

SERBIA AND THE EUROPEAN UNION: ECONOMIC LESSONS FROM THE NEW MEMBER STATES

Editors

Mirjana Radović-Marković
Srdjan Redžepagić
João Sousa Andrade
Paulino Teixeira



in cooperation with



Coimbra, 2011

Publisher
University of Coimbra – Faculty of Economics, Coimbra, Portugal
in cooperation with
Institute of Economic Sciences, Belgrade
and
Belgrade Banking Academy, Belgrade

Editors:

Mirjana Radović-Marković
Srdjan Redžepagić
João Sousa Andrade
Paulino Teixeira

Reviewers:

António Portugal Duarte
Marta C. N. Simões
Carlos Carreira

ISBN

978-972-9344-03-9

Copyright©2011 by University of Coimbra – Faculty of Economics. All rights reserved.
Publishers have the copyright to all published articles

CONTENTS

PREFACE.....	7
--------------	---

PART I.

THE MODERN EUROPEAN ECONOMY AND INTEGRATION..... 9

CHAPTER 1. MAASTRICHT CRITERIA AT THE AGE OF 18: ARE THEY EVEN CONVERGING, WHICH PARTY AND TO WHAT END?.....	11
<i>Marko Malović, Mališa Đukić, Srdjan Redžepagić</i>	
CHAPTER 2. ATTRACTIVENESS OF WESTERN BALKAN COUNTRIES FOR FDI	27
<i>Matija Rojec, Slavica Penev</i>	
CHAPTER 3. ATTRACTIVENESS OF SERBIA FOR FOREIGN DIRECT INVESTMENTS: TENDENCIES, OBSTACLES AND PERSPECTIVES	47
<i>Ivan Stošić, Draško Nikolić, Mihajlo Đukić</i>	
CHAPTER 4. ACCESSION TO THE EUROPEAN UNION, INTEREST RATES AND INDEBTEDNESS: GREECE AND PORTUGAL	61
<i>Pedro Bação, António Portugal Duarte</i>	
CHAPTER 5. FINANCIAL SYSTEM INTEGRATION OF SERBIA IN THE EUROPEAN FINANCIAL SYSTEM	77
<i>Zoran Grubišić, Periša Ivanović, Nikola Fabris</i>	
CHAPTER 6. HARMONIZATION OF SERBIAN ACCOUNTING STANDARDS WITH THE EU STANDARDS	92
<i>Gordana Vukelić, Sonja Đuričin, Grozdana Belopavlović</i>	
CHAPTER 7. CREDIBILITY AND MONETARY POLICY: THE CASE OF SERBIA	105
<i>Gradimir Kožetinac</i>	
CHAPTER 8. CULTURAL BARRIERS TO SERBIA JOINING THE EUROPEAN UNION	118
<i>Živka Pržulj, Gordana Vukelić</i>	
CHAPTER 9. MONETARY POLICY AND THE PATH TO SUCCESSFUL INTRODUCTION OF EURO IN SLOVAK REPUBLIC..	133
<i>Júlia Ďurčová, Ludmila Bartóková</i>	
CHAPTER 10. MISCONDUCT OF THE KEY POLICY RATE: THE CASE OF SERBIA	147
<i>Branko Živanović, Milena Kovačević, Una Vukoje</i>	

PART II.	
REGIONAL POLICY, AGRICULTURE AND EU ACCESSION ... 165	
CHAPTER 11. INEQUALITY AND GROWTH: RELEVANT LINKS FOR THE PORTUGUESE ECONOMY	167
<i>Adelaide P. S. Duarte, Marta C. N. Simões</i>	
CHAPTER 12. FINANCIAL CONSTRAINTS: LESSONS FROM THE PORTUGUESE MONETARY INTEGRATION	185
<i>Filipe Silva, Carlos Carreira</i>	
CHAPTER 13. BANKING REFORM IN SLOVAKIA: CASE OF COMMERCIAL BANKS AND CENTRAL BANK	200
<i>Marianna Siničáková</i>	
CHAPTER 14. HOW STRONG IS SERBIAN AGRICULTURE - COMPARATIVE ANALYSIS OF SEVERAL AGRICULTURAL INDICATORS OF SERBIA AND ROMANIA	214
<i>Marko Jeločnik, Lana Ivanović</i>	
CHAPTER 15. REFORMS IN CHOSEN TRANSITION COUNTRIES WITH RECOMMENDATIONS FOR INCREASING COMPETITIVENESS.....	234
<i>Vesna Paraušić, Vladana Hamović, Branko Mihailović</i>	
CHAPTER 16. PUBLIC ADMINISTRATION REFORM IN THE SLOVAK REPUBLIC AND OTHER RELATED REFORMS – TAKING LESSONS OF THE OTHER EU COUNTRIES.....	250
<i>Lenka Horváthová</i>	
CHAPTER 17. MULTIFUNCTIONAL DIMENSION OF THE SERBIAN AGRICULTURE SECTOR IN THE FUNCTION OF ACCESSION TO EU	261
<i>Ana Jaško, Nenad Popović, Ondrej Jaško</i>	
CHAPTER 18. BANKING SECTOR: COMPARATIVE ANALYSIS SERBIA VS EU MEMBER STATES	282
<i>Vlastimir Vuković</i>	
CHAPTER 19. REGIONAL POLICY FUNDS: HOW PREPARED IS SERBIA TO ACCESS EUROPEAN UNION REGIONAL POLICY FUNDS?	297
<i>Đuro Đurić, Vladan Ivanović, Mladenka Balaban</i>	
PART III.	
THE ROLE OF POLICY IN SME DEVELOPMENT AND EU ACCESSION	
315	

CHAPTER 20. POLAND'S INTEGRATION WITH THE EUROPEAN UNION AND ITS IMPLICATION FOR SMALL AND MEDIUM SCALE ENTERPRISES	317
<i>Mirjana Radović-Marković, Imani Silver Kyaruzi</i>	
CHAPTER 21. EU AND SERBIA: SME POLICY IN TIME OF CRISIS AND BEYOND	332
<i>Isidora Beraha, Elena Baranenko, Ana Jaško</i>	
CHAPTER 22. REFORM OF ACCOUNTING AND ACCOUNTING EDUCATION IN THE SLOVAK REPUBLIC AFTER THE EURO ZONE ACCESSION	344
<i>Radoslav Tušan</i>	
CHAPTER 23. EDUCATIONAL AND TRAINING MODEL FOR IMPLEMENTATION OF E-CRM STRATEGY	359
<i>Jovan Zubović, Ivana Domazet, Aleksandra Bradić Martinović</i>	
CHAPTER 24. POLICY OF SMALL FARMS SUBSIDIZING IN THE FUNCTION OF ECONOMIC AND SOCIAL DEVELOPMENT OF VILLAGES IN SERBIA.....	383
<i>Božo Drašković, Zoran Rajković, Duško Bodroža</i>	
CHAPTER 25. CORPORATE SOCIAL RESPONSIBILITY AS A TOOL FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH.....	396
<i>Bojana Radovanović, Filip Brković, Slavica Stevanović</i>	

P R E F A C E

Dear readers,

The goal of the book "Serbia and the European Union: economic lessons from the new member states" is to provide an accessible presentation of the facts, theories and controversies that are necessary to understand this process. Its emphasis is on economics, covering both the microeconomics and macroeconomics of European integration. In addition, the book covers the essential aspects of integration, institutions, laws, politics and policies.

The book does not only contribute to our understanding of the explanations of the enlargement through community rules and norms, but it also provides a strong theoretical contribution to the analysis of international institutions as well as try to extract some general lessons that can be learned from the history of EU admission of the member countries. The contributors demonstrate that integration process of each recent member country is characterized by particular circumstances that constrain further institutional developments, legitimacy and credibility. It is combined both the internal dimension and external dimension of the European integration process, whilst offering a tool for comparison.

The EU framework on integration is based on knowledge-sharing, policy coordination and the exchange of information. We have enlisted leading researchers to synthesize existing knowledge and to make use of many different data sources. The different aspects of the integration process, presented into different chapters, enhancing readability of the book. In this context, successful experiences from the new member states can be taken across EU and apply to Serbia, too. We hope that the book will provide the analytical foundations for policy actions needed to foster Serbian integration into the EU and trust that readers will find the book thought-provoking and a motivating force for new ideas and solutions.

In Coimbra, January 2011

Editors
Mirjana Radović-Marković
Srdjan Redžepagić
João Sousa Andrade
Paulino Teixeira

PART I.
**THE MODERN EUROPEAN
ECONOMY AND INTEGRATION**

CHAPTER 1.

MAASTRICHT CRITERIA AT THE AGE OF 18: ARE THEY EVEN CONVERGING, WHICH PARTY AND TO WHAT END?

Marko Malović¹

Mališa Đukić²

Srdjan Redžepagić³

Abstract

Maastricht criteria are well known to be arbitrarily designed. To top it all off, times and again they've been only briefly fulfilled and –worse even- often manipulated with. Among them, fiscal criteria and overall Stability and Growth Pact are perhaps the most controversial of all, as recent problems within the EMU amply demonstrate. Moreover, the epicentre of the EMS, so-called ERM2, and convergence criterion in this regard seem to be much more effective in protecting the interests of those already in the Eurozone, rather than serving as a vehicle for faster and safer euro-accession of the candidates. In addition, since some of the convergence criteria, quite regardless of their dubious effectiveness, leave room for ambiguous interpretations, let alone the often forgotten real convergence criteria earmarked in the Treaty as a carte blanche, existing members of the EMU in times of unprecedented economic hardships may well be tempted to block candidate countries on their way to Euroland. All of these issues raise numerous questions and urge for fundamental reassessment of the Maastricht criteria, as well as point at considering their reform or indeed alternative policy options from the view point of candidate- and acceding countries.

Key words: EMU, Maastricht (Convergence) criteria, inflation, fiscal profligacy, ERM2, acceding countries

¹ Marko Malović, Institute of Economic Sciences Belgrade, Serbia

² Mališa Đukić, Belgrade Banking Academy, Belgrade, Serbia

³ Srdjan Redžepagić, Institute of Economic Sciences, Belgrade, Serbia

INTRODUCTION

EU is and always has been a highly political creature. As such, in fact, it seems to have been driven by notorious discretion more than by (often formally proclaimed) level-playing-field rules, virtually at all times and instances - except when it really didn't make any sense to firmly stick to them. Both retrospect and prospect of European monetary integration have repeatedly illustrated this trait and perhaps most vividly so. In spite of coming to an age this year, convergence criteria -as a set of preconditions for joining the EMU- are by no means exception to that pattern.

Maastricht criteria are well known to be arbitrarily designed.⁴ To top it all off, times and again they've been only briefly fulfilled and -worse even- often manipulated with. Among them, fiscal criteria and overall Stability and Growth Pact are probably the most controversial of all, as recent problems within the EMU amply demonstrate. As a matter of fact, global financial meltdown has uncovered alarming dissonance between unprecedented fiscal profligacy in Eurozone countries on one hand and self-inflicting fiscal austerity in candidate and acceding countries on the other [Darvas, 2009]. Moreover, the epicentre of the EMS, so-called ERM2, and convergence criterion in this regard seem to have been much more effective in protecting the interests of those already in the Eurozone, rather than serving as a vehicle for faster and safer euro-accession of the candidates [Fölsz, 2003]. In addition, since some of the convergence criteria, quite regardless of their dubious effectiveness, leave room for ambiguous interpretations, existing members of the EMU in times of unprecedented economic hardships may well be tempted to lock in candidate countries in such a (for members) comfortable status quo: for as long as outsiders pursue national consensus to be promoted into EU/Euroland, their economic policies (and more) remain under control of E(M)U [Lavrač, 2004], [De Grauwe, 2009]. All of these issues raise numerous questions and urge for fundamental reassessment of Maastricht criteria, as well as point at considering their reform or indeed alternative policy options from the view point of acceding countries like Serbia.

The rest of the paper is organised as follows: section 2 gives the overview of convergence criteria and ERM2, section 3 deals with oddity of each and every Maastricht criterion from the perspective of the present moment and potential new entrants, while the section 4 reiterates corrective proposals, counter-weighs principal costs and benefits and eventually concludes.

⁴ For early intellectual critiques, consult Buiter, Corsetti and Roubini (1993) and Wickens (1993).

OVERVIEW OF THE MAASTRICHT CRITERIA

In order to qualify for the Euroland, apart from having to be a member of the EU⁵, each candidate country must conform to at least five convergence criteria- defined 18 years ago in the famous Maastricht Treaty, which ushered the timeline and the rules for launching the euro and the EMU as we know them. These criteria tackle either monetary, fiscal or currency stance of a candidate country. In that order of appearance, convergence indicators could be summarized as follows:

- 1) Applicant's inflation rate for the preceding year must have accounted for no more than 1.5% above the average inflation rate of the three lowest inflation E(M)U members;
- 2) Long term interest rate (hinting at long run inflation) on applicant's government bonds in the preceding year must have remained no more than 2% above the average long term interest rate of the three lowest-inflation E(M)U members;
- 3) Budget deficit must not exceed the threshold of 3% of the applicant's GDP ("except in exceptional circumstances");
- 4) Applicant's public debt must not exceed 60% of the country's GDP ("or must be declining toward that level") and, lastly,
- 5) Applicant's national currency must stay within its ERM2⁶ exchange rate band of $\pm 15\%$ around the central parity for at least two years without outward realignments or unilateral devaluations.

