure from the environment. The main disadvantage of his model is the lack of precise and clear definition of factors that are directly connected to business performance. Colin Smith's (2006) model, compared to the previous one, succeeded in distinguishing several factors that can measure successful use of social networks in a company. Smith suggests income from sales of new products as one of the most important factors that can measure successful use of social networks. Many authors mention other CSFs that are important when one company is using social networks like: human resources, organizational culture and organizational structure. Reagans and B. McEvily (2003) and Burt (Burt, 2005) are also defining a set of CSFs responsible for successful use of social networks in one company. According to this group of authors, the most important factors are the type and structure of the networks, demographics of the network and social capital of the organization. Multidimensionality of this model is making it complicated, besides the fact that there are factors, which the company cannot influence. Another model that describes different CSFs is Philip Chen's model (2010). Is his model, Chen has defined four groups with two factors that are important for successful use of social networks. These groups are: strategy, infrastructure, openness, and collaboration. Chen clearly defines and confirms that this set of CSFs is responsible for successful use of Web 2.0 technologies to improve business performance from financial and nonfinancial perspective.

From the reviewed literature, most of the authors suggest more or less the same set of the CSFs. For our purposes, we decided to use the two groups' model (or the multistage model). The first group consists of internal factors and the second group consists of external factors. Internal factors are directly connected to every day work of a company and its capability to successfully use social networks. These factors are subsequently divided into the following subgroups: functional factors, strategy factors and technical factors. In the group of functional factors are internal integration of social networks and openness in using. Strategic factors are: alignment of business and Internet marketing strategies and alignment of Internet marketing strategy and CRM (Customer Relationship Management). The third group are technical factors like IT infrastructure and organizational structure. Second subgroup of factors are external ones related to the social pressure that one organization could have from its competitors and users in their environment. These two groups of CSFs are influencing a group of independent financial and nonfinancial factors that are directly related to business performance of a company. These independent factors are income from sales, decreasing costs, and brand recognition.

Based on the literature and the different models mentioned above, a conceptual model was created, with eight CSFs. All this CSFs are directly responsible for improvement of business performance.

**Figure 1.**

Conceptual model of CSFs for the successful use of social media

## Research

For this study, a survey instrument was used. The collected data was analyzed using Structural Equation Modeling (SEM) techniques to validate, evaluate, and analyze the relationships between the specific factors (independent variables) and business performance (dependent variable).

The sample for testing consisted of 150 Macedonian companies, which actively used web-based social networks in the past year. The descriptive statistics show that 91% of the companies in the survey were from Skopje, 20% were in trading industry, 13% in software industry, 12% in telecommunication industry and 14% in media and newspapers. According to the size 40% were small companies, 26% were medium companies, 20% were micro companies and 13% were large companies.

To test the reliability, an internal consistency of this study was analyzed and reviewed using Cronbach's alpha. Construct validity is the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure (Bagozzi and Yi, 2012; Hair et al., 2009). In this study, all measures were analyzed for reliability and validity using a Structural Equation Modeling (SEM) confirmatory technique. Confirmatory factor analysis (CFA) was used to construct a measurement model composed of ten constructs of this research model. The measurement model estimates each construct between latent variables (independent variables) and dependent variables using measuring items. To assess convergent validity for construct validity, composite reliability (CR) and average variance extracted (AVE) from measures were examined (Hair et al., 2009).

Cronbach's alphas assessing the internal consistency of the study's measures are in range from 0.71 to 0.91. They were above the acceptable threshold of 0.70, suggesting adequate reliability (Bagozzi and Yi, 2012).

A confirmatory factor analysis was conducted to determine the convergent and discriminant validity of the 10 constructs. As suggested by Hair (Hair et al., 2009), convergent validity was assessed by examining the factor loadings, computing the composite reliability of, and average variance extracted for the model constructs. Constructs have convergent validity when the factor loadings are statistically significant, the composite reliability exceeds the criterion of 0.70, and the average variance extracted is above 0.50. As suggested by Hair (Hair et al., 2009) and Fornell and Larcker (Fornell and Larker, 1981), discriminant validity was assessed by comparing the squared correlations (between the constructs) and the average variance extracted for a construct. Constructs have discriminant validity when the squared correlations are lower than the average variance extracted for a construct. The fit of the measurement model was assessed using the following statistics and indices: Chi-square, the ratio of the Chi-square to the degrees of freedom (df), Comparative Fit Index (CFI), and Root Mean Squared Error (RMSEA). Chi-square/df values less than 3 indicate good model fit and between 2.0 and 5.0 is acceptable level (Groenland and Stalpers, 2012). CFI values in 0.80 to 0.90 indicate a confidence level (Schreiber et al., 2006). RMSEA values less than 0.90 indicate good fit (Fornell and Larker, 1981).

The factor loadings, composite reliabilities, and average variance extracted for the model constructs are shown in Table I. From the table it can be concluded that some of the factor loading do not fit the accepted ratios. The index GFI and AGFI are not fitting the acceptance level bellow 0.90. Also RMSEA is over the recommended level of 0.90 (Bagozzi and Yi, 2012). The index CFI is below 0.8 which is also below the recommended level. Only relative index CMIN which represent Chi-square is between 1 and 3 (Hair, 2010).

**Table I.**

**CFA TESTING WITH 10 CONSTRUCTS**

| | |
|---|---|
| $\chi^2$ | 1019.429 |
| Level of freedom | 620 |
| Level of probability | 0,000 |
| GFI | 0,631 |
| AGFI | 0,56 |
| RMSEA | 0,91 |
| CFI | 0,735 |
| CMIN | 1,664 |

Next step in CFA is to determine the level of adequacy, by using the squared multiple standardized regressive coefficients. From the analysis, it can be concluded that 13 factors which are explaining the latent variables are below the accepted level of 0.40 (Hair, 2010). Because the CFA shows that the some of the constructs in the model do not fit the factor loadings, adjustment of the model was required.

After refining and adjusting the model, a confirmatory factor analysis was conducted for the second time. The factor loadings were good, but one of the 10 constructs was left out. The factor loadings are shown in a table 2.

**Table II.**

**CFA TESTING WITH 9 CONSTRUCTS**

| | |
|---|---|
| $\chi^2$ | 324,230 |
| Level of freedom | 216 |
| Level of probability | 0,000 |
| GFI | 0,774 |
| AGFI | 0,687 |
| RMSEA | 0,80 |
| CFI | 0,895 |
| CMIN | 1,501 |
| PNFI | 0,589 |

From the Table II. it can be concluded that all indexes for model fit are better then the previous model with 10 constructs. RMSEA is within the recommended value of 0.9, CFI is above recommended minimal value of 0.8. Also PNFI (Parsimony-Adjusted Measures), wich show the level of adjustment of the model is better then the first tested model. Also CMIN is in the recommended value between 1 and 3.

To evaluate the fit of the proposed model, the fit of the whole model was tested and assessed. The magnitude (i.e., statistical significance) and direction (i.e., positive or negative) of the individual parameters (i.e., the path coefficients) were assessed. Overall, the goodness-of-fit indices show that the proposed model has a good degree of fit with the data; the ratio of the Chi-square to the degrees of freedom was 3.80, a number smaller than 4.0 is considered very good, and between 2.0 and 5.0 is acceptable (Hair et al., 2009), the CFI 0.89 was within 0.8 to 0.9 confidence level (Bagozzi and Yi, 2012) and the RMSEA 0.08, less than 0.1, which is considered a good fit (Schreiber et al., 2006).

The path coefficients and corresponding standard errors and t-values are presented in Table III

**Table III.**

**STANDARDIZED REGRESSION COEFFICIENTS OF SEM**

| | | | t-value | P - value |
|---|---|---|---|---|
| BusFin | <--- | VnatInt | .070 | .908 |
| BusFin | <--- | PolOtv | 1.954 | .008 |
| BusFin | <--- | BusIMS | .177 | .775 |
| BusFin | <--- | CRMInt | 1.965 | .060 |
| BusFin | <--- | ITInf | .475 | .088 |
| BusFin | <--- | OrgPos | 1.910 | .059 |
| BusFin | <--- | NedTeh | 1.935 | .036 |
| BusNFin | <--- | NedTeh | 1.935 | .022 |
| BusNFin | <--- | OrgPos | -.574 | .188 |
| BusNFin | <--- | ITInf | .335 | .137 |
| BusNFin | <--- | CRMInt | 1.633 | .248 |
| BusNFin | <--- | BusIMS | .270 | .587 |
| BusNFin | <--- | PolOtv | 1.964 | .018 |
| BusNFin | <--- | VnatInt | -.134 | .779 |

Note:*** p-value <0,01; :** p-value <0,05; :* p-value <0,10

From the values above it can be concluded that 50% of the regression coefficients are statistically significant. Statistical significance is expected to be in the range of p-value <0.10 because of the size of the example (Hair et al., 2009). All regressive coefficients are positive except the last one (Business non-financial and internal integration), but there is no statistical significance.

Statistical significance can be found between the next regressive coefficients: culture of open communication - financial and non-financial performance; CRM integration and financial performance; IT infrastructure and financial performance; organization structure and financial performance; availability of technology - financial performance and non-financial performance. There are 5 statistical significant relations related to financial and 2 with non-financial performance. Of all relations, the strongest is CRM integration and financial performance (t-value = 1,965), and the weakest is the availability of technology - financial performance and non-financial performance (t-value = 1.935). From here it can be concluded that seven of fourteen initial hypotheses were confirmed.

## Conclusion

The subject of research in this paper was the analysis of group of critical success factors that improve business performance by use of web-based social network in organizations. This analysis involves a group of independent critical success factors that directly or indirectly affect the performance of enterprises.

The results of the conducted SEM research shows that statistical significance exists between the proposed seven critical success factors and financial or non-financial performance of the companies. The results show that there is significance in the relationship with financial performance (5 links) and non-financial performance (2 links). These links are: the culture of open communication and financial performance; CRM- integration and financial performance, IT infrastructure and financial performance, organizational structure and financial performance, unavailability of technology and financial performance, unavailability of technology and non-financial performance; policy open communication and non-financial performance.

In terms of financial performance, it can be concluded that the link between CRM- integration and financial performance is the strongest. This relationship is the strongest in the overall model. Namely, if companies invest in social CRM data integration in their system, it will significantly affect and increase their sales and profits. In terms of non-financial performance the strongest link is between the policy of open communication and non-financial performance. Namely, if companies invest in open communication in their every day working, it will significantly affect and increase their brand awareness, employee satisfaction and relationship with their business partners.

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# THE ROLE OF FINANCIAL DOLLARIZATION DURING THE FINANCIAL CRISES

**Mihail Petkovski[1] - Kiril Jovanovski[2] - Suzana Makreshanska[3]**

***Abstract***

*This paper explores the relationship between financial dollarization and financial crises. The unhedged foreign currency borrowing and foreign currency depreciations are often seen as a major threat to financial stability, especially in CEE countries where the credit and deposit dollrization is high. The paper consists of four parts. The first part deals with the determinants of financial dollarization. The second part analyses the dimensions of financial dollrization in Emerging Europe. The third part discusses the role of financial dollarization during several financial crises (Mexico, East Asia, Argentina, recent global financial crisis). The fourth part focuses on potential risks emerging from financial dollarization in Republic of Macedonia, under different scenarios for devaluation of national currency.*

***Keywords:*** *credit and deposit dollarization, financial crises, exchange rate depreciation, CEE region, Macedonia.*

## 1. Introduction

The standard theory usually recognizes that in a country with fixed exchange rate policy, a major factor for appearance of the crisis is the inconsistent fiscal policy. Another popular explanation in the literature is that the lack of banking supervision and low level of development of the banking sector are two major factors for generating financial instability.

However, some relatively new models of currency crises emphasized private-sector balance sheets as a major cause of the crises. Krugman (2010) coined the term “third-generation models”, to describe the models where a currency depreciation set off by speculative attack would sharply worsen balance sheets of firms and banks with foreign–currency debt. The reason is simple: the domestic-currency value of their foreign-currency debt would rose.

1), 2), 3) Ss. Cyril and Methodius University, Faculty of Economics – Skopje.

The subject of our research are the risks arising from household and corporate foreign currency indebtedness. Here, we look for the reasons why foreign currency debt use is so prevalent in some countries and regions and whether it is a significant source for macroeconomic and financial risks or not.

The paper describes the episodes of financial crises in different countries, where financial dollarization was the trigger for financial turbulences. Having large amounts of foreign currency debt in their balance sheets, the banks in these countries faced strong financial turbulences when large depreciations of their currencies occurred. As the credit borrowers could not service their liabilities, credit risk started to transform into currency risk. Consequently, bank insolvencies simultaneously generated currency and banking crises.

## 2. Determinants of financial dollarization

Financial dollarization is defined as holding a substantial part of the assets and liabilities of residents in the form of instruments denominated in foreign currency (Ize and Levy-Yeyati, 2003). Hence, because earlier this phenomenon is analyzed in countries where assets and liabilities are generally denominated in US dollars, the same literature is referred to as "financial dollarization" (Broda and Levy-Yeyati, 2003). Here, we should mention that whenever a country use foreign currency (dollar, euro, etc..) for assets and liabilities denomination, in this paper we will refer as a "dollarized" or "euroized" country. That terminology we will use throughout this paper.

Most of the literature that deals with the causes and experiences of dollarization refer to examples of countries in Latin America. This is because countries like Bolivia, Argentina, Mexico and Peru, in the last thirty years, have experienced currency substitution. However, in the last ten years, because of the emergence of the euro, Europe countries outside the euro-zone were also facing increasing share of Euroization of their economies.

There are many aspects that cause the surplus economic units in these countries to keep their savings in foreign currencies. In this section we will try to summarize the economic phenomena that motivate agents to dollarize their assets and liabilities. If the movement of macroeconomic variables in different economies shows that the "de facto" dollarization is a rational response of economic agents to the loss of trust in the domestic currency, then we should accept that leading reason why dollarization appears is inflation. This is because in economies that have chronically high inflation rates, economic agents use foreign currency to reduce the negative consequences of the inflation. Therefore, the US dollar and the Euro are replacing the local currencies in countries with high inflation rates.

Besides inflation, other important determinants of dollarization are: expected depreciation of the domestic currency, interest rate spreads and the national aversion to risk. Here we can include also: time inconsistency and lack of trust in the monetary policy, market anomalies and the moral hazard arising from deposit insurance (Ize and Powell, 2004); management of assets and liabilities, profitability, concentration and risk management in banks and companies. Further from institutional aspect, dollarization depends on the openness of the economy, the size and depth of the financial system and the legal obstacles and transaction costs associated with the provision of foreign currency.

There are many authors dealing with the issue of dollarization who provide indicators to measure the degree of dollarization in the country in order to better understand the factors that determine it. Extensive literature related to this issue can be divided into three main groups. These three views are not entirely independent of one another, nor are contradictory in their bases, but their conclusions are different.

The first theory, is based on the theory of currency substitution, and it is one of the oldest theories of emergence and dynamics of change of dollarization in developing countries. This theory sees inflation as the most important factor for the occurrence of dollarization. The second theory is the one of minimum variance portfolio, which is developed by Levy-Yeyati (2006) and Ize and Levy-Yeyati (2003). According to this theory, the dollarization is more determined by changes in the rate of inflation and the depreciation of the real exchange rate than expected inflation and depreciation of the nominal exchange rate. The third theory is developed by Rajan and Tokatlidis (2005), and it refers to the impact of institutional quality on the level of dollarization.

In addition, because financial dollarization can take many forms, including credit and deposit dollarization, this part of the paper will give an explanation of the three theories by distinguishing the credit and deposit dollarization.

The degree of dollarization is endogenously determined by optimizing agents between the limits of policy and technology. The study of the theory related to the behavior of different classes of agents that choose among domestic and instruments denominated in foreign currencies, may help explain the relationship between the degree of credit and deposit dollarization and other macroeconomic and financial variables. Thus, if there is a strong connection between the research subject of this paper and independently changing variables of the research model, we could easily give presumption of future violations of economic prosperity through the creation of financial imbalances or failing to take appropriate measures.

There are two types of factors that affect the financial dollarization: factors driven by demand and supply factors driven by the dollarized assets. The domestic banks borrow in foreign currencies, and the factors affecting the increase in the supply of assets denominated in foreign currencies are linked to the specific techniques of managing the assets and liabilities of banks, profitability, and risk management. On the other hand, demand for these assets is a result of liabilities management, aversion to risk and profitability of companies. Additionally, as determinants of dollarization can be also considered: specific indicators relating to general requirements for protection against risks, liberalization and deregulation of the foreign exchange markets, the uncertainty and lack of confidence in domestic policies, and the overall level of financial and economic development.

**Table:** Factors for increasing financial dollarization:

| **Factors for increasing financial dollarization** | |
|---|---|
| Deposit dollarization | Credit dollarization |
| • Changes in inflation rate and real exchange rate; | • Factors specific to banks – assets and liabilities management |
| • Interest rate spreads, | • Factors specific to companies - opportunities for hedging risks |
| • Portfolio selection, | • Macroeconomic factors, |
| • Transmission channel of the effects in the economy, | • The role of the central bank, |
| • Time inconsistency and lack of confidence in macroeconomic policies, | • Uncertainty and lack of confidence in domestic policies, |
| • Imperfect markets, and | • The level of financial development, and |
| • Hysteresis effect. | • Undeveloped markets, warrants and faulty risk assessment. |

*Source: Authors summarize of different research papers*

### 3. Financial dollarization in the emerging markets

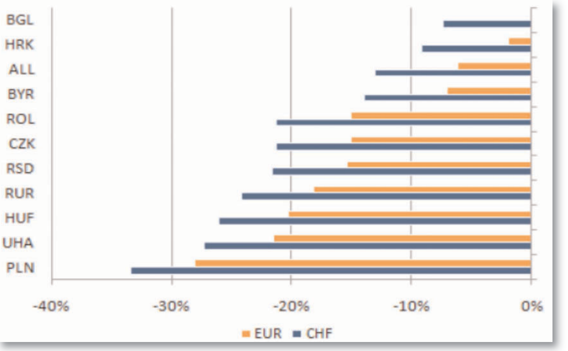
In recent years, an increasing share of private sector credit in the Emerging European markets of Central, Eastern and Southeastern Europe (CESEE) has been denominated in foreign currency. Despite the warnings from academic researchers and central banks governors, the inherent risks associated with foreign currency lending have been underestimated or neglected by banks managers and borrowers. Today we can conclude that the global financial crisis induced a materialization of these risk factors.

The weakening of Emerging European currencies against the euro and the swiss franc led to a significant increase in the real costs of unhedged FX borrowing and consequently higher expected credit default risks for banks. As most of the Emerging Europe's currencies depreciated against the euro and the swiss franc, investments in domestic currency become much more risky, and had higher costs for servicing their foreign currency liabilities.

**Figure 2:**

Exchange rates (CEESE) vs. EUR and CHF 2008-2009

*Source: Authors own calculation.*




In recent years, the global economy had become increasingly integrated, causing an increase in the number of firms that have some business activity outside their country of origin. Such foreign connection ranges from simple import or export action to more complex decisions including global sourcing, production, and competition. These multinationals face many different product and capital markets, a myriad of legal regimes, political risks, and exchange rate uncertainty.

**Figure 3:**

Share of the private foreign currency borrowing in selected countries, 2005-2013

*Source: National Central Banks statistics.*

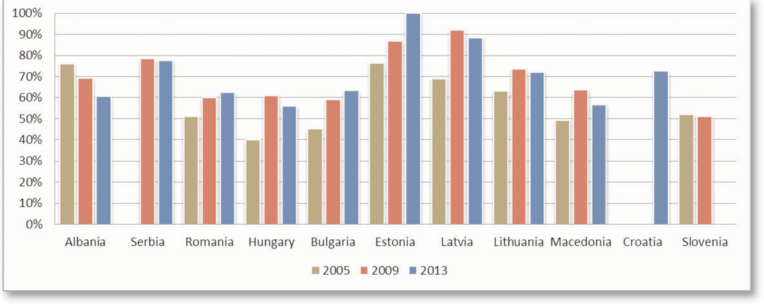
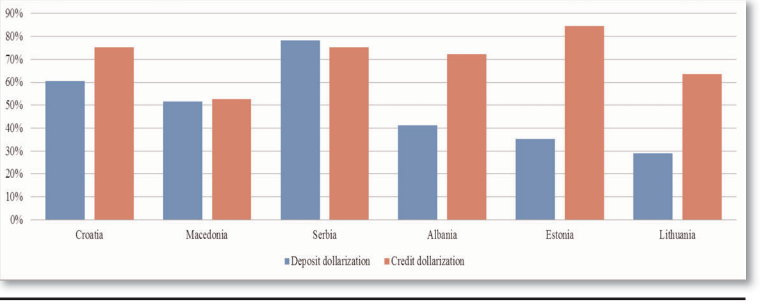



Figure 3 shows that in many of the Emerging European countries the share of foreign exchange loans exceeds the share of the domestic currency loans. Having that in mind and other factors mentioned above, it is no surprise that in some countries, the share of foreign currency borrowing to total credit is more than 60% (Baltic countries, Bulgaria, Croatia and Macedonia), which can be seen as a trend in the recent several years (2005-2009). Although there is evidence of the proccess of de-dollarization in some countries the scale of the phenomenon of dollarizaion is still big enough for raising concern. This comes to importance even more if we concider that the credit dollarization is greater than the deposit dollarization.

**Figure 4:**

Average financial dollarization 2001-2013



This relationship comes form the fact that there is dominant presence of the foreign banks in these countries. As we can suppose the presence of financial institutions that have easy access to foreign founds (credit markets), the balance currency mismatch fears will predominate. They usually not only increase the share of foreign currency denominated credits, but also increase the possibility for contagion in the whole region where some foreign banks are dominant. Our analysis show that in the countries where FX credits are prevalent, there is a greater probability for credit defaults.. Certainly, there are many reasons for appearance of the credit defaults, but the dominant FX lending cannot be neglected.

At the outset of the recent global crisis, the appearance of the exchange rate risks associated with FX lending forced banks to take precautionary measures. For instance, in 2008, Erste Bank stopped granting CHF-denominated credits in Austria and Hungary, and redefined the criteria for approving EUR-denominated foreign currency credits. Such measure reduced retail FX lending to households (Erste Group 2009a, 3). In the similar way, Hypo Group Alpe Adria announced that it stopped all foreign currency lending activities in USD and CHF in the autumn of 2008 (Hypo Group Alpe Adria 2009, 56). Furthermore, in Hungary, which is among the countries with the highest share of FX loans, banks completely stopped granting loans denominated in Swiss Franc (CHF), which until then represented over 90% of new mortgage loans.

**Table 1:**

Provision for impairment losses (2007-2009)

| (€m) | 2007 | 2008 | % | Q1 2008 | Q1 2009 | % |
|---|---|---|---|---|---|---|
| Raiffeisen International | 357 | 780 | +119% | 93 | 445 | +379% |
| Erste Bank | 455 | 1,071 | +135% | 163 | 370 | +127% |
| Bank Austria/ UniCredit | 483 | 1,012 | +109% | 103 | 332 | +222% |
| Volksbank International | 43 | 72 | +69% | n/a | n/a | n/a |
| Hypo Alpe Adria Group | 274 | 533 | +95% | n/a | n/a | n/a |

*Source: Reiffeisen International bank, Erste group, Bank Austria, Volksbank International, Hypo Group Alpe Adria.*

EU-based parent banks as part of the European Bank Coordination Initiative ("Vienna Initiative"), also pledged to keep their FX exposures and to recapitalize its CESEE operations (Nitsche, 2010). Central banks and governments also revised their policies towards FX lending (EBRD, 2010; Steiner 2011; UniCredit 2011). Ukrainian policy makers banned FX lending to unhedged borrowers in October 2008, and Turkey for FX lending to individuals in June 2009. Similar policy measures were raised in Poland, Romania, Hungary and Croatia, all aiming to stop or slow the expansion of the foreign currency borrowing.

## 4. Episodes of financial crises related to foreign currency borrowing

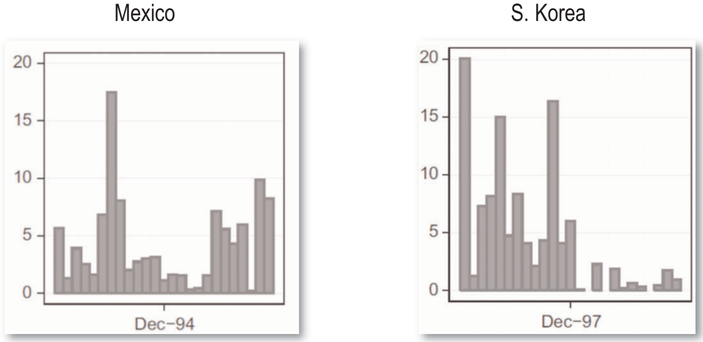
The Great Russian writer has once said something that can be used as an introduction to what this part wants to elaborate: "All rich families are the same. But, all unhappy families are miserable in their own way". We can compare the financial crises in similar way: every financial crisis is different from another and has its own characteristics, but also they have rudiments that can be seen as similar form different crises.

With little differences, today we can identify certain pattern for development of the past financial crises. First, after every period of large capital inflows, the investors (domestic and foreign), expecting the worsening of the economic fundamentals try to export their capital from the affected country. Second, this leads to completely changed pattern of the investors' behavior, which can easily put the country in a situation of episodes of bank run. Third, large outflows of capital, accompanied with great currency depreciations, foster the vulnerability of the financial institutions in the country. Such situations, at the end usually result with decreasing credit activity, deleveraging and worsening the economic fundaments of the country.

Close analysis of the Asian and Latin Americas crisis; lead the economists to the conclusion that the foreign currency borrowing is an important factor for the appearance of the financial imbalances (Eichgreen and Hausmann 2005). In addition, in countries like Mexico (1994), several countries from Eastern Asia (1997), and Argentina (2001), prior to the crises, the regime of fixed exchange rates was considered as the factor for stability. But exactly the fixed exchange rate was the reason for prevalence of the foreign currency use and consequently, for the eruption of financial crises.

The figure 4 shows us that the similar pattern followed the crises in Mexico and South Korea. At the beginning, there were major increases in the foreign currency lending, and after the large financial imbalances were developed, the investors perceived the FX landing as toxic.

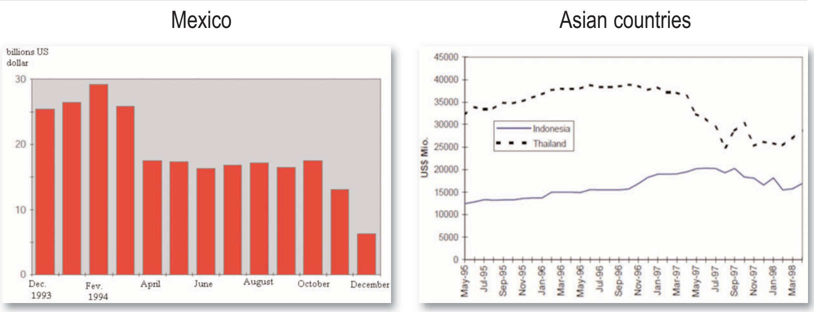
**Figure 5:**
Foreign borrowing of the private sector in Mexico and S. Korea (% of GDP)




*Source: Hale, Arteta, 2009.*

The period leading to the rapid increase of the foreign currency borrowing was characterized with large foreign capital inflows from foreign investors. Banks were approving credits with little awareness of the long term risks, and what is more important; most of the credits were denominated in foreign currency. Everybody forgot the FX risks, since the countries had great amount of FX reserves, as they were the investors' paradise for the period.

**Figure 6:**
Foreign currency reserves (Mexico and Asian countries)




*Source: IMF - International Financial Statistics.*

Suddenly, several political and economic shocks, made the investors to lose their trust in the countries strong fundamentals, and begin to withdraw their capital. With many foreign and domestic investors pulling out large amounts of capital, the countries were left with almost no funds to defend their nominal exchange rates, and eventually to devalue their currencies.

The aftermath is well known in the history of financial crises. Private sector couldn't serve its obligations in foreign currencies; The governments didn't manage to collect enough money to pay its debt liabilities; Large currency mismatches led to big bank crises and great deterioration of the economics of the countries.

Recent turbulence in the global financial markets has triggered a major review of the conventional wisdom about Emerging Market countries' macroeconomic policies. The result is a wide debate on the set of policies and institutional arrangements for macroeconomic stability to these countries. One important aspect of all debates has been the choice of proper exchange rate system. The 1997 Asia crisis raised serious questions about conventional crises explanations (e.g., current account and fiscal deficits, low saving rates) and led to a noticeable shift of financial analysts' opinion towards favoring floating exchange rates.

### 5. Foreign currency borrowing and the exchange rate regime – The case of Macedonia

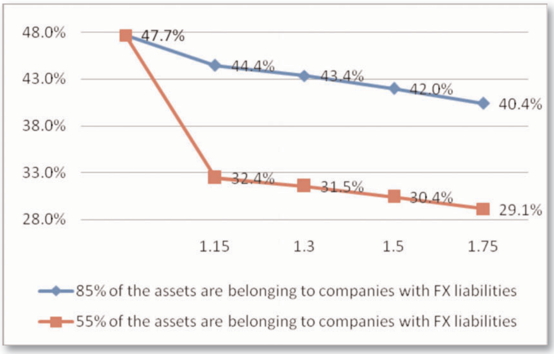
The analysis so far, has shown that, a country with fixed exchange rate regime has the potential to accumulate higher share of FX loans in their banking systems than countries with floating rates. Macedonia has fixed exchange rate and high level of FX loans (more than 80% of the total loans to corporate sector). In those terms we test the impact of denar devaluation on the credit portfolio and banks performance in Macedonia.

In the analysis we put two general assumptions: (1) The denar value of the euro is supposed to devalue by 15%, 30%, 50% and75%; (2) the depreciation is not followed by changes in the aggregate commodity demand (the aggregate revenues of the companies do not change).

The effects of the projected devaluation will be analyzed both on the corporate and banking sector. The company performances will be measured by two indicators; financial stability (an index of the total liabilities to capital), and profit margin, as a buffer to the rising costs due to exchange rate devaluation. Here, we made several adjustments to exclude the net exporters, and the total liabilities that the companies have to foreign companies.

**Figure 7:**
Financial stability ratio of the companies in a case of devaluation of (15%-75%)

*Source: Authors own calculations, according to assumptions and data from official statistics of the NBRM.*

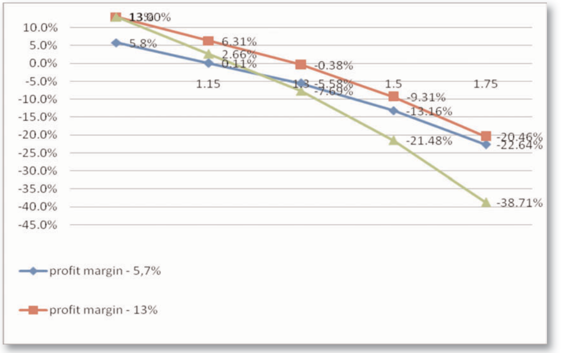



Under assumption that around 15% of the total company assets in the country belong to the companies that do not have liabilities in FX we find a decrease in the financial stability ratio[4] of 40% (form 47% to 29% with devaluation of 75%). Under assumption that 45% of the total company assets belong to the companies that do not have liabilities in FX, the decline of the ratio is 29% (from 47 to 40% with devaluation of 75%). Knowing that Macedonia is small and open economy, the realistic share of the FX liabilities is supposed to be greater, leading us to the concerns about the potential vulnerabilities of the economy. In our analysis we took that 64% of total imported goods were used as a repro-materials, which means that all that goods will have higher price in case of devaluation.

4) Measuring the total capital to total liabilities of the company.

**Figure 8:**
Changes in the profit margin in a case of devaluation of (15% - 75%)

*Source: Authors own calculations, according to assumptions and data from official statistics of the NBRM.*




The analysis shows that even the devaluation of only 15% will make all companies to lose their profits. Like in the previous test we take that 85% (55%) of the total revenues are generated from companies with FX liabilities. Than we first make the calculation under the assumption that these companies have profit margin of around 13%. Then we make calculation with the profit margin of 5,7%, which is the actual nonfinancial companies margin. Analysis shows that the companies enter the negative profit margin territory with devaluation slightly over 15% in both cases, showing great sensitivity to the changes in the exchange rate.

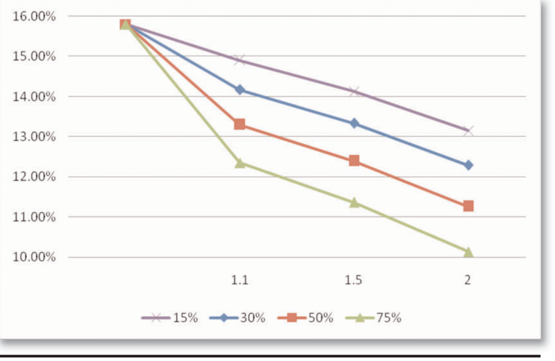
Such dynamics related to the performance of the companies would normally have its impact on the total loan portfolio of the banks, and in the end on their capital adequacy ratio. Rising production costs of the domestic companies will cause them liquidity problems and eventually problems in servicing their loans. With lowered expectations for on time debt repayments, the banks will start to reclassify the companies' loans and calculate provisions for the appropriate risk category.