Be that as it may, Maastricht criteria clearly disregarded much of the optimum currency area scientific legacy and introduced set of indicators instead, which scream 'arbitrary' in multiple respects: they are not supported by any other coherent piece of economic theory either, it is unclear why specific numerical targets were chosen (or where it is clear - the reasoning is painfully too linear, to put it mildly), only to culminate with evident (and arguably deliberate) absence of real convergence criteria, calibrated ones at least.⁷

⁵ Moreover, the political set-up of EU enlargement commits accession countries to join the EMU at some stage after the EU accession.

⁶ Originally, it used to be just ERM (Exchange Rate Mechanism), a multicurrency parity grid that served as converging hard-core of the EMS. ERM2 came about only with launching of the euro, representing essentially bilateral agreements between euro itself (or EMU if you will) and respectful late comers' currencies which joined or will join the Eurozone subsequently.

⁷ We discuss this non-calibrated, and typically less known, additional Maastricht criteria further at the end of this section.

Inflation convergence thresholds, 1) and 2), aim at enforcing the German-style “culture of price stability” in both short and longer run as a top monetary priority in E(M)U. This in turn bears consequence also for criterion 5), to be discussed later. Inflation criterion, nonetheless, is numerically arbitrary beyond reasonable doubt (why exactly 1.5% for short run or 2% above the three best performers’ average for the long run inflation). These rules of thumb, even if correspondent to EU’s reality once upon a time, nowadays pertain to no more than drastic egocentrism of the strongest founders and their obsolete arithmetic.

Similarly, fiscal criteria too were arbitrarily designed, often unfulfilled and patently window-dressed. Baldwin and Wyplosz (2009) remind that EMU’s budget deficit criterion has been set as equivalent of the usual German golden rule for annual public investment (the only acceptable cause of budget deficit for them at the time) which typically amounted to some 3% of GDP. Cumulative public debt ceiling, again, has been pinpointed at 60% of GDP -according to one school of thought- simply because that was the average EU debt level back in 1991 when Maastricht criteria were being formulated. The other school of thought, first demonstrated by Bini-Smaghi *et al.* (1993), offers more rigorous proof for equally superficial reasoning behind this threshold. Namely, since public debt dynamics stems from current budget deficits as in (1),

$$G(t)-T(t) = PD(t)-PD(t-1) \quad [1]$$

or in terms of applicant’s current GDP,

$$d(t) = p(t) - PD(t-1)/Y(t) \quad [2]$$

then rearranging the second term on the right hand side yields

$$PD(t-1)/Y(t) = PD(t-1)/(1+g(t)) \quad [3]$$

where $g(t)$ is an annual economic growth rate. By plugging this result back into (2), we obtain

$$d(t)(1+g(t)) - g(t)p(t) = p(t) - p(t-1) \quad [4]$$

Since fiscal convergence required by Maastricht criteria implies constant debt-to-GDP over time, expression (4) collapses to

$$p(t) = d(t) (1+g(t))/g(t) \quad [5]$$

Now, jointly under arbitrary supposition at the time that growth rate amounts to 5% *p.a.* (or 3% in real terms) and under then newly invented rule that budget deficit must not exceed 3%, equation (5) gave roughly 60% solution for saddle-

point stable public debt ratio. In any case, upon launching the euro, several initial EMU members had been in breach of the 60% debt rule, notably Belgium, Italy and Greece, but strictly also Sweden, Holland and Spain, whereas less than 3% budget deficit indicator was honoured only thanks to accounting tricks. Baldwin and Wyplosz (2009) report that France privatised portion of its state-owned telecomm in order to temporarily curb the deficit, Italy collected some tax revenues year in advance, while even Germany contemplated selling monetary gold in order to tune down its public finances.

Finally, the road to the European monetary union goes also through the Exchange Rate Mechanism 2 (ERM2), which regulates the exchange rate relationships between the present Euroland and the future EMU members (“pre-ins”) [De Grauwe-Schnabl, 2004]. The ERM2 alone is a mere anteroom which allows the EMU to appraise the pre-in’s adjustment potential and financial stability in respect to monetary and exchange rate policy. But more broadly, the ERM2 is the overcoat and temporal yardstick of the entire Maastricht criteria set. There are no explicit regulations as for the timing of the ERM2 entry, but the Maastricht criteria require a minimum waiting period of two years before examination whether one is ready to leave this gym *sui generis* and embrace the euro. Current participants in ERM2 are Denmark’s krone, Estonian krone (to vanish as of 1st of January 2011 when Estonia will officially adopt euro), Lithuanian litas and Latvian lats. After deliberately failing to meet some of the convergence criteria in the past, which made it pointless to participate in the ERM, to Sweden has apparently been “let alone” in a position effectively resembling the UK’s. All the rest of the bigger EU members still out of Eurozone together with EU candidate countries have problems with choosing the right moment for obligatory ERM2 entry and with meeting macroeconomic consequences of its dire requirements in practice. Couple of things is arbitrary here. Some countries, both EU members and EU candidates, were *de iure* or *de facto* allowed to opt out of the ERM2 and/or euro altogether.⁸ In addition, despite officially announced band width of $\pm 15\%$ around central parity, the ECB in reality stubbornly insists on much narrower corridor. Moreover, conversion rate negotiations (*i.e.* determination of central parity) lack in transparency and gain in political discretion on behalf of EMU over more recent euro-applicants. In short, are we witnessing not only the EU enlargement fatigue here, but also the antagonism of macroeconomic interests which may stop the euro’s “Drang nach Osten”?

Having said that, it is worth noting that, recently, EMU officials began raising the questions of fulfillment of additional and less known Maastricht criteria, largely

⁸ Others, like Italy and Finland, for instance, were admitted in the Euroland following an assessment which took place before the mandatory two years in the ERM had elapsed.

ignored or unaware of thus far even in professional and academic circles, which have to do with the so-called real convergence. While it doesn't explicitly quantify them, the Treaty of Maastricht indeed does mention additional convergence criteria, such as the position and size of the balance of payments disequilibria, developments in unit labour costs and other price indices, (un)employment rates etc. [Lavrač, 2004]. Relevantly enough, Lavrač (2004, pp.4-5) makes the following remark about them, and we quote: "*At this moment it is hard to judge their real weight. They, however, certainly give the EU institutions some additional flexibility and discretion when evaluating readiness of the countries for the EMU which can be activated in the case of need.*" These valuable and meaningful criteria, also related (for a change) to theoretical pillars of the OCA theory, have nevertheless never ever been called upon let alone applied in the case of 'old Europe's' qualification for Eurozone. Enough said, for the time being.

REASSESSMENT OF THE MAASTRICHT CRITERIA AND SOME RECTIFYING PROPOSALS

Before proceeding with more fundamental reassessment of the Maastricht criteria, let us document the output of a quick and somewhat illuminating scientific exercise. Inspired by De Grawe (2009), we ventured to determine how many of the EMU members meet the Maastricht criteria today. Furthermore, logical comparison would enlist the current ERM2 members and other obvious Euroland candidates to see how they fare with the convergence indicators presently and in case they fulfill them to a reasonable extent, what is their macroeconomic performance against the performance of the rest of the European economies without immediate convergence criteria concern.

In a nutshell, apart from Ireland, inflation criterion appears to be by and large met within present EMU too. Quite expectedly, however, relatively larger developing transition countries like Poland, Romania, Serbia and even more developed Turkey are having problems with keeping inflation in check without causing havoc in other aspects/segments of their economies. On the other hand, not a single EMU member (abstracting from tiny Luxembourg) is likely to abide by the budget deficit criterion in 2010. So if Ireland and UK have deficits four times greater than allowed, while France, Italy and Spain have budgetary gaps of roughly double the proscribed Maastricht criterion and rising, how credible is keeping some of the ERM2 and other EU candidates out of integration processes on the grounds of not meeting convergence criteria? In terms of cumulative public debt indicator, matters are even more ironical: in 2010, almost all of the inaugural EMU members are deeply in breach of the 60% GDP ceiling, while virtually all

of ERM2 members as well as others⁹ aspiring to join the Euroland or EU (including entire Western Balkans, Turkey, Ukraine, Russia and the rest of the so-called European periphery) demonstrate considerable prudence in regard to the public debt criterion! Nonetheless, it is painfully transparent that most of the newer EU members won't be admitted to Euroland any time soon, whereas if UK, for instance, wanted to swap the pound for euro in spite of its debt-to-GDP of over 80%, it would probably happen literally overnight. Clearly, repeated transgressions of Maastricht criteria in the past and present when it comes to Western European countries coupled with all too easily dismissed leniency in the cases of the new members and acceding countries, suggest that euro entrance criteria have very little to do with economics or rules, and much to do with politics and inconsistent discretion [Jonas, 2004], [De Grauwe, 2009].¹⁰

Notwithstanding that, explicit results of often preliminary and implicit efforts by candidates for E(M)U to meet the Maastricht criteria seemingly come with steep macroeconomic costs, some of which are genuinely degressive and ultimately avoidable. Reassessment of euro entrance criteria deals with these issues in greater depth.

Inflation criterion, to begin with, would be perhaps more logically defined if extracted among EMU countries inflation rates, rather than entire group of EU members, including those who opted out of the Euroland. By and large, inflation in individual countries of the euro area reflects partly the conduct of monetary policy by the ECB, but partly their specific characteristics like income level, labour costs, taxes and real GDP growth, openness and sensitivity of domestic prices to exchange rate fluctuations etc., which are in no way related to the conduct of the single monetary policy. The more is any given euro area member different from the euro area average, the more can inflation in that particular country reflect its structural specificities, and commensurately less the impact of common monetary policy. In terms of their structural characteristics, particularly income level and growth, the new EU members are akin to the fastest growing/lowest income present euro area members. However, under the existing rule, or, more accurately, under the unchanged approach to the interpretation of the existing rule, these countries would most likely be required to replicate

⁹ With noticable exception of Hungary again.

¹⁰ Macroeconomic determinants anyway tend to be of second order importance in both forming and dissolutions of currency unions through time. Currency unions typically dissolve when: a) there are large inflation differentials among member states, b) countries become protectionist (either protectionism or trade flows simply dry up due to exogenous or non trade-barriers driven reasons), c) but mostly and predominantly due to changed political sentiment, drastically altered politics or state status of the member(s) [Nitsch, 2004].

inflation performance of countries that are at the different end of the euro area membership ranked by GDP size [Jonas, 2004]. Moreover, Lavrač (2004) bolsters the argument by asserting that low inflation doesn't have to be always a sign of economic and institutional superiority, but to the contrary - could also be the result of worrisome macroeconomic imbalances. In addition to that, how should we read "three members with the best performance in terms of the price stability" in times of protracted recession causing evaporating inflation rates or indeed deflation in some of the members?! [*Ibidem*] These are just some of the grounds on which several authors, notably Buiter and Sibert (2006) and Darvas (2009), demanded alteration of the price stability criterion so that some kind of euro area average serves as a future reference point, instead of the more extreme ongoing rule the EMU officials stubbornly stick to. The reasoning behind this rectifying proposal being not only that E(M)U has changed to the point it would be unwise to sustain the status quo and ignore the macroeconomic needs of the newcomers and soon-to-be members, but also because pressing constructional weakness of the Maastricht criteria unsustainably specifies a number of nominal convergence criteria that jointly constrain if not ridicule the remaining other: for instance, if an applicant economy has to curb current inflation and cuts down long term inflation expectations to the euro area levels, it might cause nominal appreciation of national currency and eventually the breach of narrow exchange rate band established under the auspices of ERM2.

For as long as truly integrated pan-European bond market maintains reasonable real interest rate convergence, the long term interest rate criterion remains the least controversial of the nominal convergence criteria. Nevertheless, until not long ago, the so-called Walters critique (he was a counselor in Thatcher's administration) has ushered the fear of divergence of national long term inflation rates precisely because of honouring the long term interest rate Maastricht criterion. Namely, due to the unified euro area-wide nominal interest rate, countries with higher inflation are to depress their real interest rates, whereas lower inflation economies will expectedly have higher real interest rates, which all in turn corroborate the final corollary: common monetary policy is bound to be more expansionary in higher inflation states and more contractionary in lower inflation member states [Mongelli-Wyplosz, 2008]. That notwithstanding, Mongelli and Wyplosz (2008) dismiss the Walters critique after analyzing the data on Euroland's pre-crisis long term inflation and interest rates time series: since some sort of real covered interest arbitrage flattens out the real interest differential and balance of international competitiveness, under reasonably unified expectations of common currency umbrella, higher inflation and therefore expansionary low real interest rate causes real appreciation (drop of pseudo-real exchange rate) and therefore deterioration of international competitiveness, while conversely, lower inflation rate or deflation tendency implies real depreciation

(rise in real pseudo-exchange rate) which counterbalances the former effect. Alas, if a more serious asymmetric shock, fiscal and/or balance of payments crisis in one or more EMU members alters the rational expectations and (re)introduces uncovered real interest parity into the equation, then markets may start charging fundamentally different nominal interest rates to member state's governments with plagued credibility quite regardless of the ECB's quotations. Recent examples of Greek, Irish or Spanish crisis (although not identical among themselves), call for utmost caution in this regard. In a sense, this long term criterion's destiny depends upon prudent national macroeconomic management and successful reform of other, short-term criteria.