Our test includes 3 scenarios, representing an increase of the risk categories of the loans from 10%, 50% and 100%. Under assumption of 10% increase of the certain risk category loans, 10% of the risk category with lower provision ratio will be added to the higher provision ratio loan portfolio. This implies that, if some loans enter into a riskier loan category, the total non risk bank portfolio will get smaller.

Another assumption is that there are no new loans disbursed and the worsening of the loan risk classification means that the amount of the free risk loans is decreasing. The bank's capital is corrected only for the additional provisions and not for the open FX position, since it is hard to guess its path (although the results will be even worse if we have data for its assumption).

**Figure 9:**
Bank Capital Adequacy in a case of devaluation of (15% - 75%)

*Source: Authors own calculations, according to assumptions and data from official statistics of the NBRM.*




5) "Financial stability report – 2011", NBRM, 2011.

The results suggest that the banks will face capital adequacy ratio decrease of 19% (36%) if the denar devaluates at 15% (75%). As the simulation shows, the banks will still have enough capital to cover the losses (slightly over 12% with devaluation of 15% and over 10% with 75% of devaluation). However, these are the expected changes in the bank liquidity that would occur only as a result of the changes in the solvency of the corporate borrowers. Here we should expect that the retail sector would be also infected by the devaluation, resulting in decline of the aggregate demand and negative changes in the corporate, banking and government sector. Such assumption leads to a greater decline in the bank capital adequacy ratio, even in cases of smaller percentage of devaluations.

Having that in mind, and the fact that Macedonian banking system is still relatively underdeveloped, in terms of loan to GDP ratio (18,7% for retail loans and 27% for corporate loans), the risks arising from FX borrowing are great and ask for precautionary measures on a regular (systemic) basis.

## 6. Conclusion

Foreign currency borrowing is probably the most visible symptom of financial dollarization. It is prevalent in emerging markets, where firms often borrow in a foreign, rather than the domestic currency. Foreign currency use is also dominant in most countries in Eastern Europe, with the exception of the advanced transition economies (Poland, Slovenia, Czech Republic, etc.). Our analysis points out that the main determinants for the expansion of FX loans are both macroeconomic environment (relative inflation rates, interest rate differential, and exchange rate volatility) and a currency composition of banks deposits.

The paper's short overview of the recent episodes of financial crises shows that in some cases (East Asia in 1990's, Argentina in 2002) unhedged FX borrowing was a major cause of a financial crises. There are also reasons to believe that a surge in FX lending, chiefly in euros and Swiss francs, in some Central and Eastern European countries exacerbated the effects of the recent Global financial crisis. All these examples reveal that FX borrowing was and continues to be a significant source of macroeconomic, financial and personal risks (EBRD, 2010).

Finally, given the very high level of FX borrowing and the fixed exchange rate regime, we tried to test the vulnerability of the Macedonian banking sector under three different scenarios for a devaluation of the denar (15%, 35%,75%). We find that even with our rather stylized assumptions, the test shows a significant deterioration of the banking sector credit portfolio as a result of currency devaluations.

All these arguments suggest that action for reducing the unhedged FX borrowing is critical for making the Macedonian economy (and other transition economies) less vulnerable to potential currency devaluations/depreciations. Unfortunately, at least for now, this topic is "non-issue" both for policymakers and academic economists in Macedonia. We will be happy if this paper would be a start of a fruitful debate about an interesting and important issue.

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# MONETARY RESPONSE TO THE GLOBAL ECONOMIC CRISIS IN A SMALL, OPEN ECONOMY WITH FIXED EXCHANGE RATE - THE CASE OF THE REPUBLIC OF MACEDONIA

**Trenovski Borce, PhD**[6]
**Tashevska Biljana, MSc**[7]

***Abstract***

*The global economic crisis imposed one of the most significant challenges for the conduct of monetary policy, which forced monetary authorities throughout the world to reach the limits of their conventional instruments and implement new sets of measures for exit of the crisis. The situation created by the global crisis presented an especially interesting challenge, not only for developed economies, but also for small economies with fixed exchange rate, which were supposed to survive this economic storm without having their anchors blown away by the "strong wind". The Macedonian economy is an example of a small open economy, highly intergrated in trade, which for a longer period maintains the fixed exchange rate as a best suited monetary regime for sustaining a stable macroeconomic environment. The monetary authority (NBRM) successfully responded to the challenges of the global economic crisis despite the specific characteristics of the Macedonian economy and the monetary regime which limits its response. Thus, we found a special challenge in elaborating and analyzing the response of the Macedonian monetary authority to the global crisis. The elaboration of the undertaken measures can be a solid ground and a guide for the creation of monetary policy in small open economies with a fixed exchange rate.*

*The paper is structured as follows: the first section elaborates the transmission of the economic crisis; the second section focuses on the general picture of the monetary resonse; the third section analyses the monetary authority's response at the beginning of the global crisis, when it reacted with a monetary tightening; the fourth section elaborates the monetary policy response in the peak of the crisis, characterized by monetary relaxation; the fifth section presents the macroprudential measures implemented for fighting the crisis and the last section gives summarized conclusions about the monetary response to the crisis.*

***Keywords:*** *monetary policy, global crisis, monetary measures, macroprudential policy*

6) Assistant Professor, Ss Cyril and Methodius University, Faculty of Economics – Skopje, borce@eccf.ukim.edu.mk, 3286-887, R. Macedonia; CEA Senior Economist

7) Teaching Assistant , Ss Cyril and Methodius University, Faculty of Economics – Skopje, biljana@eccf.ukim.edu.mk , 3286-881, R. Macedonia

**Introduction - Transmission of the global crisis to the Macedonian economy**

Before we turn to the elaboration of the monetary policy response to the conditions imposed by the global crisis, we try to present in short the transmission channels through which the crisis affected the Macedonian economy. The reason behind this is that these channels are at the same time signals, determinants and limits which the monetary policy makers take into account when formulating their reaction to the current situation. More specifically, these transmission channels presented the shocks (targets/aims) towards which the monetary policy measures were directed.

The specific transmission channels of the Global economic crisis to the Macedonian economy are mainly determined by the specific features of the Macedonian economy - trade intergration, financial integration and influence of the global trends on the expectations and confidence of economic subjects. Macedonia, as a small open economy, can not achieve solid growth rates and function successfully if isolated from its environment (trade partners, foreign investors, international capital markets etc.). The large net-trade exchange of about 115% of GDP, the high level of eurozation (foreign currency deposits account for almost 45% of M4), the poorly predictable money demand and the significant import dependence of the Macedonian export sector are the main reasons for NBRM's strategy of de facto fixed exchange rate, which presents yet another determinant of the transmission mechanism. Accordingly, the current account deficit (the significance of exports), the FDI and the portfolio investments, the access to international capital markets, the movement of the world market prices – are all important determinants which in the presence of a de facto fixed exchange rate, determine the stability of the Macedonian economy and the reaction of the economic policy. The main transmission channels determined by the specifics of the Macedonian economy are: first, the fall in the global economic activity (especially the economic activity of our key trade partners); the deterioration of the international capital markets and the worsening of investors' confidence in markets and their risk aversion. These main transmission channels, in the period of the bancrupcy of "Lehman Brothers", caused a decrease of Macedonian exports, due to the declilne of the foreign effective demand, limited financing sources, as well as a rise in their price, a decrease in FDI inflows, portfolio investments and private transfers (as a dominant source of finance of the current account deficit). This in turn caused a fall in the production of the export sectors (the motors/carriers of GDP growth), a lower credit activity and hence a restriction and higher costs of financing for households and businesses, a decline in the activity of the securities markets, pressures on the exchange rate etc.

Before the crisis, Macedonia experienced a period of rising GDP growth trend, low inflation rates, low or balanced budget deficits, declining trend of public debt, a slight recovery of the export sector and a modest decrease in unemployment rates (see table no.1 below). The positions of the key macroeconomic indicators represent on the one hand stabilizers (or transmission channels) of the Macedonian economy from the effects of the global crisis, and on the other hand, they are the main determinants of the key macroeconomic policies undertaken in the period when the effects from the crisis were most severe and later.

**Table No.1** - Main macroeconomic indicators for Macedonia

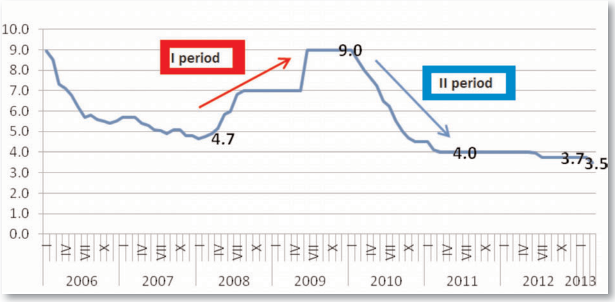
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GDP (%, constant prices) | 4,5 | -4,5 | 0,9 | 2,8 | 4,6 | 4,4 | 5,0 | 6,2 | 5,0 | -0,9 | 2,9 | 3,1 | 1,0 |
| Inflation (end of period, %) | 5,8 | 4,0 | 0,8 | 2,7 | -2,2 | 1,6 | 3,1 | 6,7 | 4,1 | -1,6 | 3,0 | 2,8 | 2,0 |
| Export of goods and services (change in %) | 20,4 | -15,6 | -5,1 | -5,9 | 13,1 | 11,0 | 8,3 | 12,0 | -7,0 | -15,7 | 24,2 | 10,5 | 5,0 |
| Unemployment (% of total) | 31,7 | 30,5 | 31,9 | 36,7 | 37,2 | 37,3 | 36,0 | 34,9 | 33,8 | 32,2 | 32,1 | 31,4 | 31,9 |
| Public expenditures (% of GDP) | 33,7 | 40,3 | 40,5 | 37,4 | 35,2 | 34,0 | 32,5 | 31,6 | 33,4 | 33,2 | 32,0 | 31,2 | 31,3 |
| Budget deficit (% of GDP) | 2,5 | -6,3 | -5,6 | -0,1 | 0,4 | 0,2 | -0,5 | 0,6 | -0,9 | -2,7 | -2,4 | -2,5 | -2,5 |
| Total public debt (% of GDP) | 47,9 | 48,8 | 42,9 | 37,9 | 35,6 | 39,5 | 32,0 | 24,0 | 20,6 | 23,8 | 24,2 | 27,7 | 30,9 |
| Current account deficit (% of GDP) | -1,9 | -7,2 | -9,5 | -4,0 | -8,1 | -2,5 | -0,4 | -7,1 | -12,8 | -6,8 | -2,1 | -2,7 | -4,0 |

*Source: International Monetary Fund, World Economic Outlook Database, October 2012 (forecast begins in 2011)*

## The response of monetary policy to the challenges imposed by the global economic crisis

The fixed exchange rate regime, implemented by NBRM, relates monetary actions with the stock and flows of foreign exchange reserves (the stability of the exchange rate), which reflects the movements of inflation, economic activity, external sector, the action of fiscal policy and the expectations of economic agents. Therefore, every pressure on the exchange rate (the anchor of price stability) forces monetary policy interventions aimed at eliminating the pressures and stabilizing the situation in the foregin exchange market. This should be taken into account when analyzing the monetary policy response in Macedonia to the Global economic crisis. The general overview leads to the conclusion that the monetary response to the global economic crisis in Macedonia can be divided into two parts, which correspond to two periods (see charts no.1 and no.2):

**Chart No.1** CB Bills interest rate

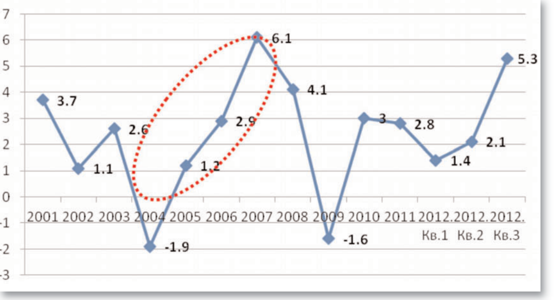



*Source: NBRM*

The first period which began in the last quarter of 2007 and lasted until the beginning of 2009, characterised by the presence of upward pressures on the price level and large pressures on the exchange rate, caused an unfavorable ambient for conducting monetary policy and a conduct of a restrictive monetary policy;

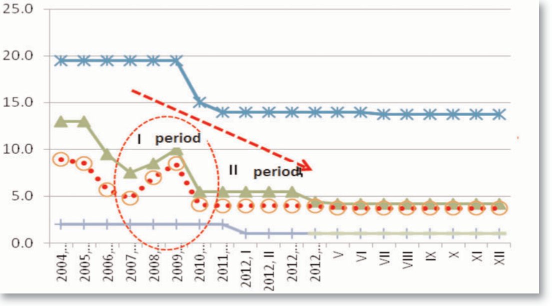
The second period continued in the second half of 2009 (the peak of the global crisis), when the pressures on the exchange rate relaxed and the inflation pressures weakened, the expectations of economic agents stabilized, the external sector movements improved, which created favorable conditions for monetary relaxation (NBRM joined the majority of central banks in the world which already had relaxed their policy).

**Chart No.2** – Inflation




*Source: NBRM*

**Chart No.3** - NBRM active and passive interest rates (end of period, annual base, in %)




*Source: NBRM*

## The first response of monetary policy (first period) - monetary tightening

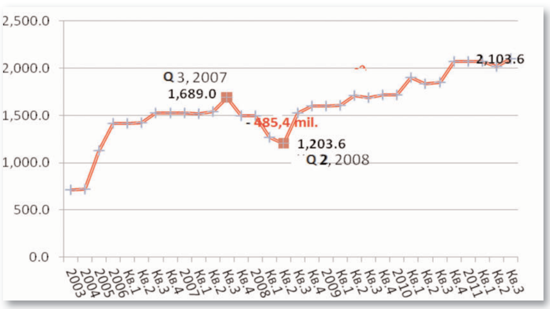
In the pre-crisis period the monetary policy in Macedonia was being conducted in a more favourable and relaxed macroeconomic atmosphere, characterised by positive GDP growth rates, low inflation rates, favourable external sector movements (increased export activity, positive movements of portfolio and FDI, large private transfers inflows – narrow balance of payments deficit), a stable banking sector, a continuous credit expansion in the banking sector, a prudent fiscal policy.[8] In order to maintain the main goal of NBRM and to maintain the stability of the nominal exchange rate in this period through foreign currency transations, NBRM constantly purchased large amounts of foreign currencies in the foreign exchange market. However, the first signals of the coming changes began to show in the second half of 2007, when the inflation rate began to intensify as a result of the higher food price growth, reflecting the global trends. The pressures for depreciation of the domestic currency were especially evident in the last quarter of 2007, resulting from the deteriorated balance of payments situation, predominantly due to the outflow of foreign currency assets for using foreign currency rights for portfolio investments. This presents the first effects of the global economic (at the time mortgage/financial) crisis, which influenced the demand for financial intruments on the global financial markets (including the countries which were not directly involved in the toxic securities net), resulting from the increased uncertainty on the global financial markets, the worsening liquidity, the increased capital prices, the increased risk aversion.

8) More extensively see in NBRM's annual reports for 2005, 2006 and 2007:
http://www.nbrm.mk/default.asp?ItemID=31460AE7ECA4DE4585DC1FA67A807D0A

The real pressures which attracted the attention of the monetary policy and which were the reason for its action toward tightening, occurred during 2008 (especially in the first two quarters), as a result of the adverse economic/financial events that shook the Macedonian economy:[9] the rising trend of prices of food and energy from 2007 continued, the domestic demand added oil to the fire, the inflation continued to increase, the portfolio-investments significantly decreased, private transfers fell as well, the domestic demand adjusted slowly and still contributed to worsening of the terms of trade and to deepening of the trade deficit, which started to significantly increase the pressures on the foreign exchange market. Although determined actions (elaborated below) undertaken by NBRM and the achieved capital inflows contributed to stabilization of the situation on the foreign exchange market in the third quarter and especialy towards the end of the during a period of escalating economic situation on a global level, the fear of spillover effects to the Macedonian economy and the concern over the stability of the banking system and the domestic currency caused significant psychological pressures that further contributed for the psychological channel to be the reason for an increased demand for foreign currencies. In order to catch the power of the pressure present on the foreign exchange market on the value of the domestic currency, we point to the fact that since the third quarter of 2007 until the second quarter of 2008, the foreign currency reserves were cut by ¼, i.e. by 485,4 million euros (see chart no.4). These tendencies continued with a variable dynamics in the first half of 2009, when the uncertainty and the risks coming from the global economic crisis continued to reflect on the monetary positions of the domestic economy, causing serious pressures for depreciation of the domestic currency and forced NBRM to intervene with net-sales of foreign currencies in the first quarter of the year.