What about reassessment of the fiscal criteria? At the time of Maastricht Treaty preparation, the 3% deficit-to-GDP rule as well as the 60% of GDP debt benchmark, were considered necessary because governments have been tempted to create greater budget deficits in order to mitigate shocks: does that sound strangely familiar by any chance? This could additionally lead and has led to problems of sustainability of deficits and to growing government debts. Other negative effects would include price instability as a country that allows its debt-to-GDP ratio to increase over a period of time would cause its own but gradually also the EU-wide interest rate increase. As a consequence the burden of government debts in other EMU countries would force them to follow more restrictive fiscal policies to stabilize their debt-to-GDP ratios. The above stated considerations contributed to the definition of numerical budgetary rules in the Maastricht Treaty that countries have to satisfy to become members of EMU.

Our assertion is that there must be a level-playing-field correspondence between Euroland members and ERM2 participants in terms of both numerical fiscal requirements and fiscal instruments at their disposal. In other words there should be a tighter compatibility of Maastricht criteria and the so-called Stability and Growth Pact rules.¹¹ The Stability and Growth Pact's (SGP) main purpose is to ensure that the members maintain budgetary discipline following the introduction of a single currency. It includes a European Council resolution adopted at Amsterdam on 17 June 1997 and two Council Regulations of 7 July 1997. The two regulations were revised in June 2005 and amended after discussions on operation of the SGP. As it is well known (if not consistently deployed), the Stability and Growth Pact opens the way for the Council to penalise any participating member state that fails to take appropriate measures to end an

¹¹ For instance, thereby it would be inconceivable for euro members to demand from ERM2 participants effectively procyclical fiscal policy in the face of global adversity while they themselves pursue countercyclical policy if not outright fiscal profligacy at the same time.

excessive deficit (the "excessive deficit procedure"). A non-interest-bearing deposit with the ECB would be a form of a penalty. If the excessive deficit is not corrected within two years it could be converted into a non-refundable fine. On the other hand, again, the penalties are subject to assessment of the circumstances by the Council. With regards to the fiscal criteria, based on the Commission report the Council decides whether there is an excess deficit. In most non-member states, fiscal deficits have been above the Maastricht reference value for some time especially due to the government measures undertaken to mitigate the global financial crisis impact. In addition, financial positions in the non-member states have been facing aging-related fiscal shocks. Schadler *et al.* (2005) argue that in the period before euro adoption, the candidate countries should aim at bringing fiscal deficit below 3% of GDP. In the case of a negative shock and assuming that euro qualifiers adopt the euro with the fiscal deficit close to 3%, the negative shock would push the deficit above 3%. Consequently, to reduce the deficit to 3% of GDP would require a restrictive fiscal policy which could be politically difficult provided the adverse effects on the employment and the economy. In the light of the recent shocks that have been caused by the global financial crisis, the authors of this paper suggest that non-member states should reduce the deficits below the 3% of GDP ideally before the entry in ERM2. As a result, a buffer zone would exist to allow shock absorption and prevent the emergence of the currency market nervousness that may impact the euro value. However, how politically feasible that is remains equally controversial issue.

Furthermore, Warin (2005) and Wyplosz (2006) argued that, despite the justification for fiscal rules in an EMU without a centralised budget, EU fiscal rules may hinder economic growth in Europe. The authors consider that those rules reduce the margin of manoeuvre of the member countries when facing asymmetric shocks and are not growth promoting. That is to say that not only current shape of public finances by no means is secure indicator of future growth potential, but even more so that economic costs of lost confidence in institutions and decimated political support may easily overcome extra couple of percent of budget deficit, neglected by the still ruling neoclassical paradigm.

The necessity to combine short-term flexibility and long-run fiscal discipline is a notoriously complex trade off. As shown above with the reference to the statistical data of recent and historical fiscal indicators, the problem of setting the quantitative ceilings is that the rules have been repeatedly broken. A solution to the problem could be the formation of an independent national fiscal body in E(M)U member states, candidate countries and economies with the strategic objective of becoming E(M)U members (such as Serbia). For the sake of the argument, this could be a council consisting of competent experts that are neutral with respect to the ongoing short-sighted political interests and objectives. A

similar approach exists and is implemented in a number of central banks of developed countries in the form of a monetary council. Needless to say, fiscal policy is highly politicised, especially the structure of public revenues as well as the structure of public expenditures. However, what should be excluded from politics with respect to the fiscal policy are the issues of budget deficit and public debt. Setting up medium-term and long-term deficit and public debt targets by an independent fiscal body may bring us a step closer to the objective of achieving the sustainability of budget deficit and public debt based on a more flexible, yet fundamentally prudent, well-balanced and overarching set of conditions, as outlined in reformed and sublimed convergence criteria/SGP.

Finally, we don't see full-fledged fiscal federalism as modality likely to work in the context of EMU, due to stark differences in economic structure and development level among the members (which requires taxing etc. to remain national prerogative in order to preserve the euro) as well as due to historically rooted international and political mistrust within E(M)U, in respect to each other's prudence or intentions even. Nonetheless, ideal reform would institute at least some residual, federally administered funds, which could direct fiscal transfers to most adversely hit or those with the thinnest fiscal base, and -mind you- even before joining the euro, *i.e.* already in the ERM2 stage, just as the ECB, for example, bears responsibility for EMU-applicant's exchange rate zone together with its own national central bank while at common currency anteroom. Alas, from the onset of E(M)U there seems to be no political willingness to instigate such a federal buffer, nor it is obvious where the money might come from [Malović, 1998].

When it comes to the exchange rate criterion and ERM2, apart from increasingly asymmetric impact of one-size-fits-all monetary policy in an ever more diverse EMU¹², the issues that stand out are the following: a) does ERM2 vs. ERM makes a difference and in what respect, b) sustainability of nominal exchange rate target in small open transition economies, and lastly c) timing of ERM2 entry, or indeed, if unilateral euroisation appears more appealing than policy constraints of ERM2, is that an option, for whom and when exactly.

Essentially, there are very few differences between ERM and ERM2. The former was multilateral symmetrical parity grid, but in reality *de facto* DM-zone, the

¹² Therefore, as emphasized many times before, giving up monetary independence may be costly especially for the EMU applicants, when they are hit by asymmetric shocks and cannot efficiently substitute monetary policy with some alternative stabilizing mechanisms [Lättemäe, 2003]. On the other hand, Buitert and Sibert (2006) suggest that asynchronous shocks can be beneficial in currency union with integrated financial markets since they increase the scope for and return on investment diversification.

latter being *de iure* bilateral euro-zone. In both mechanisms countries couldn't unilaterally determine their currency parities,¹³ nor were they solely responsible for maintaining them. The main problem with ERM2 is that it was mainly designed to protect those already in the Eurozone from potential competitive devaluations/depreciations of the candidate-currencies [Fölsz, 2003]. The straightforward implication of that being that it's high time for ECB to stop insisting on narrower bands than required by the ERM2 itself, thereby enabling "the outs" to still retain some monetary sovereignty and occasionally deviate from uncovered interest parity without fundamentally endangering the exchange rate criterion.¹⁴ ECB's supporting interventions along those of the respective central bank should be slightly more frequent and more generous, bearing in mind that, while in ERM2, EMU applicants are especially vulnerable. Opponents of such a policy contend that wider bands, by abandoning tightly pegged target zones, cannot credibly serve as nominal convergence anchors. The extent to which this assertion is false and all the arguments as well as empirically tested wider currency bands which point to the contrary have been discussed at great length in Malović (2007), *inter alia*, so we won't dwell on it in this treatise.

Even though Harrod-Balassa-Samuelson (HBS hereafter) appreciation effect as a result of transitional catching-up process may be a bit overrated in some instances, it does cause problems to inflation criterion as well as to exchange rate management within ERM2. It is a side-effect of desired but non-quantified real convergence process, yet it may open a conflicting gap in respect to nominal convergence as dictated by the Maastricht criteria [De Grauwe-Schnabl, 2004]. Namely, the currency of fast growing economy appreciates relative to that of the more slowly growing economy, either through nominal appreciation in case of managed floats or through inflation differential channel in case of fixed exchange rate regime. Jonas (2004) underlines that it's almost impossible to peg the exchange rate while at the same time maintaining control over money supply (and thus inflation). Orłowski and Rybinski (2005), however, by extending widely popular flexible inflation targeting framework into *de facto* monetary conditions index, confirm the difficulty of the task, but demonstrate it is not impossible: by assigning interest rate instrument to changes in relative (Polish versus Euro-area) inflation forecast, whereas foreign exchange reserves interventions to exchange rate stabilisation, the framework can work at least for a while and in good times. More serious perils, in our opinion, should be recognized in and during international capital flow reversals, their sudden occurrence made possible by

¹³ Central parities of the ERM2 currencies *vis-a-vis* euro are determined among finance ministers of EU member states, ECB and central banks' governors of ERM2 participants, after taking into consideration Commission's proposal [Fölsz, 2003, p.6].

¹⁴ Letting Slovakia into EMU looks like a long awaited step forward in that respect.

mandatory dismantling of capital controls immediately before entering the EU. At such a fragile point, applicants still could not rely on superior institutional imports, benefits of euro-wide capital market or banking system, but they ought to be able to draw swiftly from ECB's reputation and size through both verbal and open market operations/swaps¹⁵ channel. On their own, national policy makers should strive to avoid sterilisation as well as appreciation, by rapidly repaying foreign debt together with expanding industrial policies and country's export oriented productive capacities.

More often than not, HBS effect alone could be accommodated even within the narrower ($\pm 2.25\%$) version of exchange rate stability criterion, but be that as it may, applicant countries/their currencies should ideally enter ERM2 in peaceful times and at such a level of economic development that forces pressing towards any excess inflation or appreciation are actually modest and/or retreating. In addition, we advise against entering ERM2 if Ricardian equivalence doesn't hold, fiscal policies appear imprudent or if the large-scale administrative price control is still in place. Moreover, for several criteria if not all, some countries may wish to pursue nominal convergence even before formally entering the ERM2, since it seems wise to aim at fulfilling Maastricht criteria at least a year ahead of the planned date of entrance due to lengthy administrating procedures (this being especially advisable to overachievers deliberating speedy entrance) [Lavrač, 2004]. However, struggling history of recent enlargements of Euroland suggests that speedy accessions seldom work out,¹⁶ hence small economies with little industrial production and those having clearly identified interest in hasty adoption of euro, might stand a better chance with outright unilateral eurisation. In this case, the euro would circulate in parallel to the domestic currency, or perhaps replace it altogether. In any event, this action would assume that national authorities fix the value of the domestic currency in terms of the euro, rather than participating in the ERM2 target band arrangement for two years before entering EMU [Meade-Mueller-Plantenberg-Pisani, 2002]. Blessing of dollarisation is by all means always mixed and never completely irrevocable,¹⁷ but for those whom it might

¹⁵ Similar to ones offered by the ECB to Denmark and Sweden, for example.

¹⁶ For instance, Lättemäe (2003) and most strikingly Darvas (2009) describe formidable obstacles, promises to and disappointments of Baltic countries in their attempts to give up their currency board or even dollarisation arrangements in favour of ERM2. Thus, there is a stark contradiction between the huge loans granted from the EU and elsewhere to support Latvia in maintaining its exchange rate peg and the denial of Latvia's euro-area prospects by EU officials [Darvas, 2009]. In presence of tequila effect of global crisis across South and East Europe, this appears yet another example of selfish and dangerous game played out by Brussels and Frankfurt.

¹⁷ Crisis driven exit from dollarisation by Ecuador constitutes a note-worthy caveat [Darvas, 2009].

serve it is in fact a viable option. Not only that some older members avoided spending entire two years in ERM, but what's more, despite ostentatious verbal threats by the ECB and Commission basically nothing ever happened to economies which eurised without explicit EMU's consent (like Montenegro e.g.). After all, ERM2 is too cumbersome from the outsiders view point, and too defensively designed to serve the interests of those already in. Nevertheless, for countries capable of utilizing non-negligable benefits of autonomous monetary policy making and floating exchange rate, like Poland, Czech Republic, Croatia or Serbia, the choice is probably less easy one and not likely to point in eurisation direction anyway.

CONCLUDING REMARKS

In this paper, we performed reevaluation of the Maastricht (convergence) criteria from the view point of ERM2 members and other acceding countries aiming to join the Euroland in the proximate future. It appears that Maastricht criteria implicate serious flaws and even drawbacks both from the economic theory standpoint and particularly having in mind logical socio-economic priorities of less-developed transitional applicants at the outskirts of Europe. The entire nominal convergence set, but especially inflation, fiscal and exchange rate criteria, seem to be designed primarily to shield the interests of those already in the Eurozone, rather than serving as a vehicle for faster and safer euro-accession of the candidates. Hence, it would be not only analytically easy to show that keeping the same and rather asymmetrically-tackling rules in a vastly expanding E(M)U violates the equal treatment principle, but also that so obsolete convergence criteria arguably aren't in the interest of EMU as a whole either any more. Consequently, at least inflation and long term interest rate criteria could be related to the euro area average rather than three best performing countries. Along the same lines, fundamental reform of fiscal criteria in parallel with SGP reform could establish more flexible albeit credibly prudent fiscal guidelines entrusted to politically independent national fiscal bodies among the applicants, whereas existing EMU members would have to clean up the mess of their own fiscal profligacy and establish the level playing field on the matter. Furthermore, quite independently from dubious effectiveness of several if not all of the nominal convergence criteria, and deliberately left room for ambiguous interpretation by 'insiders' of their fulfillment, previously admitted EMU members could always (and expectedly in crisis times) resort to non-quantified real convergence criteria from the Maastricht Treaty in order to block candidate countries on their way to Euroland. This might happen on economic, financial or clearly nationalistic (political) basis. Nevertheless, once the E(M)U applicants realise that they are knocking on the door of –in many aspects- 'dragged party with lights on and beer

running out', as well as when old E(M)U members on their behalf realise the size of highly skilled immigration injection their economic area and common currency both badly need, there should be common ground for mutually beneficial reform of Maastricht (convergence) criteria.

Otherwise, however, alternatives remaining differ pending on structural, geographic and future strategic traits of economies at hand. Small(er) service based countries may indeed emerge better off by unilaterally adopting the euro, thereby avoiding the most of the messy Maastricht hustle all together. Larger, more heavily populated and more industrial countries, on the other hand, probably must seek either consensual euroisation deal or give it all up (even intentionally postpone) for a longer period. Having said that, too much procrastination on Brussels behalf, surely diminishes the benefits and elongates the costs of common currency adoption for E(M)U applicants according to standard OCA theory and the latest research in this field.¹⁸

References

- [1] Baldwin, R.-Wyplosz, C. (2009), «The Economics of European Integration», McGraw-Hill, Third Edition.
- [2] Bini-Smaghi, L.-Padoa-Schioppa, T.-Papadia, F.(1993), «The Policy History of the Maastricht Treaty: the Transition to the Final Stage of EMU», Banca d'Italia, *mimeo*.
- [3] Buitter, W.-Corsetti, G.-Roubini, N. (1993), «Sense and Nonsense in the Treaty of Maastricht», Economic Policy No.16.
- [4] Buitter, W.-Sibert, A. (2006), «The Inflation Criterion for Eurozone Membership: What to do when you fail to meet it? », Annual Meeting of the Turkish Economic Association, Ankara, September, *mimeo*.
- [5] Darvas, Z. (2009), «Treaty Change is needed to make Sense of Euro-area Entry Criteria» VoxEU.org electronic paper, *mimeo*.

¹⁸ If we recall the proverbial Mundell's OCA benefits, they are chiefly summarized by: 1) elimination of conversion costs and currency risk (with stable float or unilateral euroisation reasonably achievable even without formally joining the EMU), 2) increased trade (for which in their most recent paper Santos Silva and Tenreyro (2010) econometrically demonstrate it's so negligible that amounts to nothing more than a myth!) and above all 3) reputation and financial potency of union's monetary authority as a body-guard intervener as well as importing well-defined, credible and stable financial rules, laws, disciplined and reliable institutions from 'north' to 'south'. Be that as it may, it strikes us as interesting and indicative, that during both EU and EMU integration, this latter and -chances are- the most beneficial gain the applicants need to wait for the longest time, whichever, formal or unilateral, convergence pattern they choose to follow.

- [6] Fölsz, A. (2003), «The Monetary Framework after Accession – A Political Economy Analysis of ERM2» EIOP Working Paper Vol.7 No.2.
- [7] De Grauwe, P. – Schnabl, G. (2004), «EMU Entry Strategies for the New Member States», *mimeo*.
- [8] De Grauwe, P. (2009), «The Politics of the Maastricht Convergence Criteria», VoxEU.org electronic paper, *mimeo*.
- [9] Jonas, J. (2004), «Euro Adoption and Maastricht Criteria: Rules or Discretion?», ZEI Working Paper B14, Rheinische F.W. Universitaet Bonn.
- [10] Lättemäe, R. (2003), «EMU Accession Issues in Baltic Countries», EZoneplus Working Paper 17A. J.Monet Centre of Excellence, FU Berlin.
- [11] Lavrač, V. (2004), «Fulfillment of Maastricht Convergence Criteria and the Acceding Countries», EZoneplus Working Paper 21, J.Monet Centre of Excellence, FU Berlin.
- [12] Malović, M. (1998), «Caveat Emptor for EMU and EEA», Berza no. 7-8, Belgrade.
- [13] Malović, M. (2007), «Exchange Rate Regimes and Monetary Policies in Emerging Markets: A Showdown for Few Theoretical Misconceptions», CsGG Discussion Paper 42 (monograph), London School of Economics, London.
- [14] Meade, E.-Mueller-Plantenberg, N.-Pisani, M. (2002), «Exchange Rate Arrangements in EU Accession Countries: What Are the Options? », Centre for Economic Performance, London School of Economics and Political Science , *mimeo*.
- [15] Mongelli, F.-Wyplosz, C. (2008), «The Euro at Ten: Unfulfilled Threats and Unexpected Challenges», Fifth ECB Central Banking Conference.
- [16] Nitsch, V. (2004), «Have a Break, Have a..National Currency: When do Monetary Unions fall apart?» CESifo Working Paper 1113.
- [17] Orłowski, L.-Rybicki, K. (2005), «Implications of ERM2 for Poland's Monetary Policy», The William Davidson Institute, Working Paper 802.
- [18] Santos Silva, J.-Tenreyro, S. (2010), «Currency Unions in Prospect and Retrospect», CEPR Discussion Paper 7824.
- [19] Schadler, S.-Drummond, P.-Kuijs, L.-Murgasova, Z.- Van Elkan, R. (2005), «Adopting the Euro in Central Europe: Challenges of the Next Step in European Integration», IMF Occasional Paper 234, Washington, DC.
- [20] Warin, T. (2005), „The Hidden Structural Features of the Fiscal Rule: A European Saga“, International
- [21] Advances in Economic Research 11, pp. 29-38.
- [22] Wickens, M. (1993), «The Sustainability of Fiscal Policy and the Maastricht Conditions», London Business School Discussion Paper No.10, LBS.
- [23] Wyplosz, C. (2006), „European Monetary Union: The Dark Sides of a Major Success“, Economic Policy 21, pp. 207-261.

CHAPTER 2.

ATTRACTIVENESS OF WESTERN BALKAN COUNTRIES FOR FDI

Matija Rojec¹

Slavica Penev²

Abstract

Based on standard classification of competitive advantages of a country as investment location and complex international assessments of countries' competitiveness, the paper identifies competitive advantages and disadvantages of five Western Balkan countries (WB5), as FDI location. WB5 as a region lags behind EU27 and EU10 average in almost all relevant indicators of locational competitiveness.

The identified competitive advantages of WB5 as a location for FDI are the following: stable macroeconomic environment, fast economic growth, geographical proximity to major EU markets, stable and relatively well developed financial system, relatively low cost and qualified labor, and EU Stabilization and Association Agreement with EU, CEFTA and other bilateral trade agreements.

The most prominent weaknesses inhibiting more FDI inflows in WB5 are: small domestic market with low per capita income, relatively high country risk, slow progress in structural and institutional reforms, underdeveloped infrastructure, inefficient government bureaucracy and high administrative barriers.

The paper concludes that the main policy message arising from theoretical findings and empirical evidence suggest that the best way for WB5 to attract more FDI in the future is to strengthen the structural reforms and to speed up their EU approximation processes. Any specific FDI policies are only of a secondary importance.

Key words: *FDI, location criteria, WB5, EU10, attractiveness, EU approximation process*

¹ Matija Rojec, Faculty of Social Sciences, University of Ljubljana, Ljubljana

² Slavica Penev, Institute of Economic Sciences, Belgrade

INTRODUCTION

Foreign direct investment (FDI), their size, structure and stability of flows, are generally recognised as a potentially important source of economic growth (see, for instance, Billington, 1999; Bevan and Estrin, 2000; Dunning and Lundan, 2008). Apart from increased capital capacities, FDI brings a number of other positive effects. First of all, FDI represents an addition to domestic accumulation, meaning an increase of production capabilities and, consequently, of employment (Buckley et al. 2002). FDI also results in the inflow of new knowledge and technology (Buckley et al. 2002), with positive spillover effects on the rest of the economy (Lucas, 1993; Borensztein et al. 1998). Foreign investors may also open new markets and transfer management knowledge. Nowadays, many countries successfully exploit development opportunities which are brought in by FDI. Expansion of production by means of FDI and, consequently, foreign know-how is one of the most widely used growth models of the present time (see, for instance, Moran et al., 2005; Herzer et al., 2008; O'Sullivan, 1993; Doyle, 1998; Shan and Song, 1997 etc.).

FDI inflows in five Western Balkan Countries (WB5) - Albania, Bosnia and Herzegovina, Macedonia, Montenegro and Serbia – recorded permanent growth in the period 2001-2007. The inflows culminated in 2007 with USD 7,820 million. FDI was mostly related to large privatizations. Since 2008, all countries of the region except Albania experienced a decrease in FDI inflows, mostly due to the impact of the global economic crisis. This decline continued during 2009, except in Albania and Montenegro, due to some important privatizations (an oil refinery in Albania and the power sector in Montenegro). The largest fall in FDI inflows has been in Macedonia and Bosnia and Herzegovina (see Table 1). Increased FDI inflows to WB5 countries in the last decade resulted in the increase of inward FDI stock to GDP ratio from average 19.2% in 2002 to 52.8% in 2009. Comparison to FDI penetration in new EU member states (NMS), however, shows that there is still a room to increase FDI in WB5. Namely, average inward FDI stock to GDP ratio in NMS was 78.3% in 2009 (see Table 2).

Table 1: Inflows of FDI in WB5 countries in 2001-2010 (in million USD)

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albania	206	135	178	346	264	325	662	988	979
Bosnia and Herzegovina	119	265	381	704	613	766	2 077	1 064	501
Macedonia	447	106	118	323	97	424	699	587	248
Montenegro	-	72	49	65	478	618	921	916	1 311
Serbia	177	495	1 357	963	1 573	4 350	3 462	2 995	1 920
WB5	950	1 073	2 083	2 401	3 025	6 484	7 820	6 550	4 960

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Table 2: FDI inward stock as % of GDP in NMS and WB5 countries, 2002-2009

	2002	2003	2004	2005	2006	2007	2008	2009
NMS	37,3	41,4	46,8	45,7	60,3	68,7	63,4	78,3
Bulgaria	26,1	31,9	41,0	50,9	74,2	95,7	89,1	107,7
Cyprus	46,6	50,9	54,1	50,7	76,0	83,7	83,4	114,1
Czech Republic	51,4	49,6	52,3	48,7	56,0	64,5	52,4	60,9
Estonia	57,7	71,1	83,6	81,4	76,5	78,4	71,1	85,1
Hungary	54,3	57,3	61,3	56,1	107,0	143,6	163,8	194,3
Latvia	29,5	29,3	32,9	30,7	37,5	37,7	34,1	44,8
Lithuania	28,1	26,7	28,3	31,6	36,6	38,5	27,3	37,4
Malta	58,4	66,8	72,8	72,3	102,5	112,1	98,9	118,5
Poland	24,4	26,7	34,3	29,9	36,8	42,0	31,1	42,5
Romania	17,1	20,5	27,0	26,0	37,0	36,9	33,2	45,9
Slovakia	34,9	43,8	51,8	49,4	60,2	60,3	48,5	57,1
Slovenia	19,0	22,5	22,6	20,2	23,1	30,4	28,1	31,4
WB5	19,2	21,7	25,2	27,8	43,1	54,2	42,1	52,8
Albania	8,1	8,7	11,4	12,5	15,2	22,8	21,3	28,7
Bosnia and Herzegovina	26,2	26,0	28,0	27,9	34,0	45,5	39,8	45,9
Macedonia	31,9	34,9	40,8	35,9	43,4	47,2	46,5	51,9
Montenegro	6,3	8,9	11,4	29,1	51,3	69,1	72,3	109,8
Serbia	11,2	15,5	16,9	22,1	33,7	33,1	39,5	49,3

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

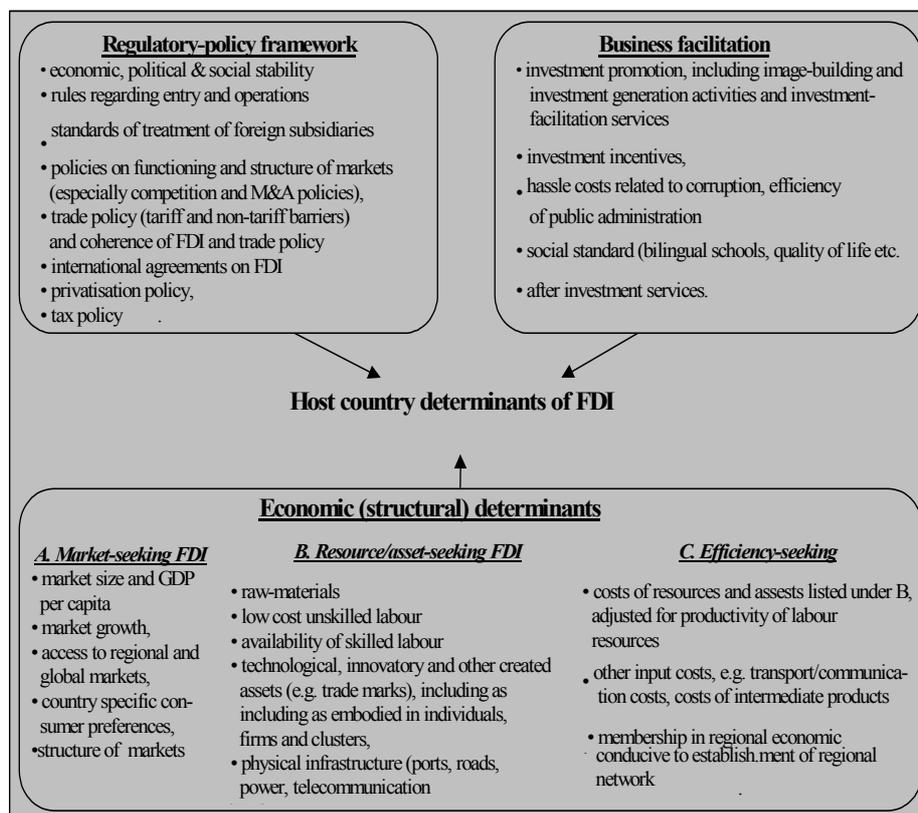
The objective of this paper is, first, to see which are the factors that attract and divert foreign investors in WB5 countries and, second, to propose some policy measures to increase attractiveness of the region for foreign investors. The paper is structured as follows. In section two, we first try to identify the main determinants of host country's attractiveness for FDI, i.e. which are the factors that make a country more or less attractive to FDI. In section three, we then apply the identified determinants of country's attractiveness for FDI on the situation in WB5 countries, i.e. based on the identified host country determinants of FDI inflows we analyze advantages and disadvantages of WB5 countries as FDI location. Section four concludes.