**Chart No.4** - NBRM official reserves (in mil. €)

*Source: NBRM*




The efficiency of the monetary policy measures, the decreased uncertainty about the global developments, the adjustment of the import demand, as well as the more positive forcasts of the external position of the couny in the following period (beginning in the second half of 2009), significantly eliminated the pressures on the domestic currency and created a basis for a change in monetary policy toward its relaxation. The elaborated movements and tendencies in the first period (just before the crisis and in terms of the crisis), especially the strong pressures on the general price level and on the exchange rate, beginning at the end of 2007 until the beginning of 2009, were the reason for NBRM to take a number of measures and changes in the monetary instruments in order to stabilize the expectations of economic agents, to contribute to lowering of the inflation pressures, to stabilize the situation on the foreign exchange market, to maintain the stability of the financial sectors and to achieve its main goal – maintain a stable price level.

The relaxed pre-crisis macroeconomic ambience, characterized by a credit expansion in the bankng sector, by the structural excess of denar liquidity in condition of a shallow financial market and a poor portfolio of securities owned by banks (high preferences for investment in Central Bank bills) was the

9) More details on the monetary movements in this period can be found in the Annual report of NBRM for 2008, pp.80-120, available on: http://www.nbrm.mk/WBStorage/Files/Godisen_izvestaj_20085.pdf

reason for NBRM to implement a number of changes in the position of its instruments in order to remove these anomalies:

- On January 11, 2005, came into force the decision to increase the reserve requirement rate for denar and foreign currency deposits from 7,5% to 10%, in order to decrease the structural excess of denar liquidity and a larger coverage of short term foreign currency liabilities with liquid assets.
- In order to stimulate the secondary market of securities and the interbank money market, and to reduce the influence of NBRM on the primary securities market, a number of changes to positions the main monetary policy instrument (CB bills bills) were made – on January 20th 2005 the every-day auctions of CB bills with maturity of 7 days were suspended/canceled and were to be hold twice a week; on March 9th 2005, after the movements on the foreign exchange market had stabilized, NBRM suspended/canceled the CB bills with 7 day maturity. As a result from the favourable macoreconomic movements near the end of 2005 (October 26th, 2005), there were conditions for NBRM to transfer from "volume tender" to CB bills auction on the principle "interest rate tender", which enables a market forming of interest rates (in this case – their decrease).
- In order to promote repo-operations and to increase the security of approved money funds, NBRM at the end of September 2005 made a decision with which the approval of Lombard credit was replaced by an overnight credit, approved as a repo-transaction. Also, the daily overdraft allowed to banks for working with their daily transactions? was replaced by an intraday repo.
- With the aim to reduce the structural excess of liquidity in the period, i.e. its sterilization on a longer term, on March 7th 2006, NBRM, in agreement with the Ministry of finance, began to issue treasury bills for monetary policy purposes with a 3 month maturity. This instrument, beside the purpose of sterilization of liquidity, enabled investors to focus on the market for short term securities, as well as a more efficient liquidity management and improvement of the monetary policy transmission mechanism.
- The planned issuing of treasury bills for monetary policy purposes was done simultaneously with the lowering of the frequency of holding central bank bills auctions in order to direct the demand toward the new instrument. Therefore, in Februay 2006, NBRM reduced the frequency of the auctions for central bank bills from twice to once a week.
- During 2006, in order to adjust the interest rate of lombard credits to the market interest rates, it was cut twice, reducing it from 13% to 9,5%, and in 2007 it was further reduced to 7,5%.
- Aimed at an equal treatment and a wide scope of liabilities from banks' balance sheets, in December 2007 NBRM adopted a Decision on reserve requirements of banks (entering into force in February 2008), expanding the basis for calculation of the reserve requirements, with the inclusion of new categories of accounts from the balance sheets of banks.
- In December 2007, NBRM adopted a Decision (entering into force in January 2008), which fully liberalized the purchase of securities by nonresidents, i.e. the foreign exchange rights and the other requirements for portfolio investments by non-residents were revoked (according to the requirements under the Stabilization and Association Agreement between RM and EU).

**Response to the first effects of the global crisis – monetary tightening**

The specific circumstances which have roots from the end of 2007, enhanced in 2008 and forced a response from the monetary authority, focused on eliminating the strong pressures on the foreign exchange market and stabilizing the inflation an disinflactionary expectations of economic agents:

- The significant outflow of foreign currency and the expected increase of prices caused NBRM to transform the “interest rate tenders” into “volume tenders”. Additionally, NBRM increased the interest rate on Central Bank bills in 2008, from 5,08% to 5,25% in February; from 5,25% to 6% in march; from 6% to 7% in may. Also, in june 2008 a decision was made to increase the interest rate on Lombard credit from 7,% to 8,5%. The rising trend of interest rates on Central Bank bills and Lombard credit continued in the first half of 2009. In March 2009, the interest rate on Central Bank bills was increased from 7% to 9%, while the interest rate on Lombard credit from 8,5% to 10,5%.
- The inflationary pressures and the pressures on the foreign exchange market and other macroeconomic disturbances, combined with the pressures in the banking sector, through the too fast credit growth, provoked an adoption of a Decision on a required deposit in NBRM, which the banks are obliged to allocate if the growth of credit to individuals exceeds the established rate of growth of this type of credit. Banks and saving houses are obliged to allocate a mandatory deposit in NBRM if their population credit growth exceeds 40% annualy (at the end of December 2008). The extraction is done once a month, for the excess amount above the established rate. NBRM pays an interest rate on the allocated amount of 1% per annum. In December 2008, the validity of this decision was extended throughout 2009.
- In may 2009, a decision was adopted on reserve requirements, in which the rate of allocated reserve requirement for banks’ liabilities in foreign currency was increased (it entered into force in July 2009). The rate of liabilities in foreign currency was increased from 10% to 11,5% (and later in august 2009 from 11,5% to 13%) and also the rate of liabilities in domestic currency with foreign clause rose from 10% to 20%. This decision allowed banks to be able to fully use the extracted funds for reserve requirements for covering the daily liquidity needs. In October 2009, NBRM reached a decision prescribing that the rate of ? for reserve requirements in euros to be 0,10% per annum.

**The second response of monetary policy to the gloibal crisis (second period) – monetary relaxation/loosening**

The reduced uncertainty about the global economic activity and the stabilization of the external sector created conditions for relaxation of the monetary policy at the end of 2009. These economic movements continued the next year, 2010,[10]: the inflation rate was kept at a low level, the domestic demand recoverd slowly, the temporary positive movements on the global markets influenced positively on the foreign effective demand/Macedonian exports in times when the import slowly adjusted, the private transfers showed a growing trend, the current account deficit was decreasing. These movements in conditions of foreign exchange rate targeting enhances the capacity for action (relaxation) of monetary policy. The created room for monetary policy in time when economic activity was slowly recovering and the movements in the financial/banking sector showed that the confidence in it slowly returns (the process of crediting/support of businesses was deteriorated) was the reason for the monetary policy to significantly relax during the year (the interest rate after a severalfold cut reached at the end of the year a record low level thusfar of 4%). The tendencies in 2010 continued in the first half of 2011, with the exception of the risks arising from the accelerated growth of inflation, which were successfully put under control by the monetary authority, not requiring large changes in monetary policy. In a dominant part the favourable climate for conducting relaxed monetary policy continued in 2012 – the inflation was on a low and controlled level, without more significant risks from acceleration, the position of the balance of payments remained favourable, which created room for monetary loosening, aimed at contributing to a larger credit growth and support to the domestic economic activity. However,

10) More details on the monetary movements in this period can be found in the Annual report of NBRM for 2008, pp.80-120, available on: http://www.nbrm.mk/WBStorage/Files/Godisen_izvestaj_20085.pdf

the significantly weaker economic activity in the Eurozone in that period, considering the trade integration of the domestic economy, increased the volaility of the real/export sector (there was even a recorded decrease of economic activity at the beginning of the year) and imposed a need for the events on the global scene to be seriously observed by NBRM, in order to register and eliminate on time the eventual occurrence of real risks for monetary policy.[11]

Response to the global crisis – monetary relaxation

- The reduced uncertainty, the stabilized external sector, the stabiized foreign exchange market, the reduced pressure on the overall price level allowed the monetary policy to take a new course at the end of 2009 and to begin the long time expected (and often debated about) monetary loosening. On november 30th 2009, the interest rate on CB bills was carefully reduced from 9% to 8,5%, while the interst rate on Lombard credit was reduced from 10,5% to 10%. The following years, the interest rates on CB bills and overnight credit were further reduced 7 times, from 8% and 9,5% (in march 2010) to 4% and 5,5%, respectfully (until december 2012). Due to the favourable macroeconomic conditions and climate for the monetary policy, NBRM reduced the key interest rate by 0,25 p.p., i.e. from 4% to 3,75%.
- In february 2011, with the aim to support the financial stability and improvement of the liquidity risk management by banks, NBRM introduced a new instrument – a bill of six-month deposit which enabled banks to place denar funds in NBRM with 6 month maturity (and the possibility for ), with the interest rate epending on the 6-month EURIBOR, increased by 0,5p.p. These funds were also acknowledged for banks to fulfil the coeficients for denar and foreign currency liquidity.[12]
- In september 2011 (in force since January 2012), with the aim to stimulate long-term savings by individuals, growth of banks' credit potential and the development of the repo-market, a change was adopted to the setting of the reserve requirement, which releases banks from reserve requirements on the liabilities toward households for time deposits with agreed maturity of over 2 years, as well for the obligations coming from repo-transactions in denars (and changes in the periods for fulfinig the reserve requirement).[13]

In course of increased flexibility, more active liquidity management and enhanced support for financial markets development, in April 2012, NBRM adopted changes in the operational framework for conducting monetary policy[14] - for a more favourable approach to liquidity and money market development it introduced regular weekly repo-operations for providing liquid assets to the banking system; for a more attractive application of repo-operations it reduced the frequency of the auctions of Central Bank bills to once in the period of reserve requirement and it introduced a restrictedamount of offered CB bills; for an enhanced flexibility in liquidity management in the bankinkg sector it introduced seven-day deposit facility, which are made available to banks every Wednesday, at their initiative (with a 2% interest rate p.a.).

The first unconventional measure of NBRM – on 29.11.2012 (into force since January 1st, 2013, and to be implemented until the end of 2014), NBRM adopted a new Decision on reserve requirements[15],

11) See more details on the monetary movements and risks to the financial and real sector in this period in the quarterly reports of NBRM for 2012 (http://nbrm.mk/?ItemID=3879E6ED9740AD40BFFD41BC269831E9). See also the quarterly reports for 2012 of the Ministry if Finance of the Republic of Macedonia, available from : http://finance.gov.mk/node/692

12) Decision for a 6-month deposit in NBRM, Official gazette of RM, no. 14/11.

13) Decision on reserve requirements, Official gazette of RM, no. 126/2011

14) See the Quarterly Report of NBRM, April 2012, available from: http://nbrm.mk/WBStorage/Files/WebBuilder_Kvartalen_izvestaj_april_2012_SP_WEB.pdf

15) See Official Gazzette of RM no.153/2012

which allows for a reduction of the basis for reserve requirements of banks for the amount of newly extended credits to net-exporters and to firms for financing projects for domestic production of electric energy for own and/or commercial purpose, for investments in debt securities in domestic currency issued by the above mentioned nonfinancial companies, as well as a complete exemption from allocating reserve requirements for the liabilities of banks for issued debt securities in domestic currency and with an original maturity of at least two years.[16] Having in mind that this measure appllies only to specified sectors and instruments and has been adopted for a defined time period, it is considered to be an unconventional/nonstandard measure of monetary policy (these unconventional measures have been an important instrument in dealing with the global crisis in the USA and the EU). This measure is aimed at facilitating and improving the conditions for crediting two key sectors for economic growth, net-exporters and companies in the energy sector, while the facilitations for investments/issuing securities is aimed at suppporting the development of the capital market.

### Macroprudential policies in response to the global crisis

As the effects of the global crisis became more severe, the increased need emerged for measures to support the stability and liquidity of the financial/banking pressure and by that to maintain the stable macroeconomic environment of the country (these measures entered in force since 01.01.2009).[17]

- In order to reduce the credit risk of the banking sector from household crediting and in order to slow down/restrain the credit expansion, NBRM, in March 2008, adopted amendments to the Decision on the methodology for determining capital adequacy. This increased the risk weight for used overdrafts based on current accounts and used credits by individuals based on credit cards.
- In order to reduce the risks imposed by the global economic crisis in terms of liquidity problems faced by many financial institutions in the world, NBRM introduced an obligation for banks to maintain at least the required lowest level of liquid assets to cover liabilities that are due in the following 30 and 180 days (especially in foreign currency and in denars).
- In order to avoid the risk of placement of foreign currency assets in the banking sector abroad in times of a global financial tsunami, a Decision on foreign currency deposits with NBRM was adopted, which entitles banks to place foreign currency funds in NBRM under interest rates equal to those in central banks in the Eurozone and the international financial institutions.

Amendments in the Decision on exposure assume the exposure of domestic banks to foreign first class banks to be included in the exposure limits in full amount instead of the former practice of 20%.

- A Decision on the type of securities that authorized banks can buy and sell abroad, which provides an increase in the lowest allowed long-term credit rating of securities in which an authorized bank can invest abroad.
- A Decision prescribing the minimum required elements for management of the interest rate of the portfolio of bank activities, as well as the way of measuring the bank exposure to this risk.
- In September 2011, aimed at larger credit support to the economy and a more rational liquidity management of banks, NBRM amended the Decision on managing banks' liquidity risk in terms of relaxing the required level of liquidity of banks – it introduced a unique liquidity rate irrespective of

16) See Quatrerly report of NBRM, January 2013, available from:
http://nbrm.mk/WBStorage/Files/Istrazuvanje_Kvartalen_izvestaj_Januari_2013.pdf

17) See in detail in the Annual Reort of NBRM for 2008, pp 88-89, available from:
http://www.nbrm.mk/WBStorage/Files/Godisen_izvestaj_20085.pdf

the currency, instead of the previous following of liquidity separately for denar and for foreign currency positions.[18]

- Establishing a Financial Stability Committee, comprised of representatives of NBRM and the Ministry of Finance, with a basic goal, following the example of developed economies, to analyze the events in the econonmy and the financial sector, to assess the risks, to propose preventive macroprudential policies and to coordinate fiscal and monetary policy. This Committee held its first meeting on 1st September 2011, when a common ascertation of the Ministry of Finance and the NBRM was reached, stating that there is no serious risk threatening the financial sector in Macedonia, neither from a systemic risk aspect, neither from external shocks and macroeconomic performances aspect.[19]

### *Concluding remarks*

*(summary of the response of the monetary policy in times of the Global economic crisis)*

- Each pressure on the foreign exchange rate (the anchor of price stability) forces interventions by monetary policy for eliminating the pressures and interventions on the foreign exchange market.
- The monetary response of NBRM to the global crisis can be divided into two parts, which refer to two periods:

  The first period began in the last quarter of 2007 and lasted until the beginning of 2009, in which there were significant upward pressures on the pirce level and large pressures on the foreign exchange rate. This caused a non favourable environment for conducting monetary policy and was the reason for leading a restrictive monetary policy;

  The second period, which continued from the first half of 2009 (the peak of the global crisis), when the pressures on the foreign exchange rate and the inflationary pressures weakened, the expectations of economic agents stabilized, the movements of the external sector improved, thus creating conditions for relaxation of the monetary policy;

- The first signals/effects became present in the first half of 2007, when the inflation rate began to intensify as a result of the faster growth of food prices, which resulted from the global trends. The real pressures that attracted the attention of monetary policy and triggered its action in the course of tightening emerged during 2008 – from the third quarter of 2007 to the second quarter of 2008 the foreign reserves fell by ¼, that is for 485,4 million euros more precisely.
- Reducing the uncertainty about the global economic activity, stabilization of the external sector created conditions for monetary policy relaxation at the end of 2009.

### Measures of the monetary authority as a response to the global crisis

*The eve of the crisis - a relaxed macroeconomic environment*

On 11th January 2005 the Decision of NBRM on increase of reserve requirement for denar and foreing currency deposits from 7,5% to 10% entered into force; on 20th January the everyday auctions of seven-day Central bank bills with maturity were abolished; on 9th march 2005, after the foreign exchange market stabilized, NBRM canceled the 7-day central bank bills; NBRM moved from “volume tenders” to “interest rate tenders”; in September 2005 it replaced, by Decision, the Lombard credit with

18) The Decision on liquidity risk management of banks (Official Gazzette of RM, no. 126/2011)

19) See Archive of the Government of R. Macedonia: http://arhiva.vlada.mk/?q=node/7044, http://vlada.mk/node/1139

an overnight credit; on 7th march 2006, NBRM, in accordance with the Ministry of finance, began to issue 3-month treasury bills for monetary purposes; the intrest rate of the lombard credit was twice reduced, falling from 13% to 7,5%; in December 2007 the basis for calculation of the obligation for reserve requirement was expanded, by inclusion of new categories of accounts from the balance sheets of banks; in December 2007 NBRM adopted a Decision for a complete liberalization of purchase of securities by non-residents.