DETERMINANTS OF COUNTRY'S ATTRACTIVENESS AS FDI LOCATION

Which are the factors that determine the attractiveness of a country for FDI, factors that make some countries more and others less attractive location for FDI? The answer is provided by the so called OLI paradigm of FDI (concept of ownership-location-internalization advantages/determinants of FDI; for detail see Dunning, 1993). Integral part of OLI paradigm is the concept of location-specific advantages/determinants, which explains why a firm would rather invest abroad than at home and which countries have advantages as FDI location, that is for establishing a certain activity. Location specific factors could be classified into main economic (structural and market) factors, which represent the basic reason/motive of foreign investor for investing in particular country (market size and growth, availability and price of production factors, possibility of more efficient production etc.), and into factors of investment climate with regulatory economic policy framework, and broader investment climate, including support to entrepreneurship. Regulatory-policy framework and business environment represent more or less favorable framework for the realization of basic motives (see UNCTAD, 1998: 91). Empirical analyses of foreign investors' motivation and of location specific factors of FDI clearly show that:

- a) Basic structural characteristics of an economy, i.e. market characteristics (market size and per capita income, market growth, access to regional and global markets etc.), and availability / quality / costs of factors of production (labor, raw materials and other inputs, technological, innovatory and other created assets, physical infrastructure etc.) are of primary importance for the attractiveness of a country as FDI location.
- b) These are followed by general regulatory and policy frameworks, which define investment climate in its broadest sense. They include elements such as economic, political and social stability, privatization policy, trade regime and policy, tax rates and tax structure, labor market and product markets regulations and policies, etc.
- c) Only if these basic preconditions are in place, specific FDI regimes and policies can become relevant for attracting foreign investors (see, for instance, Dunning, 1993; UNCTAD, 1998; Business International, Creditanstalt, 1992; A.T. Kearney, 1998; Meyer, 1998; Rojec, Redek in Kostevc, 2007 etc.) (see Graph 1).

Graph 1: Host country determinants of FDI



Source: UNCTAD: World Investment Report 1998, Geneva, 1998, p. 91.

OECD inter-country variations in inward FDI stocks show that slightly over one half of the variation is explained by countries' structural characteristics and slightly less than half by policy factors. The most important among the policy factors are labor market policies explaining more than 25% of the inter-country variations, followed by other border barriers, FDI restrictions and product market policies. The latter three combined account for approximately 20% of the variations in inward FDI stocks (OECD, 2003). Although the investment climate and FDI policy factors are in a certain sense of a secondary importance they undoubtedly have a crucial impact on the decision of a foreign investor whether or not to go ahead with the realization in line with his primary motivation determined with structural factors. In short, an inadequate investment climate, regulatory and policy framework could turn away a foreign investor, who would otherwise choose to invest as far as market, resource / asset or cost considerations are concerned.

Analyses of various international institutions, which assess countries' attractiveness for inward FDI are more or less based on the above theoretical concept. Let us briefly look into some of them. *UNCTAD's Inward FDI Potential Index* (UNCTAD, 2004) takes into account the following factors: real GDP growth, GDP per capita, total exports as a share of GDP, density of telephone lines and mobile phones, energy consumption, R&D expenditures, students in tertiary education, country risk, exports of natural resources (as a share of world total), imports of parts for electronic and automobile industry (as a share of world total), exports of services (as a share of world total), stock of inward FDI (as a share of world total). *UNCTAD's Investment Compass* (<http://compass.unctad.org>) takes into account six groups of factors: sources and assets (market size, availability of natural resources and human capital), infrastructure (basic and technological), operational costs (labour and other costs), economic performance and governance, taxes and regulatory framework. *World Investment Prospect Survey (WIPS) 2008-2010* (UNCTAD, 2008), based on the survey among the largest MNEs claims that:

- Market access is by far the most important location determinant (50% of answers, see Graph 1). "Market size" (18%) favours large countries, while "market growth rate" (18%) gives priority to dynamically growing economies. Criteria "access to international and regional markets" (14%) is in favour of small and medium sized countries offering access to large regional markets. Graph 1 clearly shows high market growth (26%) and access to EU market (18%) have above average importance for NMS¹.
- Availability and costs of labour are also frequently mentioned by the surveyed MNEs (16%). Here, we have two aspects. The first is access to skilled labour (8%), and the other is low labour costs (8%). NMS are above-average attractive in the criteria of low labour costs (14%), but as far as access to skilled labour is concerned they also don't lag very much behind the world average (7%).
- Technical quality of business environment relates to the quality of infrastructure (7% for world average and 4% for NMS), availability of suppliers (6% and 5% respectively) and access to domestic capital markets (3% and 1% respectively). All these criteria are in favour of more developed countries as FDI location.
- As far as legal and administrative environment is concerned, the survey clearly shows that incentives play a more or less marginal role (3% in the case of world average and 5% in NMS). In general, foreign investors

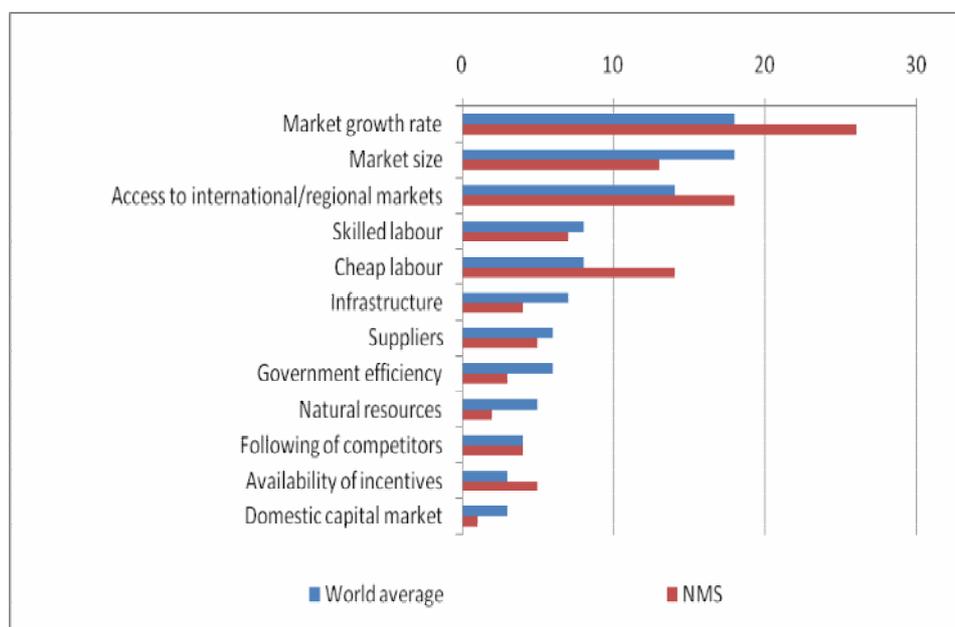
¹ We present results for NMS as a kind of comparative benchmark for WB5. As NMS, WB5 are also European countries with the legacy of the socialist system and aspiration of becoming the EU member states.

seem to be more sensitive to government efficiency (6% in world average), where NMS are less attractive (3%).

- Access to natural resources and following of the competitors seem to be less important determinants of FDI inflows (see Graph 2).

FDI Confidence Index of A.T. Kearneya (2004: 4) lists the following location factors of FDI: market size, market growth potential, access to export markets, government subsidies, production/labour costs, infrastructure, financial/economic stability, economic reforms, quality of life, political/social stability, tax regime, presence of competitors, consumers' sophistication, availability of acquisition targets, regulatory environment, cultural barriers, transparency, rule of law, managerial talent, highly educated labour force. *Forbes's Capital Hospitality Index* (<http://www.forbes.com/lists/>) takes into account general economic factors, such as GDP growth, GDP per capita, trade balance, population and unemployment, and other factors, such as liberalisation of trade and capital flows, ownership rights, innovations, technology, bureaucracy, investors' protection, corruption, personal freedom, tax burden, market performance.

Graph 2: Location criteria for FDI; world average and average for NMS, 2008-2010 (% of answers of surveyed MNEs)



Vir: WIPS 2008-2010, p. 38

The list of factors that determine attractiveness of FDI locations as suggested by the concept of OLI paradigm fits very well with the factors suggested by various international systems of assessing attractiveness of FDI locations. We always have market size and growth, including access to international and in particular regional markets, we always have availability, quality and costs of factors of production (human capital, infrastructure, technology, suppliers' networks, raw materials etc.), we always have various elements of regulatory and economic-policy framework (taxes, foreign trade, economic and political stability, competition policy, labour market policy etc.) and we always have various factors of business environment and entrepreneurship promotion (entrepreneurship incentives, FDI incentives, administrative costs, corruption, social standard, quality of life etc).

ASSESSMENT OF WB5'S ATTRACTIVENESS FOR FDI

Based on the above identification of factors that determine a country's attractiveness for FDI, in this section we provide empirical data for assessing WB5's attractiveness for FDI, i.e. advantages and disadvantages of WB5 as investment locations. In doing that, we use the following sources: UNCTAD Inward FDI Potential Index, Global Competitiveness Report of WEF, EBRD Transition Indicators, and World Bank Doing Business Rankings, World Bank Worldwide Governance Indicators, which are relevant for the estimation of locational competitiveness for FDI. All these sources enable comparison of FDI locational competitiveness of WB5 countries with EU10 (new EU member states, except Cyprus and Malta) and EU27. As expected, WB5 as a region lags behind EU27 and EU10 average in almost all relevant indicators of locational competitiveness (see Appendix).

Further on we provide a more detailed evaluation of FDI locational competitiveness of individual WB5 countries as far as main economic determinants (Table 3), regulatory framework (Table 4) and business climate and promotion of entrepreneurship (Table 5) is concerned. We use the same data sources as above. All the indicators are presented in relative terms, i.e. they are expressed in percentage of EU10 average. Values above 100% mean that a particular WB5 country is better in particular indicator than EU10 average, and vice versa for values below 100%. Due to general lagging of WB5 behind EU10, we presume that value above 80% for a particular indicator makes it advantageous for WB5. To better present the results in the tables, all the values above 80% are in grey color.

In Table 3, **main economic (structural) determinants**, which are relevant for a country's FDI locational attractiveness are classified into three groups: (i) market size and market growth (market-seeking FDI), (ii) availability of resource / factors of production (resource/asset-seeking FDI), and (iii) costs of resources / factors of production and productivity (efficiency-seeking FDI). The data put forward the following conclusions:

- In spite of the fact that most of the existing FDI in region is of a market seeking character (mostly services, i.e. financial sector and telecommunications), individual WB5 countries do not have locational advantages for market-seeking FDI. Market size and standard of living (GDP p.c.) in all individual WB5 countries is not attractive for foreign investors, while growth of the markets (GDP growth) is a potential advantage for attracting market-seeking FDI. Access to regional and global markets may be attractive for foreign investors, as all the countries are members of CEFTA and have preferential access to EU market.
- WB5 may be attractive for some types of resource/asset-seeking and efficiency-seeking FDI. Potential advantages for attracting this type of FDI are: (i) low cost and qualified labor and (ii) relatively well developed segments of the physical infrastructure (telecommunications, roads). UNCTAD's Inward FDI Potential Index ranks the WB5 high in the field of telecommunication (telephone lines and mobile telephones). According to the Global Competitiveness Index (WEF), WB5 as a group are best ranked with respect to: (i) education, especially for the secondary education enrollment rate, quality of the educational system, quality of mathematics and science education, quality of management schools and extent of staff training, and (ii) FDI and technology transfer as a sub-indicator of technological readiness. However, there is a lot of space for improvement, which would make WB5 countries more attractive for this type of FDI. This relates especially to: (i) some segments of infrastructure (railroads, water supply and electricity power), (ii) quality and quantity of tertiary education, (iii) availability of experts, (iv) low rate of internet users, and (v) insufficient supply of specialized research and training services.
- Among innovation and sophistication factors, WB5 have relatively high scores for a number of sub-indices, including: control of international distribution, extent of marketing, quality of scientific research institutions and university-industry collaboration in R&D. However, if we compare these WB5 and EU10 with the average of EU27 (see Appendix), it is obvious that both of these regions are lagging much behind the well developed EU countries, and are not very competitive, when these two areas are in question.

Table 3: Main economic (structural) determinants of FDI relevant for the locational competitiveness for FDI (in % of EU10 average)

	Albania	BH	Macedonia	Montenegro	Serbia	WB5 Average
INWARD FDI POTENTIAL INDEX (UNCTAD, 2008a)						
Rate of GDP growth (% , average 2001-2009)	140%	111%	59%	98%	118%	105%
GDP per capita (US\$, average 2006-2009)	29%	34%	31%	47%	42%	37%
GDP per capita PPP (US\$, average 2006-2009)	43%	46%	54%	70%	58%	54%
Share of exports in GDP (% , 2008)	53%	65%	90%	68%	56%	66%
Average number of telephone lines per 100 inhabitants (2008)	38%	95%	77%	201%	108%	104%
Mobile telephone subscriptions per 100 inhabitants (2009)	90%	76%	110%	106%	88%	94%
Share of R&D spending in GDP (% , 2008)	n.a.	3%	24%	136%	39%	51%
EBRD TRANSITION INDICATORS - 2009						
Overall infrastructure reform	72%	72%	72%	72%	72%	72%
Telecommunications	91%	64%	100%	91%	73%	84%
Railways	57%	86%	57%	57%	67%	65%
Electric power	85%	85%	85%	66%	66%	78%
Roads	84%	96%	84%	84%	96%	89%
Water and waste water	49%	58%	68%	58%	49%	56%
WEF GLOBAL COMPETITIVENESS INDEX: 2010–2011 (WEF 2010)						
2nd pillar: Infrastructure	81%	74%	81%	89%	79%	81%
2.01 Quality of overall infrastructure	81%	74%	81%	89%	79%	81%
2.02 Quality of roads	98%	50%	87%	78%	70%	77%
2.03 Quality of railroad infrastructure	36%	47%	58%	72%	47%	52%
2.07 Quality of electricity supply	74%	100%	85%	72%	85%	83%
5th pillar: Higher education and training	80%	79%	84%	93%	83%	84%
A. Quantity of education						

5.01 Secondary education enrollment rate	90%	104%	96%	99%	102%	97%
5.02 Tertiary education enrollment rate	29%	51%	61%	79%	73%	59%
B. Quality of education						
5.03 Quality of the educational system	103%	82%	103%	116%	87%	98%
5.04 Quality of math and science education	91%	102%	91%	102%	97%	97%
5.05 Quality of management schools	93%	95%	98%	110%	88%	97%
5.06 Internet access in schools	72%	72%	84%	82%	67%	75%
C. Training						
5.07 Local availability of specialized research and training services	77%	75%	66%	86%	79%	76%
5.08 Extent of staff training	69%	107%	84%	76%	102%	87%
9th pillar: Technological readiness	81%	78%	83%	95%	79%	83%
9.03 FDI and technology transfer	95%	87%	85%	103%	83%	90%
9.04 Internet users	68%	62%	86%	74%	69%	72%
9.05 Broadband Internet subscriptions	17%	45%	62%	82%	35%	48%
9.06 Internet bandwidth	16%	10%	0%	10%	80%	23%
11th pillar: Business sophistication	90%	81%	88%	97%	78%	87%
A. Network and supporting industries						
11.02 Local supplier quality	81%	81%	89%	89%	89%	86%
B. Sophistication of enterprise operations and strategies						
11.04 Nature of competitive advantage	86%	75%	72%	106%	69%	82%
11.05 Value chain breadth	72%	80%	96%	90%	77%	83%
11.06 Control of international distribution	109%	80%	101%	111%	88%	98%
11.07 Production process sophistication	93%	73%	80%	85%	68%	80%
11.08 Extent of marketing	107%	75%	82%	98%	70%	86%
12th pillar: Innovation	77%	78%	86%	105%	88%	87%
12.01 Capacity for innovation	77%	71%	80%	98%	80%	86%
12.02 Quality of scientific research institutions	60%	72%	84%	105%	93%	87%
12.03 Company spending on R&D	87%	83%	83%	109%	83%	87%
12.04 University-industry collaboration in R&D	58%	79%	92%	100%	92%	85%

Note: Values above 80% of the EU10 average for values of the indicators in the table represent a potential advantage for FDI in WB5 and are marked by gray.

Main determinants of the **regulatory and policy framework** relevant for the locational competitiveness for FDI are given in Table 4, which clearly shows that the region is considerably lagging behind the EU10 with respect to quality of laws and rule of law (World Bank Worldwide Governance Indicators). Country risk can also be considered a disadvantage for investing in WB5. Ease of Doing Business according to the World Bank Doing Business is also a disadvantage of WB5, as they are lagging in rank far behind the EU10. However, WB5 have some competitive advantages in comparison with the average of the EU10 group. These include:

- Protection of investors, as WB5, on average, are better ranked than EU10 (World bank Ease of Doing Business Rank and WEF Global Competitiveness Index);
- Several sub-indicators related to the quality of institutions, including Burden of government regulation and Transparency of government policymaking (WEF Global Competitiveness Index); Financial market development, and Legal rights (WEF Global Competitiveness Index), and
- Macroeconomic stability, especially government debt, as one of macroeconomic stability's sub-indicators (WEF Global Competitiveness Index).

Table 4: Regulatory and Policy Framework (in % of EU10 average)

	Albania	Bosnia and Herzegovina	Macedonia	Montenegro	Serbia	WB5 Average
Country risk (September 2010) (EUROMONEY, 2010)	76%	57%	71%	44%	83%	66%
Ease of Doing Business Rank (World Bank 2010)	62%	26%	115%	74%	56%	67%
Protecting investors	171%	65%	164%	154%	92%	129%
WEF Global Competitiveness Index: 2010–2011						
<i>1st pillar: Institutions</i>						
<i>1. Property rights</i>						
1.02 Intellectual property protection	75%	59%	83%	97%	70%	77%
<i>2. Ethics and corruption</i>						
1.03 Diversion of public funds	110%	104%	107%	128%	88%	107%
<i>4. State inefficiency</i>						

1.09 Burden of government regulation	132%	93%	103%	123%	76%	105%
1.12 Transparency of government policymaking	111%	65%	101%	116%	96%	98%
3rd pillar: Macroeconomic stability						
3.04 Interest rate spread	71%	97%	139%	74%	48%	76%
3.05 Government debt	69%	125%	169%	77%	114%	100%
6th pillar: Goods market efficiency						
<i>2. Foreign competition</i>						
6.09 Prevalence of trade barriers	94%	84%	88%	98%	86%	90%
6.10 Trade tariffs	27%	18%	17%	20%	17%	19%
6.13 Burden of customs procedures	90%	81%	97%	97%	81%	89%
8th pillar: Financial market development						
A. Effectiveness						
8.04 Ease of access to loans	92%	88%	81%	138%	92%	98%
8.05 Venture capital availability	82%	74%	98%	133%	86%	95%
8.06 Investors protection						
B. Reliability and trust						
8.09 Legal rights index	123%	68%	96%	123%	110%	104%
Worldwide Governance Indicators 2009; World Bank						
Regulatory Quality	80%	70%	81%	73%	69%	74%
Rule of Law	62%	66%	71%	79%	65%	69%

Note: Values above 80% of the EU10 average for values of the indicators in the table represent a potential advantage for FDI in WB5 and are marked by gray.

Selected factors of **business environment/entrepreneurship promotion**, which determine the attractiveness of a country for FDI are given in Table 5. Potential advantages of WB5 related to business environment/ entrepreneurship promotion seem to be in the field of:

- Starting a business (WEF Global Competitiveness Index, World Bank Ease of Doing Business Rank),
- Security – several sub indicators (WEF Global Competitiveness Index),
- Health – several sub indicators (WEF Global Competitiveness Index) and
- Primary education (WEF Global Competitiveness Index).

However, Closing a Business and a number of other administrative barriers, including Registering Property, Dealing with Construction Permits and Enforcing Contracts (World Bank Ease of Doing Business Rank), are serious impediments for investing in these countries.

Table 5: Business environment/promotion of entrepreneurship determinants from selected international assessments of competitiveness, relevant for the locational competitiveness for FDI (in % of EU10 average)

	Albania	Bosnia and Herzegovina	Macedonia	Montenegro	Serbia	WB5 Average
Ease of Doing Business Rank (World Bank 2010)						
Starting a Business	115%	19%	149%	82%	92%	92%
Closing a Business	1%	105%	60%	122%	71%	72%
WEF Global Competitiveness Index: 2010–2011						
1st pillar: Institutions						
<i>Security</i>						
1.13 Business costs of terrorism	96%	102%	91%	104%	85%	96%
1.14 Business costs of crime and violence	97%	93%	93%	112%	82%	95%
1.15 Organized crime	99%	92%	92%	109%	82%	95%
5th pillar: Health and primary education	80%	79%	84%	93%	83%	84%
4.09 Quality of primary education	92%	94%	88%	101%	90%	93%
4.10 Primary education enrollment rate	97%	n.a.	93%	106%	102%	99%

Note: Values above 80% of the EU10 average for values of the indicators in the table represent a potential advantage for FDI in WB5 and are marked by gray.

CONCLUSIONS

WB5 as a region lags behind EU27 and EU10 average in almost all relevant indicators of locational competitiveness. In spite of visible differences among the WB5 countries, with Montenegro and Macedonia as the best positioned countries

in the region, and Bosnia and Herzegovina, by far the worst positioned country among the WB5, in this paper we observed WB5 as a region, as the differences among the WB5 countries themselves are much smaller than lagging of WB5 behind EU10.

The main strengths of WB5 relevant for attracting FDI are: (i) stable macroeconomic environment, (ii) fast economic growth, (iii) geographical proximity to major EU markets, (iv) good business environment (v) stable and relatively well developed financial system, (vi) high share of young people involved in education (primary and secondary), (vii) relatively low cost and qualified labor, (viii) well developed telecommunication sector, (ix) protection of investors, and (x) EU Stabilization and Association Agreement with EU, CEFTA and other bilateral trade agreements.

The most prominent weaknesses inhibiting more FDI inflows in WB5 are: (i) small domestic market with low per capita income, (ii) relatively high country risk, (iii) slow progress in structural and institutional reforms (iv) low share of exports in GDP, (v) high unemployment, (vi) poor railway and water supply infrastructure, (vii) Inefficient government bureaucracy, (viii) Low tertiary education enrolment, (ix) low share of R&D in GDP, (x) High level of corruption, (xi) High administrative barriers, (xii) Poor implementation of laws.

The main policy message arising from theoretical findings and empirical evidence suggest that the best way for WB5 to attract more FDI in the future is to strengthen the structural reforms and to speed up their EU approximation processes. Any specific FDI policies are only of a secondary importance.

References

- [1] AT Kearney. 1998. FDI Confidence Index. Global Business Policy Council. Alexandria, USA.
- [2] AT Kearney. 2004. FDI Confidence Index. Global Business Policy Council. Alexandria, USA.
- [3] Bevan, A. & Estrin, S. (2000). "The Determinants of Foreign Direct Investment in Transition Economies". William Davidson Institute, Working Paper Number 342, William Davidson Institute at the University of Michigan Business School.
- [4] Billington, N. (1999): "The Location of Foreign Direct Investment: An Empirical Analysis". *Applied economics*, 62, 1988-197.
- [5] Borensztein, E, de Gregorio, J. & Lee, J. (1998). "How does foreign direct investment affect economic growth?" *Journal of International Economics*, 45, 115-135.

- [6] Buckley P., Clegg J., Wang C. & Cross, A. (2002). "FDI, regional differences and economic growth: panel data evidence from China". *Transnational Corporation*, 11(1), 1-28.
- [7] Business International, Creditanstalt. 1992. 1992 East European Investment Survey. Vienna.
- [8] Doyle, E. (2001). "Export-output causality and the role of exports in Irish growth, 1950-1997", *International Economic Journal*, 15(3), 1- 24.
- [9] Dunning, J.H. 1993. *Multinational Enterprises and the Global Economy*. Wokingham: Addison-Wesley.
- [10] Dunning, J.H., Lundan, S.M. (2008). "Multinational Enterprises and the Global Economy". Cheltenham, UK: Edward Elgar.
- [11] EBRD. 2009. *Transition in Crisis: Transition Report 2009*. London: European Bank for Reconstruction and Development.
- [12] EBRD. 2010. *Regional Economic Prospects in EBRD Countries of Operation: July 2010 Update*, London: European Bank for Reconstruction and Development.
- [13] Forbes. Capital Hospitality Index (<http://www.forbes.com/lists/>)
- [14] Herzer, D., Klasen, S. and Nowak-Lehmann D. F., 2008. "In search of FDI-led growth in developing countries: The way forward," *Economic Modelling*, 25(5), 793-810.
- [15] Lucas, R.E.: "Making a miracle", *Econometrica*, 61(2), 1993, 251-272.
- [16] Meyer, K. 1998. *Direct Investment in Economies in Transition: Making Central European Industries Competitive*. Cheltenham: Edward Elgar.
- [17] Moran, T.H., Graham, E.D., Blomström, M. (Eds) (2005) "Does foreign direct investment promote development? " Washington, DC, US: Institute for International Economics / Center for Global Development.
- [18] OECD. (2003). "Checklist for Foreign Direct Investment Incentive Policies". Paris: OECD.
- [19] Penev, S., (ed.). 2009. *Improving the Process of Economic Reform Legislation in Western Balkan Countries*, OECD Investment Compact for South East Europe, GTZ and Economics Institute Belgrade.
- [20] Rojec, M., T. Redek in Č. Kostevc. 2007. Domet in možni elementi politike aktivnega spodbujanja tujih neposrednih investicij v Sloveniji. Delovni zvezek št. 5/2007, let. 16, Urad za makroekonomske analize in razvoj, Ljubljana.
- [21] O'Sullivan, P. (1993). "An assessment of Ireland's export-led growth strategy via foreign direct investment: 1960-1980", *Weltwirtschaftliches Archiv*, 129 (1), 139-58.
- [22] Sanfey, P. 2010, *South-eastern Europe: lessons from the global economic crisis*, European Bank for Reconstruction and Development.
- [23] Kathuria, S. (ed.). 2008. *Western Balkan Integration and the EU: An Agenda for Trade and Growth*, The International Bank for Reconstruction and Development / The World Bank
- [24] Shan, W. in Song, J. (1997). "Foreign direct investment and the sourcing of technological advantage: evidence from the biotechnology industry", *Journal of International Business Studies*, 28(2), 267-84.
- [25] UNCTAD. 1998. *World Investment Report 1998*. New York and Geneva.
- [26] UNCTAD. 2004. *World Investment Report 2004*. New York and Geneva.