*Response to the first effects of the global crisis – monetary tightening (I period)*

February 2008 – NBRM switched from “interest rate tenders” to “volume tenders”; the interest rate on central bank bills was increased several times – from 5,08% in February 2008 to 9% in may 2009; a Decision on deposit requirement in NBRM was passed, which deposit the banks will allocate if the household credits exceed the established growth rate for this type of credit; in may 2009 a new decision was adopted for reserve requirement, increasing the rate of reserve requirement for banks’ liabilities in domestic and foreign currency.

*Response to the global crisis – monetary relaxing (II period)*

30 november 2009 – the monetary policy relaxation took off and the interest rate of central bank bills and Lombard loans dropped from 9% and 10,5% to 4% and 5,5,%, respectively, in December 2012; in may 2012, NBRM additionally reduced the basic interest rate by 90,25 p.p., i.e. from 4% to 3,75%; NBRM introduced a new instrument – a bill for six-month deposit entering into force on January 2012; a Decision was adopted, exempting/discharging banks from allocation of reserves for their liabilities to individuals on the ground of time deposits with maturity over 2 years, as well as for the liabilities on the ground of repo-transactions in denars; in course of increased flexibility, more active liquidity management and enhanced support for financial market development, NBRM in april 2012, amended the operational framework for condutcting monetary policy; the first unconventional measure of NBRM, ), which addresses the selective reserve requirement, was adopted on 29.11.2012 (it entered into force on 1 janury 2012

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# DETERMINANTS OF TOURISM CONTRIBUTION TO NATIONAL ECONOMY

**Biljana Petrevską, Ph.D**
"Goce Delcev" University - Stip,
Faculty of Tourism and Business Logistics - Gevgelija, Macedonia

***Abstract***

*The aim of the paper is two-folded: firstly, theoretically to examine the determinants of tourism contribution, and then secondly, empirically to test the most profound factors that have influence on tourism development in Macedonia. Moreover, the study attempts to discover the relationship and the level of significance of several variables representing tourism contribution. For that purpose, the regression makes estimations by the OLS method, with a data set covering 1993-2012. The research findings reveal that some determinants exerted economically important influence on Macedonian economy, by showing elasticity. Particularly, the results show that foreign tourist arrivals is an influencing element, crucial for further tourism development, thus supporting the national economy.*

***Keywords:*** *Tourism contribution, Multiple regression model, Macedonia.*

## Introduction

Tourism has emerged as one of the major industries in the world economy. In 2011, it contributed almost EUR 4.5 trillion to the world global economy, or 9% of global gross domestic product (GDP), 100 million direct jobs and EUR 500 billion investments in tourism (WTTC, 2011). Due to many effects that implies, tourism is often promoted by less developed countries. In this line one may note the various economic effects, which affect positively on the overall economy of the country. In one hand, it may have variety of microeconomic influences, like assisting in quality improvement of the employees, benefiting from the scale economies and developing new facilities according to the international standards for tourism demand and supply. Regarding the macroeconomic effects, tourism is seen as a mean for enhancing the foreign export, generating foreign currency earnings, new employment opportunities, contributing to foreign debt repayment, increasing national income, generating new economic sources etc. Moreover, everyone identifies tourism as a source of economic growth and development.

*) Address: Krste Misirkov bb, 2000 Stip, Macedonia, e-mail: biljana.petrevska@ugd.edu.mk R. Macedonia

The main objective of this paper is to investigate the components that have positive influence thus contributing to the GDP of Macedonia. Moreover, this empirical study attempts to estimate the contribution of tourism to the overall economic activity of Macedonia. In order to achieve that goal, the paper is structured in several sections. After the introductory part, a brief overview is given on the theoretical and empirical literature covering the research issue. The paper proceeds with a snapshot on the most important economic indicators representing tourism contribution to Macedonia. The research design encompassing the methodology and research frame are posed in addition as well. The main research findings, discussion and conclusions are noted at the end.

## Literature review

The issue referring the economic impacts of tourism and its effects on country's economic development is highly explored. Namely, numerous researchers have been involved and a wide variety of techniques have been applied in quantifying tourism economic effects. Studies vary extensively in quality and accuracy, but mostly address the economic impact analysis (Crompton, 1993; Lundberg et al, 1995; Huybers, 2007; Babu et al, 2008; Ramos & Jim□nez, 2008; Stabler et al, 2010). In this respect, the economic impact analysis traces the flows of spending associated with tourism activity in a region in order to identify changes in sales, tax revenues, income, and jobs due to tourism activity. The principal methods being applied are visitor spending surveys, analysis of secondary data, economic base models, input-output models and multipliers (Frechtling, 1994: 119).

Due to the fact that economic development represents just one process of a complex system known as human developement, means that economic developement enevitably leads to human developement and the quality of life (Osberg & Sharpe, 2003, p.36). So, the human developement or the increasement of human quality of life is the main goal of the economic development (Hayami & Godo, 2005; Kanbur, 2003). In this respect, the acchieved ecomomic and human developement may be measured and presented by various indicators, like: value agregate indicators, natural indicators, social indicators and so forth (Cypher & Dietz, 2009; Grabowski et al, 2007; Soubbotina, 2004; Todaro & Smith, 2009).

Tourism economic impacts are, therefore, an important consideration in economic development, as well as in state, regional and community planning. In the same line, it is necessary to implement a document for tourism development, since it represents strong mechanism and a tool for creating general policy of the overall economic development (Williams & Shaw, 1991; Frechtling, 2001). Additionally, defining the development priorities as a basic element of the development strategy is the biggest obstacle to each country (Gunn, 1993; Hall, 2005). Such concept, imposes the necessity of introducing new economic policy, whereas, tourism shall be treated as integral part of the entire economy.

## Snapshot on tourism contribution to Macedonia

Macedonia identified tourism as a mean for generating various micro and macro-economic effects (Government of Macedonia, 2012). During 2002-2012, the participation of tourism in the creation of the gross domestic product (GDP) has an average of only 1.35 % per year (Table 1). Compared to the world average of 2.8% in 2011, and the average for Other Europe[20] of 2.4% (WTTC, 2012), lead us to conclusion of very modest tourism contribution.

20) Macedonia is listed in Other Europe, since Europe as a region is divided in two sub-regions (WTTC, 2012, 17):

1. European Union (Austria, Belgium, Bulgaria, Cypris, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and UK);

2. Other Europe (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Iceland, Kazakhstan, Kyrgyzstan, Macedonia, Moldova, Montenegro, Norway, Russia, Serbia, Switzerland, Turkey and Ukraine).

Based on Table 1, generally, one may note growth in the GDP of tourism industry, which was yet, very volatile. However, it has to be pointed out that the negative growth rate is partially due to the war conflicts in Macedonia and the region. For example, in 2000 Macedonia noted extreme fall of tourism activity, which can be interpreted as a consequence to the Kosovo war, bomb attacks on Serbia and refugee crisis in 1999. On the other hand, such conclusion throws a shade on unexpected extremely high growth of tourism in 2002 (when actually all these negative shocks still had an influence), which can be elaborated as an outcome of abstinence of domestic population for travelling abroad i.e. an increase in domestic tourism demand. Further, a fall of the GDP is noted in 2004, which can be provoked by increased interest for traveling abroad, caused by the recovered economic activity and the rising consumer lending. Additionally, from Table 1 is noticeable a structural breakdown as a result to the financial recession (starting as of 2009 and 2010, and slightly improving as of 2011).

**Table 1.** GDP in tourism in Macedonia, 2002-2012

| Year | GDP in tourism | Annual growth (%) | GDP total | % of total GDP |
|---|---|---|---|---|
| 2002 | 3759 | 16.6 | 256016 | 1.47 |
| 2003 | 4121 | 9.6 | 270314 | 1.52 |
| 2004 | 4051 | -1.7 | 282748 | 1.43 |
| 2005 | 4245 | 4.8 | 295052 | 1.44 |
| 2006 | 4309 | 1.5 | 309895 | 1.39 |
| 2007 | 4677 | 8.5 | 328951 | 1.42 |
| 2008 | 4954 | 5.9 | 345239 | 1.43 |
| 2009 | 4528 | -8.6 | 342062 | 1.32 |
| 2010 | 4406 | -2.7 | 351963 | 1.25 |
| 2011 | 4460 | 1.2 | 361714 | 1.23 |
| 2012 | 4579 | 2.7 | 360850 | 1.27 |
| Ave 2002-2012 | 4372 | 3.4 | 297374 | 1.4 |

*Source: Authors' own calculations based on: State Statistical Office. (various years) and National Bank of the Republic of Macedonia. (various years).*

Furthermore, the importance of tourism to Macedonia economy can be evaluated by the tourism inflows, which in 2009 represented 26% of total inflows of services and 8% of exports of goods in Macedonia. In the same line, the tourism inflows were 20% higher than the foreign direct investments. In the frames of services, tourism inflows were the second biggest item (just a little bit lower compared to the inflows of transport services), which is 1.3 times higher than the inflows of business services and 2.4 times larger than communication services inflows. Accordingly, the net tourism inflows in Macedonia have an average of 1% of GDP. Such condition indicates high potential to increase tourism effects in economic activity in Macedonia.

The forecasts regarding tourism development in Macedonia are very optimistic. Namely, the estimated results are encouraging and by 2021 it is expected that the direct contribution of tourism to the GDP will reach to 1.6 % thus bringing revenue of EUR 170 mil. according to the constant 2011 prices; the total contribution of tourism to GDP will rise to 6.0%; the visitor exports are expected to generate EUR 76 mil. (5.1% of total exports); and the investment in tourism is projected to reach the level of EUR 76 mil. representing 2.8% of total investment. Additionally, it is expected that the number of employees that indirectly support the tourism industry in Macedonia will have an upward trend and will reach 35000 jobs in 2021, representing 5.4% of the total workforce (WTTC, 2011).

### Research methodology

The investigation is made by regression analysis, mostly based on stylized facts obtained from desk-research and available sources of secondary data. The applied data set covers a period from 1993 to 2012. Generally, a regression model is used in order to estimate the impact of several factors that may be important in explaining tourism contribution. In this line, the regression analysis intends to discover the relationship and the level of significance of several commonly applied variables representing tourism contribution to Macedonian economy. So, the following are considered as potential determinants of Macedonian tourism contribution:

- Total travel and tourism (T&T) contribution to GDP (expressed in EUR). This includes wider effects from investment, the supply chain and includes income impacts. Moreover, this variable actually takes into considerations direct, indirect and induced contribution. The data are obtained from the World Travel and Tourism Council;
- Capital investment (expressed in EUR). This includes spending by all sectors directly involved in the travel and tourism industry. Moreover, this variable takes into account the investment spending by other industries on specific tourism assets such as new visitor accommodation, passenger transportation equipment, as well as restaurants and leisure facilities for specific tourism use. The data are obtained from the World Travel and Tourism Council;
- Foreign tourist arrivals. This includes arrivals of persons who have a permanent residence outside Macedonia, who are temporarily residing in Macedonia and who spend at least one night in an accommodation establishment or another catering facility providing lodging. The data are obtained from the State Statistical Office of the Republic of Macedonia; and
- Total overnights. This includes overnight of domestic and foreign tourists in Macedonia. Yet, a certain number of overnights are not included due to fact that some tourists, particularly those in private rooms, cottages and those staying with relatives and friends, are not registered. The data are obtained from the State Statistical Office of the Republic of Macedonia.

In order to examine the variables, the research introduces multiple regression method. The main idea is to involve several factors in the analysis in order to estimate the effects of each factor. Moreover, the attempt is to quantify the impact of various simultaneous influences upon a single dependent variable. In this line, the following empirical method is applied:

$$y_{it} - \beta_o + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots + \varepsilon_{it}$$

where:

$y_{it}$ denotes the dependent variable (total T&T contribution to GDP);

$\beta_o \ldots \beta_o$ denotes the regression coefficients;

$x_1 \ldots x_n$ denotes the independent variables (capital investment, foreign tourist arrivals, total overnights);

$\varepsilon_{it}$ denotes the disturbance term that is assumed to be normally distributed with a mean of zero.

All variables enter the regression model in a logarithmic form. On the one hand, this is a commonly employed tool for smoothing the variance, while on the other hand, the log-log regression enables an estimation of the elasticities. The regression makes estimations by applying the simple ordinary least squares (OLS) method. The OLS is often noted as one of the most reliable regression methods due to general quality of minimized bias and variance. Since we test the regression with multiple variables, the F-test is employed. The intention is to checks whether one or a group of, independent variables has an influence on the dependent variable. Hence, the overall significance of the regression is measured (Gujarati, 2003).

Table 2 shows the descriptive statistics for the variables used in the main regression. Furthermore, the data on skewness and kurtosis are presented, which are needed for the test of normality distribution i.e. the Jarque-Bera (JB) test. In case of normally distributed residuals, the skewness will be zero, or it can be tolerated from -0.5 to 0.5. It is noticeable from the Table 2, that this holds true for three variables: OVER (-0.301221), TT (0.074414) and INV (0.377265). For the variable FOREIGN, the value is above zero indicating positive asymmetry (skewness). Regarding kurtosis, one may note that normally distributed residuals should have value equal to three. With this regards, just FOREIGN (2.922299) satisfies that condition, while OVER (3.280707) is very close. Hence, these variables satisfy the assumption for normal distribution. The rest of the variables have coefficients far below three. The probability of rejecting the null hypothesis of normality largely exceeds the critical level of significance, confirming that all the variables are normally distributed.

**Table 2.** Descriptive statistics

| | FOREIGN | INV | OVER | TT |
|---|---|---|---|---|
| Mean | 200369.9 | 20072197 | 2054863 | 188000000 |
| Median | 197216.0 | 18887097 | 2020217 | 193000000 |
| Maximum | 351359.0 | 40532258 | 2706373 | 372000000 |
| Minimum | 98946.00 | 1129032. | 1254582 | 5258065 |
| Std. Dev. | 65613.48 | 11976357 | 329823 | 121000000 |
| Skewness | 0.635572 | 0.377265 | -0.301221 | 0.074414 |
| Kurtosis | 2.922299 | 1.985153 | 3.280707 | 1.655528 |
| Jarque-Bera (JB) test | 1.419115 | 1.399325 | 0.386517 | 1.601036 |
| Probability | 0.491862 | 0.496753 | 0.824269 | 0.449096 |
| Observations | 21 | 21 | 21 | 21 |

*Note:* FOREIGN=Foreign tourist arrivals; INV=Capital investment; OVER=Total overnight; TT=Total T&T contribution to GDP.

**Table 3.** Correlation matrix

| | FOREIGN | INV | OVER | TT |
|---|---|---|---|---|
| FOREIGN | 1 | | | |
| INV | 0.677641 | 1 | | |
| OVER | 0.476323 | -0.078728 | 1 | |
| TT | 0.694646 | **0.947369** | -0.030494 | 1 |

Table 3 presents interesting information on the degree of correlation between the variables used in the regression analysis. It is assumed that in the linear regression model, there is an absence of multicollinearity among the independent variables. In case of having high correlation between independent, the estimation of the regression coefficients is possible, but with large standard errors and as a result, the population values of the coefficients cannot be estimated precisely. As noted by Kennedy (2008), the multicollinearity is a problem if the correlation is above 0.80. One may note that that is the case with the correlation coefficient between INV and TT (0.947369), which might affect regression results.

Furthermore, very high correlation coefficients can be observed between FOREIGN and TT (0.694646), as well as between FOREIGN and INV (0.677641). These results are logical and expected since the foreign tourist consumption has profound impacts over the GDP, and represent solid base in increasing tourism capital investment. Based upon Table 3, one may conclude that the correlation between the variables is strong, suggesting that multicollinearity might be a problem.

## Discussion

Table 4 presents the estimation output from the general regression model. The value of the coefficient of determination (adjusted R-squared) is 0.897035 meaning that approximately 90% of the variations in the dependent variable can be explained with the influence of all independent variables, taken together. Although this result should not be neglected, yet, Table 4 points to few problems. For instance, it can be seen that only one regressor (INV) is statistically significant at the conventional significance level. The standard error of the regression is 0.342020. The F-statistic is 59.08030 (p = 0.0000), meaning that the regression is statistically significant. To assure the authenticity of the results the Durbin-Watson test is additionally employed. So, as noted in Table 4, the Durbin-Watson statistics is 0.622465, meaning that the residuals have positive serial correlation, and a note of caution is needed when interpreting the results. Moreover, the fact that the coefficient of determination is larger than the value of the Durbin-Watson statistics might be used as a “rule of thumb” for the presence of spurious regression. These problems are probably related to the very high correlation between INV and TT.