-
- [27] UNCTAD. 2010. World Investment Report 2010. New York and Geneva.
 - [28] UNCTAD. 2008. World Investment Prospects Survey 2008-2010 (WIPS 2008-2010). New York and Geneva.
 - [29] UNCTAD. 2009. Assessing the impact of the current financial and economic crisis on global FDI flows, UNCTAD, Geneva.
 - [30] UNCTAD. FDI/TNC database (www.unctad.org/fdistatistics).
 - [31] UNCTAD. Investment Compass (<http://compass.unctad.org>).
 - [32] World Bank. 2010. Doing Business in 2010, Washington, DC.
 - [33] World Bank. 2010a. Global Economic Prospects 2010: Crisis, Finance, and Growth, Washington DC.

APPENDIX

Selected indicators of WB5 compared to EU10, relevant for the estimation of locational competitiveness for FDI

	Albania	Bosnia and Herzegovina	Macedonia	Montenegro	Serbia	WB5 Average	EU10 Average	EU27 Average
INWARD FDI POTENTIAL INDEX (UNCTAD 2009, rank among 141 countries)	79	n.a.	100	n.a.	n.a.	n.a.	45	34
Rate of GDP growth (% , average 2001-2009)	5,6	4,4	2,4	3,9	4,7	4,2	4,0	1,5
GDP per capita (US\$, average 2006-2009)	3717	4347	3997	6027	5320	4681	12801	29660
GDP per capita PPP (US\$, average 2006-2009)	8020	8757	10090	13183	10887	10187	18836	29031
Share of exports in GDP (% , 2008)	29,5	36,5	50,0	38,1	31,1	37,0	55,8	41,9
Average number of telephone lines per 1,000 inhabitants (2008)	11	27	22	58	31	30	29	41
Mobile telephone subscriptions per 100 population (2009)	100	84	123	118	98	105	111	124
Share of R&D spending in GDP (% , 2008)	n.a.	0,03	0,21	1,18	0,34	0,4	0,9	1,5
Tertiary education enrollment rate (% , 2008)	19,1	36,9	35,5	41,1	35,8	33,7	64,7	61,2
Country risk (September 2010) (rank among 185 countries)	82	113	90	140	70	99	48	30
Share of world FDI inward stock (% 2009)	0,02	0,04	0,03	0,03	0,12	0,23	4,80	41,98
WEF GLOBAL COMPETITIVENESS INDEX: 2010–2011 scores	3,9	3,7	4,0	4,4	3,8	4,0	4,4	4,7
Basic requirements	4,4	4,1	4,5	4,9	4,2	4,4	4,8	5,2
1st pillar: Institutions	4,0	3,1	3,8	4,5	3,2	3,7	3,9	4,7
2nd pillar: Infrastructure	3,5	3,2	3,5	3,8	3,4	3,5	4,3	5,0
3rd pillar: Macroeconomic stability	4,2	4,5	4,9	5,1	4,1	4,6	4,9	4,9
4th pillar: Health and primary education	5,9	5,4	5,7	6,2	6,0	5,8	6,0	6,2
Efficiency enhancers	3,8	3,6	3,8	4,1	3,8	3,8	4,4	4,7
5th pillar: Higher education and training	3,9	3,8	4,0	4,5	4,0	4,0	4,8	5,1
6th pillar: Goods market efficiency	4,2	3,6	4,2	4,4	3,6	4,0	4,3	4,6
7th pillar: Labor market efficiency	4,5	4,2	4,4	4,7	4,1	4,4	4,6	4,5

8th pillar: Financial market sophistication	3,7	3,5	4,0	4,7	3,8	3,9	4,2	4,5
9th pillar: Technological readiness	3,5	3,4	3,6	4,1	3,4	3,6	4,3	4,8
10th pillar: Market size	2,8	3,1	2,8	2,1	3,6	2,9	3,9	4,3
Innovation and sophistication factors	3,1	2,9	3,2	3,7	3,0	3,2	3,7	4,3
11th pillar: Business sophistication	3,6	3,3	3,5	3,9	3,2	3,5	4,0	4,6
12th pillar: Innovation	2,6	2,6	2,9	3,5	2,9	2,9	3,3	4,0
EBRD TRANSITION INDICATORS - STRUCTURAL REFORMS 2009								n.a
Large scale privatization	3,7	3,0	3,3	3,0	2,7	3,1	3,7	n.a
Governance and enterprise restructuring	2,3	2,0	2,7	2,0	2,3	2,3	3,2	n.a
Competition Policy	2,0	2,0	2,3	2,0	2,0	2,1	3,2	n.a
Banking reform & interest rate liberalization	3,0	3,0	3,0	3,0	3,0	3,0	3,7	n.a
Securities markets & non-bank financial institutions	1,7	1,7	2,7	1,7	2,0	1,9	3,3	n.a.
Overall infrastructure reform	2,3	2,3	2,7	2,3	2,3	2,4	3,2	na.
Average structural reform	2,5	2,3	2,8	2,3	2,4	2,5	3,4	n.a
EASE OF DOING BUSINESS RANK (World Bank 2010, rank among 141 countries)	82	116	32	71	88	78	46	41
Starting a Business	46	160	6	85	73	74	64	62
Dealing with Construction Permits	173	136	138	160	174	156	81	61
Employing Workers	105	111	58	46	94	83	100	104
Registering Property	70	139	63	131	105	102	55	65
Getting Credit	15	61	43	43	4	33	30	42
Protecting Investors	15	93	20	27	73	46	67	70
Paying Taxes	138	129	26	145	136	115	98	72
Trading Across Borders	66	63	62	47	69	61	57	38
Enforcing Contracts	91	124	64	133	97	102	52	45
Closing a Business	183	63	115	44	102	101	69	40
WORLD BANK WORLDWIDE GOVERNANCE INDICATORS 2009;	-0,12	-0,34	-0,03	0,10	-0,17	-0,11	0,80	1,07
Voice and accountability	0,16	-0,05	0,13	0,30	0,32	0,17	1,08	1,15
Political stability	-0,07	-0,57	-0,22	0,55	-0,50	-0,16	0,90	0,73
Government Effectiveness	-0,20	-0,65	-0,14	-0,03	-0,15	-0,23	0,70	1,14
Regulatory Quality	0,28	-0,06	0,32	0,03	-0,10	0,09	0,99	1,21
Rule of Law	-0,52	-0,39	-0,22	0,04	-0,41	-0,30	0,70	1,13
Control of corruption	-0,40	-0,31	-0,03	-0,32	-0,19	-0,25	0,41	1,03

Sources and notes:

Inward FDI potential index

Rate of GDP growth, GDP per capita and GDP per capita PPP and Share of R&D spending in GDP

- [1] Source: World Bank database: <http://data.worldbank.org>
- [2] *Mobile telephone subscriptions per 100 inhabitants , Average number of telephone lines per 100 inhabitants and Tertiary education enrollment rate*
- [3] Source: Global Information Technology Report 2009-2010;
<http://www.networkedreadiness.com>
- [4] Country risk
- [5] Source: EUROMONEY ECR. September 2010. <http://www.euromoney.com>
- [6] Share of world FDI inward stock (% 2009)
- [7] Source: UNCTAD. 2010. World Investment Report 2010. New York and Geneva.
- [8] World Bank Doing Business Ranking
- [9] Source: World Bank Doing Business Rankings; <http://www.doingbusiness.org>.
- [10] Rank 2010: The lower the rank number the better. 183 countries have been included in 2010 ranking.
- [11] WEF – Global Competitiveness Index (GCI)
- [12] Source: World Economic Forum (WEF): The Global Competitiveness Reports 2010-2011, 2009-2010, 2007-2008.
- [13] Score 2010: scores rank for 1 = the lowest possible to 7 = the highest possible. The higher the score the better.
- [14] World Bank Worldwide Governance Indicators
- [15] Source: World Bank, Worldwide Governance Indicators;
<http://info.worldbank.org/governance/wgi>.
- [16] Score 2008: scores are on the scale from -2.5 (the worst) and +2.5 (the best).
- [17] EBRD Transition Indicators – structural reforms
- [18] Source: EBRD: Transition Indicators;
<http://www.ebrd.com/country/sector/econo/stats/timeth.htm>
- [19] Score 2009: transition scores lie between 1.00 (the worst; centrally planned economy) and 4.33 (the best; fully fledged market economy). The higher the score the better.

CHAPTER 3.

ATTRACTIVENESS OF SERBIA FOR FOREIGN DIRECT INVESTMENTS: TENDENCIES, OBSTACLES AND PERSPECTIVES

Ivan Stošić¹

Draško Nikolić²

Mihajlo Đukić³

Abstract

Taking in account the role and the importance of the FDI, as well as the measures for stimulating the FDI inflows, the overall objective of this paper is to investigate attractiveness of Serbia for inwards FDI, particularly within the South-East European region. The focal point of this paper has been the research on tendencies, sector distribution and spillovers of the FDI in Serbia. Comparison of experiences from the region is given, and some of the best practices are identified, in order to indicate to the direction that Serbia should follow in the future. Furthermore, the key current obstacles for inflow of FDI to Serbia have been analyzed and especially attractiveness of business environment for foreign investors, effects of Serbian national brand, country risk and the role of supporting institutions. Last, but not least, this paper has an aim to identify perspectives of FDI to Serbia in the coming period. Furthermore, the main factors that determine FDI inflow have been evaluated, in order to provide policy recommendations over the obstacles to the FDI increase in Serbia.

Key words: *foreign direct investments, Serbia, attractiveness of business environment, national branding*

¹ Ivan Stošić, Institute of Economic Sciences Belgrade, Serbia.

² Draško Nikolić, Institute of Economic Sciences Belgrade, Serbia.

³ Mihajlo Đukić, Institute of Economic Sciences Belgrade, Serbia.

INTRODUCTION NOTES

Foreign direct investment (FDI) plays an important role in economic development, technology transfer, as well as in improving business operations and strengthening exports. For this reason, the level of international competition in attracting foreign direct investment, particularly after the onset of the global financial crisis is constantly growing.

Many countries are taking various measures in order to attract foreign direct investment. Some rely on various forms of tax incentives and financial stimulus, the granting of favorable loans and subsidies. Others try to focus their efforts to improve the infrastructure and meet specific capital requirements of foreign investors. Many countries are trying to create a favorable business climate to attract foreign direct investments through liberalization of various administrative barriers, simplification of certain procedures and conclusion of international commercial arrangements. A large number of countries have established state agencies with the aim to attract foreign direct investments and to assist foreign investors during investment process.

Bearing in mind the role and importance of FDI, as well as measures notably undertaken by all countries in the world to attract larger number of FDI, the overall objective of this paper is to conduct an analysis of the attractiveness of Serbia for FDI inflows. Based on empirical data of the FDI inflows, sectoral distribution and the major forms of investment, the intention of this analysis is to identify the main challenges in the area of FDI in Serbia. Last but not least, the intention of this work is to determine the prospects for the future development of key determinants of FDI in Serbia in order to identify the main barriers and initiate measures of economic policy that can enhance more intensive inflow of foreign direct investments.

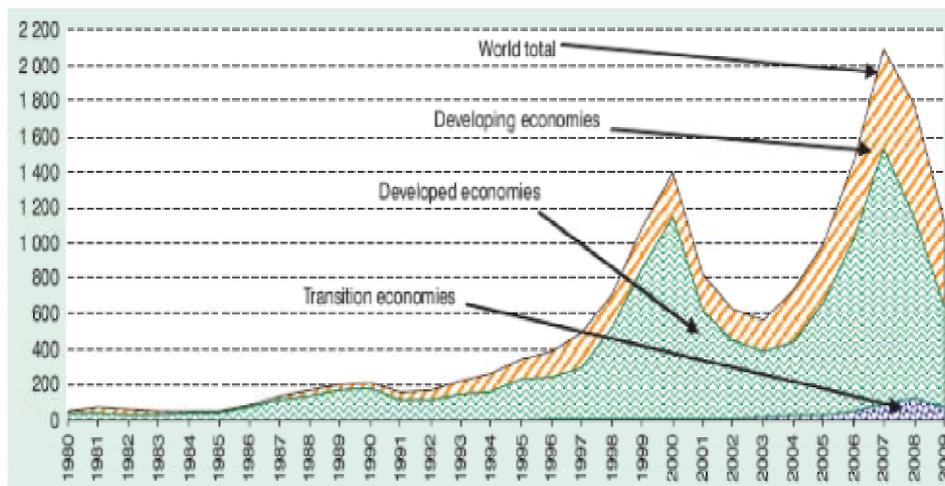
CURRENT FDI TRENDS IN THE WORLD

Following the record levels demonstrated in 2007 of around 2,100 billion U.S. \$, according to data from UNCTAD [16], FDI recorded a rapid decline worldwide. Primarily under the influence of global economic and financial crisis, FDI inflows in the world have been reduced to 1,771 billion U.S. \$ in 2008, and only to 1,114 billion U.S. \$ in 2009. The global crisis has had a negative impact on inward FDI in all regions of the world and was noted in virtually all sectors and forms of FDI investment.