**Table 4.** Regression results

| Dependent variable: LOG(TT) | | | | |
|---|---|---|---|---|
| Method: OLS | | | | |
| Included observations: 21 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | -4.026796 | 7.799041 | -0.516319 | 0.6123 |
| LOG(INV) | 1.202183 | 0.107739 | 11.15829 | 0.0000 |
| LOG(FOREIGN) | -0.009195 | 0.351421 | -0.026164 | 0.9794 |
| LOG(OVER) | 0.201401 | 0.649444 | 0.310113 | 0.7602 |
| Adjusted R-squared | 0.897035 | F-statistic | | 59.08030 |
| S.E. of regression | 0.342020 | Prob(F-statistic) | | 0.000000 |
| | | Durbin-Watson stat | | 0.622465 |

Therefore, the independent variable INV is excluded, since it is responsible for the distortion of the result preventing the precise estimation of the effects of each variable on total contribution to GDP. Table 5 presents the estimation output from the parsimonious regression. Now, after excluding capital investment (INV), the regression coefficients of FOREIGN and OVER have changed dramatically and both of them are statistically significant at 5%. Since the residual diagnostic tests pointed to the presence of heteroscedasticity and serial correlation, the Newey-West method (HAC standard errors & covariance) is also employed.

**Table 5.** Parsimonious regression results

| | | | | |
|---|---|---|---|---|
| Dependent variable: LOG(TT) | | | | |
| Method: OLS | | | | |
| Included observations: 20 | | | | |
| HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwith = 3.0000) | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 37.49819 | 14.54530 | 2.578027 | 0.0195 |
| LOG(FOREIGN) | 2.291352 | 0.534783 | 4.284639 | 0.0005 |
| LOG(OVER) | -3.200760 | 1.255940 | -2.548497 | 0.0208 |
| Adjusted R-squared | 0.554077 | F-statistic | | 12.80411 |
| S.E. of regression | 0.525823 | Prob(F-statistic) | | 0.000406 |
| | | Durbin-Watson stat | | 0.558620 |

The value of the coefficient of determination (adjusted R-squared) is now lower (0.554077), the standard error of the regression is higher up to 0.525823, while the F-statistic declined to 12.80411. From Table 5, one may see that both FOREIGN and OVER exert economically important influence on total T&T contribution to GDP. As all the variables in the regression are expressed in logarithms, the regression coefficients can be interpreted as showing the elasticities. For instance, a 1% increase in foreign tourist arrivals is associated with a more than 2% increase in total T&T contribution to GDP. This implies that Macedonian tourism industry is highly elastic to the number of foreign tourists. Concerning the total overnights, it is interesting to note that a negative regression coefficient is obtained, which is contrary to prior expectations. This might be explained as follows:

First, the regressor OVER refers to total overnights including both domestic and foreign, though domestic overnights are predominant. For instance, their share in total overnights averaged 75% during 2000-2012; and

Second, and related to the above, domestic tourists are known to spend low amounts on extra tourism services, which explains why the value added of the tourism industry remains low despite the increasing number of overnights.

In this line, one may note the necessity of identifying measures and activities in the line of attracting larger number foreign tourists who will spend much more in additional tourism services. Hence, the introduction of new intelligent ways for tourism promotion of Macedonia is a must (Petrevska & Koceski, 2013).

## Conclusion

This empirical investigation has resulted in reaching several conclusions concerning the possibility to identify determinants of tourism contribution to Macedonian economy. The data set covered the period 1993-2012 and the regression is done by applying the OLS method, as one of the most reliable regression methods.

This research confirmed that the foreign tourist arrivals and total overnights are relevant and significant predictors when referring total tourism contribution to GDP. More precisely, the regression results pointed that these variables exerted economically important influence on Macedonian economy, by showing elasticity. In this line, in a case of having 1% increase in foreign tourist arrivals, it is expected to have more than 2% increase in total tourism contribution to Macedonian GDP, thus presenting high elasticity. Yet, the regression results draw completely opposite conclusion concerning the total overnights due to obtained negative regression coefficient. In this line, some presumptions must be taken in consideration. Namely, this variable encompasses total overnights (nights spent by domestic and foreign tourists) whereas domestic tourists have major domination. Simultaneously, it must be underlined that domestic tourists seems to be very modest consumers since they spend very small amounts on additional tourism services. Consequently, there is an absence of additional value added to the Macedonian tourism industry, despite the increasing number of overnights during the sample period.

The variable capital investment was excluded since it was responsible for the distortion of the result preventing the precise estimation of the effects of each variable on total tourism contribution to GDP. It seems that regardless the average amount of more than 20 mill. EUR per year, the capital investment in tourism industry, cannot be envisaged as important factor that contributes to national economy.

Beside the several limitations that occurred during calculations in terms of statistical data, yet one may conclude that the presented model may be useful and applicable. However, several other topics remain open for further research in this area in terms of including more variables, increasing the sample period, making comparisons with similar countries etc.

Generally, this research identified the factors that had an impact over total tourism contribution to GDP in Macedonia. Finally, the paper emphasized that foreign tourist arrivals, as a major influencing factor, is crucial for further tourism development, thus supporting national economy. Therefore, the study underscores the necessity for continuous analysis of tourism direct economic impacts as an important consideration for strengthening Macedonian economy.

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# THE SIGNIFICANCE OF HOLISTIC APPROACH APPLICATION IN THE POLITICS OF ANTI-CORRUPTIVE ACTIVITIES: THE CHALLENGES FOR SERBIA

**Dr Nebojša Backović[1], Dr Safet Kurtović[2], mr Gordana Jovanović[3]**

1. Prof. dr Nebojša Backović, High Economical School of Professional Studies Peć, Leposavić, Serbia, (nebbac@gmail.com)
2. Prof. dr Safet Kurtović, Faculty of Economics, Mostar, University Dzemal Bijedic, Bosnia and Hercegovina (safetkurtovic@yahoo.com)
3. Mr Gordana Jovanović, High Economical School of Professional Studies Peć, Leposavić, Serbia, (lgordana78@gmail.com)

***Abstract***

*The post-crisis world stress the ability of reform forces companies to respond to challenges from the environment. The first step is to remove the biggest social barriers to sustainable growth and development, as well as the latent causes of the crisis. High social risks (unemployment rate, poverty, inequality) are conditioned primarily growth of corruption and organized crime. In a world dominated by the neo-liberal model of capitalism, rampant corruption concerns. Corruption opens the legitimacy crisis of the current system. Rehabilitation of the consequences of the crisis requires a break with the existing neoliberal platform. Corruption can only win the battle of the reform of the institutional system. It is about the need to build inclusive institutions that create conditions for long-term and sustainable growth and development. The reform of the institutional system starts with the rehabilitation of the modern state. The active role of the state and its responsibility in eliminating corruption is a key part of the new transitional platform. The issue of morals and ethics of those in power is critical to the success of the transition. The paper discussed possible courses of action anti corruptive forces of reform in our country, given the contemporary theory and practice. Solutions to the challenges of corruption are seen from the perspective of the new-institutional perspective. Integral (holistic) approach is the strategic asset in the realisation of the anti-corruption action.*

***Keywords:*** *Integral (holistic) approach, corruption, the anti-corruption action, crisis, reforms, neo-liberal system, inclusive institutions, government,*

The World bank Global Economics Prosperities 2013., (www.worldbank.org/data-reserch-prosperities)

## Introduction

In the last few years, the world has been going through a crisis, one that is deeper and obviously longer-lasting than before. Five years after the collapse of "Lehman Brothers", the world's economy is still barely going in the zone of low growth and high unemployment rates, inequality, destitution and corruption[21]. The fact that economic growth is still stagnating, in spite of great subventions towards the banking system and saving the interests of the powerful elites, show the systemic characters of a crisis.

Society's deep crisis is the consequence of a neoliberal model of capitalism. Since the idea of liberalism began lording over economic theory and practice, and the deregulation of the market became the general transitional platform for conducting business activities, profit has become the only measure of success. Greed, money-grubbing, and lack of transparency serve as function for realizing the aforementioned goal. Greed for wealth endangers the sustainable growth of the world. A social-economic system that is led by greed for wealth with only profit (the elite's rent) as its goal, and not the welfare of society as well, leads to crises and an unsustainable economic growth. A system like that encourages the growth of corruption and it collides with realized assumptions for sustainable growth and development.

There is a general consensus in theory and practice that corruption is the one that endangers the economic and societal prosperity of a nation. A corruptible society is in its core a sick society that, among other things, characterizes: distrust in institutions, violation of the existing value system, disorientation and insecurity. In the long term, a society like that destroys vital assumptions for sustainable growth and development.

The growing trend of recorded corruption scandals in the world in the last few decades is a sign of a deep crisis of the neoliberal system. Today, corruption poisons many areas of public, private, economic and political life and becomes a real cancer that metastasizing, i.e. spreading uncontrollably and threatening to engulf entire societies. There's word of a real global pandemic with a strong influence on the growth of instability. Having in mind that, obviously, the presence of the fight against corruption on a global level holds a key position and it is first on the frontline on the international, as well as national level.

The sprouting of corruption is especially prominent in hindsight in small, open, and insufficiently competitive countries which were, in the process of transition, exposed to pressure of applying the radical neoliberal concept. In these countries, there are more and more supporters of the claim that it isn't possible to overcome the current crisis with the existing institutional foundations of the neoliberal system. The primary goal of the reformatory powers in these countries must be removing the biggest social obstacles to sustainable growth and development, as well as the causes of the latent crisis. High social risks (unemployment, destitution, inequality) are primarily based on the growth of corruption and organized crime. High indexes of corruption perception in these countries present a signal of a deep system crisis and, at the same time, an alarm that things are rapidly changing. A cure for corruption is being looked for in the building of inclusive institutions. In that sense, we can talk about an institutional transition. An active role from the state and its responsibility for building inclusive institutions are key parts of the new transitional platform.

In accordance to the presented theses, this work is structured into four thematic parts. After the introduction, the first part contains causes which have led to the escalation of the world's crisis and motives that encouraged the sprouting of corruption, all based on relevant sources. The second part points out the changes in the course of economic science made in a time of numerous challenged and global

21) Stiglitz, J. et al, (2010). The Stiglitz report: Reformin the international Monetary and Financial Systems in the Wake of the Global Crisis, The New Press, New York, p. 11.

risks with which the world has been faced in the last decade. Among them is endemic corruption, which stifles economic development. The third part tries to find sustainable solutions for the challenges of corruption. It points to the importance of application an integrated (holistic) approach as a strategic tool in the implementation of policy anti corruptive actions. The fourth part points out the roots of corruption in Serbia and gives advice for curbing it. The work is rounded up with conclusive considerations.

## 2. Current crisis, corruption and consequences

### *2.1 Causes of the crisis*

The current crisis is, by its scope, definitely the biggest, deepest, and most complex one that the world knows. The main reasons in favor of this statement are: the depth of the disturbance, duration, and global character of the crisis[22].

There are a great number of causes that have led to the crisis. Most of the influential economists talk about a crisis of moral and ethical values. Its causes are greed, money-grubbing and lack of transparency. Megalomaniac appetites for big and fast profits are, in the absence of adequate regulation, causes of numerous moral, ethical, and societal problems, whose consequences are major damage to other people, the entire social community, and future generations. The causes that have led to the crisis are directly related to the neoliberal capitalism system.

Guided by the principle of bare market logic and with the motive of uninterrupted maximizing of profit while wanting to constantly be ahead of the competition, the management of many enterprises collided with their own contribution towards social welfare (sustainable growth), emitting negative externalities, so their behavior is often classified as irresponsible (if one takes into account the long-term interest of society). It is considered that the enterprises' business dealings have been taken over by short-term dimensions and loss of vision. Focusing merely on how to maximize profit in the short term has led to the escalation of socially irresponsible behavior by the players in the market scene. It is a consequence of a deregulated economic system. The possibilities for corruption are practically innumerable in such a system. In other words, the participants in the market are giving in to corruption because the rules of the game in such a system encourage corruption. Namely, the market always prefers short-term and particularistic interests, putting aside the long-term and social ones. Because of that, only the existence of market motives can cause significant problems related to the behavior of the players on the market scene outside of any moral or ethical norms and principles. The controlling approach which subverts everything to profit reflects serious anomalies and consequences for economic and social growth. In that view, there is an illustrative example of many companies in the USA. Unlimited business egoism and greed of the players on the market in a battle for gaining profit, wealth and power, without responsibility, has largely influenced the escalation of the financial and economic crisis in the USA, which has spread to the whole world. Therefore, it was much too late when it was understood where the economic approach to social responsibility (led from a position of neoliberal arrogance), which subverts everything to profit, is leading. In the ambience of dominance of the "invisible hand of the market" everything related to achieving the aforementioned goal was allowed. It's no wonder that corruption scandals have become a common sight in such a system. Political, economic and social consequences of such behavior of the players on the market scene are clear. There is a general crisis of morals, non-readiness to invest in the future, and the social and territorial cohesion of society is undermined[23].

22) Schwab, K.. (2013). Worrying prospects of the world economy, Davos, January, www.wforum.org/klaus-schwab-founder-an.

23) World economic Forum, Global Reesks 2012., www.wforum.org

Events across the world undoubtedly show that corruption occurs in all countries, although, admittedly, in differing degrees, shapes and intensities. It's enough to remember the numerous financial affairs and political scandals that have shook the planet in the last decade, and which undoubtedly point towards the corruptive behavior of the ruling elites, with their accumulation of wealth at the (harmful) expense of public interests. The greed of the business and political elite, in the conditions of a deregulated system, has contributed to the cancerous disease of a dominant social economic system in the world. Therefore, corruption hasn't been a purely national question for a long time. It has largely become a transnational problem.

In a time where the corruptive behavior of individuals and interest groups is reality, a part of our everyday happenings, objectively considered, raises many questions. For example: is the defeat of public interest at the hands of private greed of individuals and interest groups the fault of the construction of the neoliberal model of capitalism, or is the applied model biased towards a few chosen people? How is it possible that the model of neoliberal capitalism produces (increases) undeniable power for individuals which have, through irresponsible behavior towards their surroundings (the community), gained (increased) great wealth? Are the economy and society in a system like this sustainable? An adequate answer to these questions demands a good diagnosis of the problem. In academic circles, attention is pointed towards the analysis of a special group of social and economic risks that mostly restrict sustainable growth and development.

Greed, money-grubbing and lack of transparency (a ruthless and unscrupulous battle for gaining profit on the market) are the main reasons for numerous global risks with which the world is faced today. They affect the growth of a group of system risks related to illegal economy. According to the estimations of the WEF illegal economy has a part of 7-9% in the world BDP, which quantitatively takes 1.3 billion dollars[24]. Illegal economy via money laundering, tax evasion, legalization of dirty money, corruption etc. indicates the existence of a deficit of institutional regulation on an international and national level. 2) Therefore, the model of neoliberal capitalism shows its weaknesses via: inadequate management on all levels, inefficient functioning of institutions, problems with corruptive behavior of the business and political elite (the growing trend of recorded scandals), unsuccessful regulation of the market, increasing the difference between the rich and the poor[25]. The aforementioned risks are in the interaction. 3) The consequence of all this is that it leads to a reduction in certainty, increased transactional expenses, low (negative) incomes and recessional trends.

In hindsight, the model of neoliberal capitalism has really showed its flaws in small, open and insufficiently competitive economies. In the countries, the growth of the economic and social risks group is closely related to the corruptive behavior of the business and political elite and choosing an institutional structure that doesn't work to satisfy the collective interests of society. The uncertainty that the choice of such a structure brings becomes a part of the risk that essentially endangers sustainable growth and development and leads to political and social instability. In such economies, looked at according to the GINI index, the concentration of wealth in the hands of the minority is especially prominent[26]. Therefore, it's not at all surprising that, in such an institutional ambient, the public sees the reformatory processes in the area of democratic elective system as a political fight of "mafia clans", and ownership and structural reforms as theft (grand larceny). In other words, the public trust in the system's institutions is falling, and traditional moral and ethical values are dying. Once highly integrat-

24) World economic Forum, Global Reesks 2012., www.wforum.org

25) Rogof, K.. (2012). Liberal capitalism is the victim of its own success-in generating wealth for the minority isntead of the majority.

26) According to the GINI index, the most dramatic increase in inequality was marked in ex-socialist countries after the transition and fatal privatization (Milanović B;"More of Less" Finance and Development, IMF, Vol. 48, No3. September 2011.). An exception when the CID in question represent some other countries, such as Brasil, Mexico, Argentine (Gasparni, L; Tornarolli, L, Recent Trends in icome in equality in Latin America, Economia, Vol. 11. No 2.,2011., pp. 147-190)

ed, communities transform into fluid creations. This creates additional tensions, mistrust of the citizens in the government's capability to react to the numerous challenges (economic, social, moral and ethical in nature). The things in question are, therefore, the risks that essentially endanger sustainable growth and development, as well as the functioning of the social-economic system, and lead to a crisis.

If we go from the fact that, in the last 30 years with the affirmation of the neoliberal model of capitalism, profit was the only measure of success, therefore making everything allowed in regards to achieving said goal, then such a form of capitalism (immoral, wild, money-grubbing) is on the scene, and is being directly linked to corruption, i.e. the crisis of moral and ethical values. With the inevitable moral and ethical question, which is being rightfully asked, corruption is, on the other hand, also a par excellence economic question. Unemployment, low economic activity, poverty, inequality, high prices, mistrust of foreign investors and the growth of public debts, live and grow in great amounts by feeding on a common food-corruption.

### *2.2. The economic consequences of corruption*

The causes of corruption are found in the crisis of the system's institutions. These are the key social institutions (The state, property, market), which, when placed in a destructive social-economic system, birth corruption which undermines the economic foundations of society and leads to a crisis. In that sense, it's relevant to consider key economic consequences of corruption[27]. We'll direct attention to the ones that produce the highest risks and make an economy very vulnerable.

1) Corruption in specific market segments: the work market, goods and services market, or the money and capital market turns pretty upstanding citizens and businessmen who respect given boundaries of the law into "sheep" who lose in an unfair match with the "well connected" and the immaterial. As long as these others remain unpunished, corruption initiated more corruption over and over again through numerous abuses. Consequently, corruption blocks the developmental capabilities of a society, because it de-stimulates innovations and expense efficiency. Via its mediation it's possible to achieve business success, even though growth of quality and efficiency are left behind, by which, in the final instance, spenders are doomed to pay more, while they get a lot less. Healthy management and competition on which, historically, rests the comparative advantage and efficiency of the market system of economizing, as well as the enterprising energy of a nation, are negated by corruption.

2) Corruption becomes an obstacle to the coming of foreign investors. The uncertainty that corruption creates is incorporated into a part of the risks of the country's bonus, and affects the growth of income rates (and interest rates), as well as the growth of discount rates for all future monetary flows created in the country. For that reason, many investment projects become insufficiently cost-effective to compensate for the presence of corruption in the system. Because of that, many investors have stayed on the sidelines, and don't realize their investments and don't create new economic activity, as well as employment, in the country. Also, every piece of property they aspire to buy in the observed country, due to higher discount rates that need to compensate the uncertainty caused by corruption, affects their readiness to pay less. In high-corruption countries, potential foreign investors would rather just sell goods produces somewhere else, instead of founding enterprises and produce their goods in the country. With that, corruption directly reduces the healthy and sustainable economic growth and employment in national boundaries.

3) Corruption creates a special kind of "Renter" businessmen and monopolized economy which doesn't created new values, but redistributes existing ones. Wealth is gained "overnight", social inequalities are deepened in the society, which aren't the result of ability, but corruption. Unlike a healthy man-

27) Šoškić D., Ekonomske posledice korupcije / The economic consequences of corruption, www.politika.rs

agement which stimulates knowledge and innovation and creates a competitive economy, a management in corrupted conditions is uncompetitive and profitable only with corruption. The stepping out of national boundaries of such enterprises and economies onto an ordered international market is almost impossible. They can only go out to similar markets that are also used to corruption. “Powerful” businessmen that grew on corruption buy cheaply, but don’t use them for their intended purposes. Such “businessmen” wouldn’t be able to lead the market towards recovery, growth of competitiveness, and export.

4) Corruption creates monopolies, by which healthy and uncorrupted businessmen are denied business. This affects the growth of prices, raises inflation in the country and dooms citizens and spenders to pay considerably more, and gain less. That excess goes, by rule, into the pockets of participants in corruption.

5) Corruption in public enterprises very often leads to their business having losses. Due to that, these enterprises don’t pay dividends to the country-their owner. At the same time, their losses are directly taken over by the state, or through state guarantees. The price, in both cases, is paid by the taxpayers-the citizens. Public enterprises, instead of rationalizing their business and removing losses, raise the prices of their products and services and with them the price of corruption. Additionally, their inefficiency is dumped on the citizens, this time not as taxpayers, but as spenders. If the prices of products and services of the public enterprises grow faster than average because of corruption, lasting years, leading to an unfavorable change in the structure of gross home products in favor of an inefficient public sector that is, by rule, uncompetitive and incapable of export. This emphasizes the macroeconomic imbalance, and the country is led to a patch of economic stagnation and increase of mortgaging.

6) Finally, corruption is also an illegal income that doesn’t bring in taxes. In other words, corruption has “tax benefits” and that becomes a monetary flow in the economic system that doesn’t bring income to the state treasury, which additionally emphasizes the deficit problem in the public finances.

To enable the economy to heal, a long-term growth of employment and welfare of the population, corruption must be eradicated. Sanitizing the consequences of corruption needs a break from the existing platform of neoliberal capitalism, the universal model of world order in the last three decades. An alternative to the existing platform would have to have a framework with the same transitional policy and strategy that enables the national economy to return to a patch of long-term and sustainable growth and development. Such policies and strategy would have to be focused on eliminating corruption as key obstacles to the healing of the economy.

### 3. Economic science before the challenges of corruption: from economics to the normative theory

Economic notion in the West, considerably earlier than the current global depression, showed that the institutional matrix of the neoliberal system leads to a series of economic and social problems. The question then is why it failed to provide adequate solutions to the first symptoms of crisis, if one has in mind that the negative signals from the environment (the growing trend of recorded scandals) due to corruptive behavior of the business and political elite were strong enough and recognizable enough even in the beginning of the first decade of this century. It is thought that the interests of one percent or 0,1% of the richest have “colored” the discussion among the academic economists[28].S Debates about corruptive practices, destructive speculations, non-transparent monetary flows, rent-oriented behavior of the elites, extractive institutions, poverty, inequality, have almost disappeared from the academic discourse. The basic reason is seen by Krugman in the following[29]: a good number of the richest was making money thanks to an unregulated system; therefore, they had a direct interest in

28) Krugman, P. (2012). End this depression now, Heliks-Smederevo, Interkomerc Beograd, p. 98.

29) Ibidem, p.  92.

supporting the perseverance of the dominant conservative neoliberal academic current which didn't lean towards regulation. But that wasn't all. Defending the indefensible (their own mistakes and interests) this conservative current played a major role in undermining the efficient reaction to the current depression, with confused ignoring of the corruptive trends in the business and political practice. It's obvious that the power of money has never before in history been as unscrupulous as today its own servants up in the highest peaks of politics and science[30]. Only ideological blindness, as wells as rogue (lost) morals and ethics can explain the lost sense of pragmatism regarding the problems of the real world, which the neoliberal doctrine has pushed to the sidelines.

Keeping to Canes' logic that when the facts change, the theories change as well, thinking of solutions to the current challenges of reality, among which corruption is included, with a large dose of scientific and methodological competency of the approach to the neo-institutional paradigm. Motivated by investigating the whole of objective reality, the methodological approach that is used by this interdisciplinary doctrine is marked in literature as a holism (holistic approach). It's about an analytical frame which provided the possibility of a more complex analysis of the causes and consequences of corruptive practice. Neo-institutional economic theory, through its current directions (the theory of transactional expenses, the agency theory, and the theory of public choice) aspires to diagnose the beginning of this problem in the public and private sector and offer a solution. Finally, it's the obligation of the economy as a normative science. Therefore, for example, in the theory of public (social) choice indicates that in the absence of power limitation, public servicemen of the government behave as rational players who maximally exploit the system for their own benefit. In a non-transparent system, the abuse of public authority for private purposes, through the different forms of "rent seeking" activities, is a common occurrence. It assumes different corruptive actions towards government officials, in spite of the normative rules[31]. The founding of this problem is determined with a one-sided interest of the enterprise management's interest for profit, which also represent the driving force of the neoliberal capitalistic system. The realization of profit interest generates "rent seeking" behavior of different kinds and promotes a Machiavellian approach to business transactions. Corruption is, therefore, caused by one-sided interests of the business and political elite and a non-transparent way of running things.

In the focus of investigating this theory are institutional arrangements, which are led by collective action, that have as a goal the victory of public interests over the private greed of the elites. Opposing the spirit of cooperation and working together of the public, private and civilian sector (strength of collective action) is the egoism and greed in the battle for gaining wealth and power, one notices the deficiencies of the neoliberal capitalism and indicates social-economic effects of different institutional arrangements. The advantage goes to those who discourage corruption, uplift the development of the enterprise initiative, regulate the work of the integral (competitive) market, aid in the organization of socially responsible corporate practices and the lowering of transactional expenses, create a good legal system that ensures the fulfillment of contracts, protection of property, and therefore increasing economic and social success.

## 4. The framework for anti-corruptive action

### *4.1 Via the reform of the institutional system until the eradication of corruption*

Corruption is, in literature, often defined as the abuse of a trusted public authority for personal benefit[32]. The abuse of public authority represents a complex social-economic phenomenon. The causes

30) Hassel, S. (2011). Time for Outrage: Indignez-vous!, Hachette Book Group, First North American Edition: September, p.10.

31) More about it, Rouz-Ejkerman, S. (2007). Korupcija i vlast,uzroci, posledice i reforma, Službeni Glasnik, Beograd, p. 21.

32) Nussbaum D., and Wilkinson P., CORRUPTION, The A to Z Corporate Social Responsibility, www.books.google.rs (accessed on 03.03.2013.)

for this type of corruption are undoubtedly numerous and interwoven amongst themselves[33]. In this context, one that stands out is the "great corruption" which manifests at the highest level of government and includes the highest state projects (public procurements, different business contracts, concessions etc.). Not even the most developed countries are immune to this type of corruption. This type of corruption creates one additional social problem. Over time, it generates dangerous processes which result in social inertness, and, on the other hand, creates powerful and influential lobbies (rent oriented elite) which prevent, or oppose any kind of reformatory changes. That way the existing lobbies tend to preserve the existing position, and that has a degenerative influence on the system as a whole. Incentives for the health management are undermined, and according to that the foundations of a long-term and sustainable growth and development are endangered. One could conclude that this form of corruption solely intends to secure high incomes (rents) to rich individuals (tycoons) who have, in different forms of corruptive actions, financed the higher levels of state government to protect the existing institutional order. Such a social economic system, constituted "according to the interests of rich individuals" leads to political, economic and social instability. The instability of such a system is related to two problems: 1) the great discretional power of the elites, and 2) the existence of extractive institutions[34]. The current neoliberal system incorporates both of these problems in it. Namely, the deregulated system gives birth to a plethora of discretional power. The more discretional power, the stronger the incentive to fall to its temptations. On the other hand, the problem with the functioning of the neoliberal system is also related to the existence of extractive institutions. They encourage corruption, discourage innovations and the development of management. In other words, they block economic growth, lead to the rise of poverty and conflict creation. They serve the interests of the minority, the ruling elite, and hoarding of wealth at the expense of the country and the population. Therefore, deregulation as well as imprecise (inefficient) institutional regulation feed corruption excellently.

There is a different social-economic system that contributes to the victory of public interest over private greed. This form of organization is one of the models which have differently place goals and according to that the goals of different politics, strategies and institutions. The basic social-economic goal of such a system is the better quality of life for all social ranks, not just the ones on top. It is achieved by: 1) smart growth (development of an economy based on knowledge and innovation), 2) sustainable growth (encouraging intelligent investments in the public and private sectors which are aligned with the priorities and politics of sustainable growth), and 3) universal growth (encouraging an economy with high employment rates which would bring social and territorial cohesion). While realizing the defined goals, the state can't avoid the role of a directing the growth. The top priority goal of each democratic political system must be removing not only the biggest social obstacles with smart, sustainable and universal growth, but also the causes of the latent crisis. It's considered that you can only win the battle against the biggest social obstacles (corruption and organized crime) via the reform of the institutional system.

Inclusive institutions as a meta-factor of competitiveness and sustainable growth and development have become the object of interest of the reformatory powers in the post-crisis period. And so, while conceiving various reformatory models, inclusive institutions are added to the classic factors for sus-

33) In social economic literature about corruption, there are a few prominent groups of causes of corruption. These are: 1) institutional crisis (the state, property, market); 2)transition and transformation of economic and business systems (especially the process of privatization in a deregulated system as a fertile ground for corruption); 3) high degree of regulation and adminstrating of the state; 4) „cleprocracy" of the state (abuse of public authorities on all levels for private purposes); 5) monopolies; 6) protectionism and other external trade instruments; 7) globalization (internationalization of business and economic activities) and with it the increased growth of illegal economy; 8) moral crisis (anomie and a crisis of conscience and responsibility) etc. Sjuzan Rouz-Ejkerman, Ekonomija korupcije, Međunarodni zbornik, Službeni glasnik, Beograd, 2007.

34) Acemoglu, D., Robinson, J. (2012). Why nations fail: The origins of power prosperitiy nad poverty: Kruna Publishing Group; March, p. 544.

tainable growth and development. The factors which contribute to the revitalization of economic growth and development are, therefore, not exclusively investments, but also a group of institutions (a set of regulatory and constitutive rules, politics and systems) which is tightly related to the height of transactional expenses as an important criterion for the efficiency of the economic and social system itself. The goal of these institutions is to reduce transactional expenses. The more prominent they are, the more radical reforms and more resources (intellectual, material, financial, informational) are needed for the stabilization of the ruined institutional structure with which key obstacles would be removed, and a path towards sustainable growth and development would be secured.

The quality of inclusive institutions is determined by the ability and responsibility of those who run the social-economic system (reformatory powers) to create the “rules of the game” which efficiently support the realization of long-term interests and the goals of the public, private and civilian sectors. We’re talking about a platform for: 1) discouraging corruption and organized crime, 2) the prevention of growing global risks, and 3) encouraging long-term competitiveness of the national economy, sustainable growth and social welfare.

Inclusive institutions rule the motivation of the played via innovational dynamics; they affect adaptive efficiency, help players in making business decisions, help make and realize strategies and politics of socially responsible corporate management, with which the system of moral and ethical values is protected from corruptive practice.

Such a view of profiling the construction of institutions is based on the collective support of the private and civilian sectors, a set of socially responsible government initiatives, discourages corruption and encourages smart, sustainable and universal growth and development.

### *4.2. Eradicating corruption via the politics of socially responsible corporate management*

Contrary to popular belief, corruption isn’t just a negative effect related to the abuse of public authority. Enterprises are often in a situation where they can get an advantage over their competitors in business dealings via corruptive activity.

Offering enterprises obvious short-term gains, corruption de facto creates an illusion of advantage, while in reality it ruins the competition and undermines the mechanisms of the free market and healthy competition. Consequently, corruption generates uncertainty in the business sector, discourages new investments, raises the costs of doing business, undermines business ethics and prevents the possibility of long-term profitable business being conducted.

Even though the fight against corruption is mainly related to the efficiency of the function of the institutional system, companies can’t ignore this problem and stay on the sidelines. Furthermore, they have a key role in creating and realizing sustainable anti-corruptive strategies.

From the mid-90s of the last century, the international community has been focused on making conventions that obligate companies to generate sustainable solutions in the battle against all forms of corruption, including extortion and bribery. For example, the UN Convention against corruption (made according to the regulations of the global deal-10 principle)[35] demands companies to make an integrated effort in three areas of activity: 1) strategy of internal dealing; Incorporate a policy against corruption into a codex (programme) of socially responsible corporate managemen; 2) strategy of external dealing; Assert results in the fight against corruption (an exchange of experiences of the socially

35) Started in 2000. The global deal and initiative of the ex-General Secretary of the UN Kofi Annan designed to influence the actions of private enterprises through the application of clusters of value principles which promote social responsibility in companies. In June 2004., the compact part of 9 principles (dedicated to human and worker rights in a living environment was expanded with a 10th principle. It’s about the explicit goal related to intensifying efforts in the battle against corruption

responsible corporate practice); and 3) strategy of collective action; Joining forces with stakeholders to improve the results in the plan to eradicate corruption and high transactional expenses. It's about a sustainable collaborative activity of private, public and civilian sectors in the fight against corruption.

On the other hand, we're all witnesses of other projects being brought forth on an international and national level that are related to anti-corruptive normative regulative. For example, in the USA the congress had, after the Enron financial scandals, adopted a universal act in 2002. (the Sarbanes-Oxley Act) which regulates, in detail, every aspect of corporate management of american companies.

The New York stock exchange adopted regulations which significantly change the way of financial reporting to corporations and introduces rogorous sanctions for inaccuracies in the presented data. This all influenced many companies to make a complete revision of existing, and bringing in new, practices, politics, and programs for socially responsible corporate management.

A new approach to management is the prevention of corruption. A dominant management paradigm is changed, one which has ruled over economic theory and practice for a long time. It has incorporated in itself a market approach to SRBD (Socially Responsible Business Dealings) which was focused on how to maximize profit in the short-term. This approach caused the escalation of numerous corporate scandals with deadly consequences for long-term economic and social development. A new managemental approach to SRBD affirms the question of responsibility for enterprises, not just for realizing economic bentefits in the goal hierarchy of enterprises, but also for equally important social performances. Considering that social goals generally have a strategic foundation and background, a new managemental approach to SRBD integrates economic and social values that are key to long-term sustainability of the economy and society. Creating new values begins with a deep understanding of social problems. So, for example, undestanding investments in a project for anti-corruptive action from the management, as investment actvities which create value for the enterprise and society (via removing obstacles to sustainable development), and not as an expense, becomes critical for advancing long-term competitive advantages. The point of the new strategic managemental approach is that the company builds principles of anti-corruptive action into the core of the business. Integrating moral, ethical, and legal principles into business processes and strategies leads to creating benefits for the enterprise, and society as a whole. It's about the new target function of an enterprise. It indicates a link between creating values, sustainable development and social progress[36].

Enterprises of all sizes, economic and financial boundaries, therefore, have an interest in preventing and fighting corruption, as well as showing their determination to play a key role in that fight. In other words, that means that they willingly accept guidance from the UN which relates to the fight against corruption from companies and their integration of the concept of SRBD strategy and politics as a key part.

Willing adoption of a set of principles, according to the global deal from the UN, by the companies represents a starting foundation for this codex to become a model for socially responsible corporate behavior. This way, companies send a clear signal of their devotion to ethical principles in the fight against corruption.

The question is, however, if the instruments and mechanisms, so called "soft Iowa" had a noticeable impact on the business practice of companies the last few crisis years, having in mind that the guidance in sight of the "soft legislation of the UN" appealed to the willing integration of a set of principles into the management concept (codex) and politics of SRBD companies.

A recently published research of Transparency International in 2010 studied company practice in the fight against bribery and corruption. The report made an evaluation about the amount of transparent

36) More about it: Porter M., and Kramer M., (2011). "Creating shared value:How to reinvent Capitalsm and growth", Harvard Business Review, January-February.

reporting over 500 leading companies around the world made about the fight against corruption. The results of this analysis show that only 7 out of 486 companies achieved top scores in this area, while 151 companies got a negative score[37].

The results of these researches created new challenges. The quest is, can corruption be eradicated via voluntary promotion of SRBD practice? The answer to this question isn't that simple. The problem here arises when the useful (interest for profit) and fair (social responsibility towards the community) are mixed. The win goes to the useful in an inadequately structured institutional system, more so if the competition uses the same, or similar, methods. Therefore, it's not uncommon to see that behind the promotion of socially responsible corporate management hides a corruptive business practice. In the last 10 years, big corporate scandals, from Arthur Andersen and Enron, to the Lehman Brothers and Siemens[38], were connected to companies that had a socially responsible corporate practice. The absence of obligatory transparent corporate reporting suited the blooming of a corruptive climate. It contributed to the ignoring of the codex of corporate social responsibility by the business elite, as well as ruining the credibility of companies.

It's thought that the politics of socially responsible corporate management won't bring benefits to society if the companies do business in inadequately structured, non-transparent, and corruptive institutional milieu. In such an ambient, system changes (reforms) are necessary on all levels, as well as the construction of inclusive institutions and the introduction of ethical standards to eradicated the causes of this social pandemic.

In the frame of an inclusive (economic and political) institutional system it's possible to curb corruption with voluntary promotions of the SRBD practice. Such a system encourages economic subjects to realize anti-corruptive activity within the frame of realizing socially responsible corporate strategy and politics. This is about the change in context for conducting business activities of an enterprise in a socially responsible way, i.e. the change in anatomy and physiology for the institutional system, in which the realization of new target functions of enterprises (creating divided values) is supported.

## 5. The roots of corruption in Serbia and ways of anti-corruptive action

Corruption is a big problem in Serbia. It stalls development, destroys the economic, social and political systems, prevents the construction of democratic institutions, negates European values, and undermines the social and territorial cohesion of society.

Corruption has a corrosive influence for Serbia's economy. In the big picture, corruption leads to the loss of national, i.e. budget money through too-expensive public spending, expensive concessions, expensive equipment and long procurement times, through easy making of debts which burdens future generations etc. The main cause is the wrong allocation of resources, an indicator of imperfection of the market and state. The general consequence of that is macroeconomic instability.

The small picture shows that corruption pushes entrepreneurs into financial crime and tax evasion. Shortly into the "economic underground" (illegal economy). Unconscientiousness in business dealings, abuse of power, dishonesty, an incorrect stance towards business partners, tax evasion, irresponsibility towards nature, buying out officers and other criminal actions are a consequence of an unquenchable thirst for hoarding wealth; simply put: greed. In conditions like that, the economy slowly slides from a traditionally transparent and legal one, towards a gray and black economy, which,

37) www.transparency.org

38) Siemens invested about 400 million euros recently into advancing politics of corporate social responsibility. However, that is a lot less money than the estimated 1 billion euros that Siemens invested in corruptive actions.

taken all together, is perfect for the growth of organized crime. In such an economy, creativity and entrepreneurship, as well as the growth of efficiency, are discouraged.

A highly-corruptive business ambience encourages the most talented people to leave their home country. This is an unprecedented economic crime. It's the biggest threat to the sustainable growth and development of smaller, open and insufficiently competitive countries, such as ours. When intellectual capital becomes the victim, i.e. the byproduct of "casinos" (speculative interests and transactions which dominate ad corruptive system) development itself is basically endangered[39]. Serbia's vulnerability is extremely high. Table 1, in which main indicators of vulnerability are presented, shows this.

**Table 1.** The vulnerability of Serbia according to different parameters

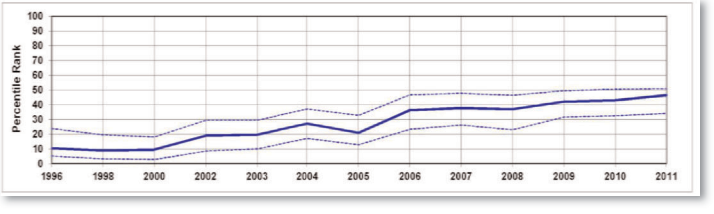
| Indicators | 2008. | 2009. | 2010. | 2011. | 2012. |
|---|---|---|---|---|---|
| Unemployment (in %) | 14 | 16,6 | 19,2 | 23,7 | 27 |
| Inequality (GINI index) | 28,2 | 27,8 | 29,6 | 28,2 | - |
| Corruption (index of perception) | | | | | |
| Country rank | 92 (of 171) | 83 (of 179) | 78 (of 178) | 86 (of 183) | 80 (of 176) |
| Competitiveness | | | | | |
| Global competitiveness index | 3,90 | 3,77 | 3,84 | 3,88 | 3,87 |
| Country rank | 85 (of 134) | 93 (of 133) | 96 (of 139) | 95 (of 134) | 95 (of 142) |
| Brain drain | 132 (of 134) | 132 (of 133) | 136 (of 139) | 139 (of 142) | 141 (of 144) |

*Source:* Adapted according to: Cantray Data Report for Serbia, 1996-2011., Worldwide Governance Indicators, www.info.worldbank.org, World economic Forum, Global Reesks 2012., www.wforum.org, www.transparency.org

The presented parameters are not only at a low level, but they also have an undesirable trend. The growth of unemployment, inequality, brain drain, is mostly the result of a corruptive business climate created in the past decade. Adding to that the privatization with criminal elements and we have located the main causes of the recessional and transitional problems of Serbia. Corruptive actions make privatization fatal, enterprises fall, workplaces disappear, the most talented people leave the country, and social problems grow. This is about the risks which basically endanger economic development and lead to social and political instability. An economy with such performances has no perspective. The gap in performances of these risks makes the integration with the EU seem like an almost impossible task.

Corruption in Serbia has gotten out of control in the past decade. This notion is supported by the trend on Picture 1. It's about an endemic event which encased all parts of society, because of which our country is classified as one of the highly corrupt ones.

**Picture 1.** Corruption in Serbia in the period between 1996-2011




*Source: Cantray Data Report for Serbia, 1996-2011., Worldwide Governance Indicators, www.info.worldbank.org*

39) Krugman, P., (2012). End this depression now, Heliks-Smederevo, Interkomerc Beograd, 2012., p. 38.

There are at least three reasons which show the unsustainability of a highly corrupt economy and society. Firstly, such a model is unsustainable for economic reasons. It can't be expected for foreign capital, which came to Serbia through privatization or SDI, stays there, in ambient where endemic corruption rules, if it can't make an appropriate income from the investments. If the existing foreign capital is thinking of leaving, it's hard to believe that new foreign capital will think of coming.

Aside from being the one thing that's preventing secure and rational investing (foreign and domestic), corruption slows and debilitates development, limits exchange, trade, leads to unreasonable and wasteful use of the public budget, encourages gray economy, lowers tax sources etc. Secondly, the model is unsustainable for social reasons. In the social sense, corruption increases poverty, hits the weakest and unprotected (schooling, medical, licenses, procurements). It opens doors to organized crime and various mafias (tobacco, construction, road, pharmacist...). Thirdly, the model is unsustainable for political reasons. The consequences of corruption on the political life of a democratic society manifest through the loss of trust in the system's institutions and legal state by the citizens. It undermines democracy, because it breaks the ties of trust between the citizens and the political elite. It grinds the foundations of righteousness, and citizen equalities upon which a democratic society is based.

Especially worrying is the fact that the index of corruption perception has been increased after democratic changes. Namely, it numbered 1.3 at the end of 2000, and in the meantime, this index was significantly increased, which means that the fight against corruption in the last decade had no results.

The base source of corruption, before the democratic changes, was determined with pre-emphasized state interventionism (hypertrophied normativism) as a consequence of war and international sanctions. It's thought that during the last decade of the 20$^{th}$ century Serbia was dominated by "cleptocracy". An order where the state is only a tool in the hands of a rent oriented elite which serves particularistic goals and interests (maximizing personal welfare). In other words, the state is the generator of corruption in this time, and the state apparatus (the ruling elite) presents an instrument of enrichment for the members of the ruling circle. This way, the state lost credibility.

After 2000 there was optimism that the new government would be able to eliminate corruption and make a U-turn. The solutions that lead to weakening corruption were seen in the change of policy by the government that manifested in the chosen reformatory course. The neoliberal model of capitalism was the leading transitional platform in conducting economic and social reforms. A cure for "cleptocracy" was seen in deregulation, privatization, and liberalization of economic and social flows.

The changing of "cleptocracy" with new elites didn't remove nor lower the level of corruption. It actually increased it. The new government failed the test because it was included in the system from small, to high corruption. An incompetent and greedy executive government of the state combined with the non-transparent was of managing things on all levels, nurturing the unemployment and irresponsibility cult in am unordered institutionalized ambient caused the blooming of corruption on its own. On the other hand, cumbersome and inefficient state apparatus delegitimized, and made futile, every effort to form a planned strategy and politics for reform, based on the neoliberal platform, using it.

The rule is that in a society in which corruption becomes a system model and base cause of recessional and transitional problems can't be removes, without changing institutions, politics, the system, as well as governmental structures.

Without a strong and clear political will to support anti-corruptive strategy on all levels, positive results in conducting reforms can't be achieved. On the other hands, the question of morals and ethics from the rulers are of key significance for the success of this strategy. Morals and ethics of the bringers of reformatory changes directly affect their reputation and credibility in the eyes of the public, which determines the success of the project they're carrying out. It seems that the actual reformatory powers have, in the last few months, succeeded in finding solutions for curbing the acute problem of corruption and show the determination to stay on that path. Under the leadership of authentic reformer leaders, the current government has managed to strongly mobilize political will (the parliament, executive government, leading political parties) for the fight against corruption.

Anti-corruptive strategy assumes changing the approach to live, work, (economy) and politics. It's not the question of changing the mentalities of the people, but the conditions that politics created with its decisions. In the economic area that means abandoning the current model of economic politics and creating conditions in which it pays off to be honest, socially responsible, hardworking, creative, innovative, and productively orientated.

By realizing the anti-corruptive development strategy, the state and its executive government can't avoid the leadership role. The state is the one who creates a context for anti-corruptive acting of players on the market scene. In that process, it's necessary to improve the working of the state system management and create a class of non-bribable, honest, expert and responsible managers[40].

The efforts of the state executive government, however, won't be sustainable if the management of the private sector doesn't active begin participating in the state project of anti-corruptive strategy and become part of the solution, not part of the problem. In our conditions, we still don't recognize noticeable activism of the business elite (the enterprises in this plan). In other words, there are no stronger signals from the companies for actively conducting anti-corruptive politics as part of a project of socially responsible corporate management.

Anti-corruptive strategy and company politics is an important transitional device towards the construction of a socially responsible corporate practice, in which the realization of social goals isn't just some obligation on the side, but the core of every business activity. It's about the strategy of building a sustainable business, where companies, while realizing their missions, exert additional pressure on the government to more efficiently conduct its anti-corruptive strategy. The real challenge is, therefore, to make the government's anti-corruptive package aligned with the reforms in the institutional system and with the activities of companies in the realization of the strategy and politics of socially responsible management, whose anti-corruptive package is a core part of. It's the patch to eliminating economic and political obstacles towards the development of a sustainable economy, a sustainable society. From that comes the significance and affirmation of the holistic approach to this question.

Namely, the private sector needs a healthy business climate that discourages various kinds of corruption and organized crime. This climate is possible to realize through the construction of inclusive institutions adapted to authentic performances of the culture of the internal environment. In an ambience like that, the local private sector will be more motivated to take on jobs from the domain of corporate social responsibility by applying a concept that emerged in the crisis "creating shared values" [41]. That's why it's very important that the „visible hand of the state" be recognized upon the construction of such a context which will secure a healthier business ambience. The context should respect the imperative of compatibility with the EU, but not to consistently follow it normatively. It's about the choice and construction of authentic institutions adapted to our vision of sustainable growth and development. Only such a reformatory agenda will lead us to an economic and social recovery and makes the negotiators in the further process of European intergations seems respectable.

40) The realisation of anti-corruptive strategy and politics rests on professional macromanagement, i.e. on capable, expert, motivated, moral and adequately paid public servicemen, which is usually called by the term „meritocracy"

41) Ibidem , p. 64.

## 6. Conslusion

This is the crisis of the neoliberal system. That universal model of world order was considered in the past decaded as a general derugulation, primatization and liberalization, by which the conomic growth will ensue as a natural result of market automatism and the „invisible hand". Profit has become the base criterion for behavior in all segments of society. Such a choice of target function couldn't have been left without heavy deformations on the whole scale of social values. That system has developed greed, money-grubbing, and non-transparency. Its consequences are corruption, unemployment, inequality, and poverty. A social-economic system which has, as a consequence, the defeat of public interest over the private greed of the elites leads to a social and territorial fragmentation of society, crises, and an unsustainable growth and development.

The model for neoliberal capitalism has shown its weaknesses especially in small, open and insufficiently competitive economies. In these countries the growth of a group of economic and social risks it closely related to the corruptive behavior of the government representatives and choice of and institutional structure that doesn't work to satisfy the collective interests of society. In such a system, the abuse of power and authority for personal gain becomes a part of the risk which essentially endangers economic development and leads to a crisis.

Sanitizing the consequences of a crisis requires a break from the existing platform of the neoliberal system. An alternative reformatory policy for the framework would have to have a transitional platform which would enable the national economy to heal the economy and society, long-term employment and the welfare of the population. A policy and strategy like that would have to be: 1) focused on eliminating corruption as a key obstacle for sustainable growth and development; and 2) sensitive to the level of construction of the institutions. The crisis has solidified stances of those who think that there is no smart, sustainable, and universal growth without dedication to the reformatory powers for an answer to these questions.

The main cause of recessional and transitional problems of Serbia is corruption. Serbia's problem is that it has become the system. You can't fight a systemic corruption with long-term nor short-term goals, or political repression, or national legislation, let alone "political Hollywood spectacles". You can only win against systemic corruption via the reform of the institutional system, so that all the parts of the national regulatory system (procedures, laws, institutions) have built-in "stable fail safes". They are invisibly built in by the creators of the new social-economic system, through the construction of inclusive institutions, adapted for authentic performances of the culture of the internal environment. It's about an area of fortifying the management, reformatory credibility of the state, which is a necessary condition of building an orderly institutional milieu. It's recognized by achieved results in six basic areas, which are: 1) noticeable political responsibility of the carrier of rule which receives the confirmation in public (thanks to the determination to persevere in an anti-corruptive battle and much more); 2) noticeable activism of the private sector in the realization of the strategy and politics of socially responsibly business dealings; 3) the reformed state institutions (respecting the autonomies of the executive, court, and legislative government); 4) the active participation of the civilian sector in the public life and a recognizable contribution of the independent media towards reporting about the public and private sectors (which don't have common points with tabloid reporting); 5) efficiency of economic institutions which contribute to the creating of a successful economic private sector; and 6) consistent, synchronized, and harmonized economic and social changes, without the ideologization of western institutional standards.

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