A slight recovery of FDI inflows was recorded at the end of 2009 and the first half of the 2010. In addition, the recovery was more expressed in developing

countries and transition economies; the growth was noted primarily in cross-border mergers and acquisitions (M&A), whereas the greenfield investments hadn't recorded any significant progress.

Graph 1: Trend of FDI in the world in billions of U.S. \$



Source: World Investment Report 2010

FDI TRENDS IN TRANSITION COUNTRIES

In the period before the global economic crisis European economies in transition have attracted considerable and ever-growing FDI inflows (the value of FDI increased from 47 billion € in 2004 to 111 billion € in 2008). However, mainly as the consequence of the global economic crisis, the value of FDI in 2009 has been reduced to around 58 billion €.

Analyzing the experience [16] of FDI inflows in transition countries, the following conclusions can be drawn:

Analysis of the impact of FDI on economic growth in Central and Eastern Europe during the transition period shows that FDI had a significant positive impact on economic growth. Majority of researches in the past decade, which expose the "net evaluation" of FDI impact in 30 countries over the past 15 years, demonstrated "an obvious positive impact on economic welfare of the host country" [11]. Countries that are successful in attracting FDI achieve higher economic growth than countries with lower FDI inflows.

Table 1: Trend of FDI net inflows in European transition economies (€ millions)

	2004	2005	2006	2007	2008	2009
Bulgaria	2,736	3,152	6,222	9,052	6,697	3,213
Czech Republic	4,007	9,374	4,355	7,634	4,415	1,965
Estonia	771	2,307	1,432	1,998	1,317	1,204
Hungary	3,633	6,172	5,609	3,956	4,752	1,021
Latvia	513	568	1,326	1,698	863	52
Lithuania	623	826	1,448	1,473	1,223	190
Poland	10,237	7,112	12,711	15,902	9,601	8,251
Romania	5,183	5,213	9,061	7,250	9,496	4,556
Slovakia	2,441	1,952	3,733	2,382	2,323	-36
Slovenia	665	473	513	1,106	1,313	-48
<i>NMS -10</i>	<i>30,809</i>	<i>37,148</i>	<i>46,410</i>	<i>52,451</i>	<i>42,001</i>	<i>20,367</i>
Albania	278	213	259	481	675	698
Bosnia and Herzegovina	567	493	611	1,517	726	361
Croatia	950	1,468	2,765	3,670	4,192	1,875
Macedonia	261	77	345	506	400	181
Montenegro	53	384	493	673	625	944
Serbia	772	1,268	3,392	2,513	2,018	1,410
<i>Southeast Europe</i>	<i>2,880</i>	<i>3,903</i>	<i>7,864</i>	<i>9,360</i>	<i>8,636</i>	<i>5,469</i>
Belarus	132	245	282	1,304	1,471	1,337
Moldova	118	153	186	394	481	62
Russia	12,422	10,336	23,675	40,237	51,490	27,852
Ukraine	1,380	6,263	4,467	7,220	7,457	3,453
<i>European CIS</i>	<i>14,052</i>	<i>16,997</i>	<i>28,610</i>	<i>49,155</i>	<i>60,899</i>	<i>32,704</i>
Total region	47,741	58,048	82,884	110,966	111,536	58,540

Source: WIIW Database on FDI incorporating national bank statistics

Despite the widespread belief that FDI inflows automatically have positive effects on economic growth, productivity growth, transfer of modern technologies, increase of exports, employment and other key economic performances, empirical experience of Central and Eastern Europe does not fully confirm this thesis. The experiences of these countries demonstrated that the type of FDI is much more important than their total volume.

Mergers and acquisition (M&A), as opposite to greenfield investments, have, in the short term, significantly less positive effect on the acceleration of overall economic activity. In many cases it is shown that the M&A led to a reduction or shutdown of local production and its transfer to other locations (in line with corporate strategy of new owners) or to the abolition of some business functions

at the purchased companies (e.g. R&D, marketing). As a rule, FDI through M&A, especially in the initial stages, did not lead to job creation, but rather to significant dismissal of employees. Also, FDI through M&A had resulted in the suppression of domestic competition and increase of concentration in local markets. Finally, in many cases there has been no expected high-speed transfer of superior technology.

As opposite, greenfield investments in most cases have significant and rapid positive effects, by stimulating economic growth and often a huge increase in exports (e.g. in the case of Hungary, where eight out of the ten largest exporters represent greenfield investments).

However, it should be pointed out that many of the observed differences in terms of external effects diminish and disappear on the long run. After the initial phase of restructuring and in case of M&A, intensive investments in production, the transfer of new or better technology frequently follows. The differences between these two modes of entry, when it comes to job creation, are often reduced over time and are more dependant on the motives of entry than the way of entry. There remains a concern in developed and developing countries, especially in relation to market power of transnational corporations and potential anti-competitive implications of M&A [2].

Experiences of transition economies show that in the early stages of transition cross-border M&A dominated over the greenfield. Basically, the reason lies in the fact that the first stages of transition, through implementation of massive privatization, created possibilities primarily for cross-border M&A.

Analysis of the main motives of FDI suggests that, in the early stages of transition, a significant share of investments represents the ones that were essentially used for "buying the market"[10], i.e. FDI oriented to the local market. Only in the later stages of transition the share of export-oriented FDI has increased.

The South-East European region, notably the Western Balkans, was far less successful in attracting FDI. This is primarily a consequence of war during the 1990's and delays in implementing transitional reforms in the EU accession. At the same time, the distinct differences can be spotted. Those countries that were more progressive in the implementation of reforms have been able to attract significantly higher "stock" of FDI, such as Romania and Bulgaria (especially after joining the EU) and Croatia. On the other hand, the inflow of FDI into other countries in the Western Balkans, including Serbia, was significantly lower than the possible absorptive capacity and potential.

FDI TRENDS IN SERBIA

In the preceding period Serbia has not achieved significant results in the inflow of FDI. During the 1990's, the inflow of FDI was very low and did not exceed 100 million U.S. \$ per year. Only after 2002 the inflow of FDI has intensified and in the period 2004-2009 the average net inflow of FDI amounted to 1,727 million € per year [1]. The highest level was recorded in 2006, being the highest in the region as well, and it was primarily the result of privatization of *Mobtel* (local mobile phone operator) which was bought by the Norwegian company *Telenor*. After that, foreign investors have reduced the pace of investment in Serbia, especially since the end of 2008, when the global economic crisis considerably reduced the inflow of FDI⁴.

Over the past six years, the highest level of FDI inflows in Serbia has been made in financial intermediation (27.2% of total inflow), manufacturing (21.4%), commerce (16.5%) and real estate and renting (13.5%).

Table 2: The structure of FDI inflows in Serbia by economic activity (in %)

	2004	2005	2006	2007	2008	2009
Agriculture	1.0	0.7	0.2	0.6	1.7	1.2
Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Mining and quarrying	0.2	0.0	0.0	0.9	0.9	22.4
Manufacturing	30.4	18.9	18.4	14.1	17.2	29.4
Electricity, gas and water	0.0	0.0	0.0	0.0	0.1	0.3
Construction	1.9	0.8	0.6	5.0	2.5	1.6
Wholesale and retail trade, repair	35.9	22.0	8.6	7.7	12.2	12.3
Hotels and restaurants	1.5	0.0	0.1	1.3	0.7	0.3
Transportation	1.5	0.7	28.8	19.5	7.5	6.5
Financial intermediation	10.6	37.6	36.5	31.7	38.2	8.6
Real estate, renting	13.9	13.2	6.6	16.0	18.1	13.2
Public Admin. and Social Security	0.6	5.7	0.0	0.0	0.1	0.0
Education	0.0	0.0	0.0	0.0	0.0	0.0
Social and personal services	0.5	0.3	0.0	2.9	0.8	1.0
Unclassified	2.0	0.0	0.0	0.1	0.0	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: according to the data of the National Bank of Serbia

⁴ In 2008, the annual net FDI inflow was 1,820.8 million €; in 2009 it amounted to 1,372.5 million €, and in the period January-July 2010 it was 519.7 million € - Source: Data of the Ministry of Finance of the Republic of Serbia: Basic macroeconomic indicators, July 2010.

The major part of, particularly large, FDI in Serbia has been made in the form of M&A (in fact through privatization), while the number of greenfield and brownfield investment was relatively modest.

Analyzing the basic trends in FDI inflows in Serbia, one can conclude that:

Total volume of FDI inflows is still obviously low (stock per capita in 2009 is about 2,000 €) and does not reach even half of the FDI per capita in Croatia – 5,729 € and it is several times lower than in advanced transition economies of a similar size as Serbia - Czech Republic € 8,409, Hungary 6,410 €, Slovakia 6,300 € [14].

The largest part of FDI has been made in the form of M&A, basically through the privatization of the real sector and the acquisition of a large number of domestic enterprises in the financial sector and services. The number of greenfield (or brownfield) investments, especially the large ones, was insignificant (*Ball Packaging, U.S. Steel, VIP mobile*).

The major part of FDI was directed to "buying the local market", or to the sector of non-interchangeable goods: banking, insurance, energy, telecommunications, real estate and retail. Very few had been export-oriented. Nevertheless, U.S. Steel with its investment in facilities in Smederevo represents the single largest exporter of Serbia and its export value in the "good years" before the global financial crisis reached almost 1 billion U.S. \$.

The applied statistical analysis, in order to detect relations between FDI and GDP and export level in Serbia, did not show adequate results. Significant correlation between FDI and GDP or FDI and export level could not be established according to statistical analysis performed. On the other hand, it would not be appropriate to say that FDI are completely irrelevant for economic development of Serbia. From our point of view, FDI level in Serbia in recent years was too low to detect causality and to retrieve reasonable conclusions.

Merit, greenfield, export oriented FDI, which play a crucial role in economic development, are still low [12]. Although it should be noted that there is some time lag between the realization of FDI and its effects on economic growth, due to the relatively low volume and mainly form and orientation, the inflows of FDI in Serbia had a less-than-expected effects on the growth of overall economic activity, employment and exports.

That is why the question of Serbia's attractiveness for foreign investment is naturally imposed, as well as of the analysis of basic causes and barriers to greater

penetration of Serbia towards FDI. This is especially due to the fact that Serbia has no sufficient sources of own accumulation, and is therefore largely confined to the inflow of foreign capital, which is economically much better provided through FDI than through increased borrowing abroad.

ATTRACTIVENESS OF SERBIA FOR FOREIGN INVESTORS

A number of endogenous and exogenous factors have influence on the investor's decision to invest in a foreign country. Following the economic, strategic, often even subjective reasons, the investors frequently and especially in contemporary circumstances of globalization, choose to invest abroad. Under the impact of tendencies for achieving high profits, conquering foreign markets, providing resources at favorable terms, improving the business efficiency and achieving economies of scale, opposing the competition (and in many other specific reasons), companies invest their capital abroad and enter into various forms of FDI.

Decisions about the investment locations are usually based on detailed calculations and fundamental analysis. In addition, specific objectives, strategies and motives significantly affect the decision making process of some companies regarding the selection of countries for their FDI. In addition to the numerous, heterogeneous internal reasons, some companies, according to empirical experience, the attractiveness of countries for foreign investors is largely determined by current economic environment and investment climate.

There are many indicators of economic environment through which investors can evaluate a country's attractiveness for foreign investment⁵. If the investors use such reports, and most of them do, they would not be able to gain a favorable picture of the attractiveness of investing in Serbia. Due to the limited space, only the results of the most commonly used examinations for evaluating different aspects of investment are listed below:

In the World Bank report "*Doing Business 2010*" on business conditions, which is based on the results of 10 indicators of doing business, the conditions for doing business in Serbia are ranked relatively low. Serbia is ranked 88th out of 183 countries that are included in the analysis and is rated unfavorably compared to many countries in the South-East Europe.

⁵ i.e.: *Doing Business, Economic Freedom of the World, Country Risk Reports, FDI Confidence Index, Global Competitiveness Report, International Country Risk Guide, Index of Economic Freedom, World Investment Report, etc.*

Table 3: Business conditions in Serbia and South-East European region [4]

Criteria / country / rank	Serbia	Macednoia	Montenegro	BiH	Albania	Croatia	Romania	Bulgaria
Starting a Business	73	6	105	160	46	117	42	50
Dealing with Construction Permits	174	137	167	136	137	163	91	119
Employing Workers	95	58	104	111	105	146	113	53
Registering Property	105	63	123	139	70	109	92	56
Getting Credit	4	43	43	61	15	68	15	4
Protecting Investors	73	20	24	93	15	126	41	41
Paying Taxes	136	26	139	129	138	33	149	95
Trading Across Borders	69	62	125	63	66	97	46	106
Enforcing Contracts	97	64	130	124	91	44	55	87
Closing a Business	102	115	42	63	183	79	91	78
Ease of Doing Business Rank	88	32	90	116	82	106	55	44

With this attractiveness level of business conditions it is difficult to count on a greater inflow of FDI. What is most concerning from the perspective of the attractiveness of Serbia for foreign greenfield investment is very low positioning in terms of procedures and extensive waiting for obtaining building permits and ownership registration (Serbia is at 174th and 105th position, respectively).

Although, certain progress in relation to the results of research from 2009 is encouraging, when Serbia held the 94th place, whereas it should be noted that Serbia was ranked significantly better (68th position) in 2007. The progress is indisputable in many areas, but the results of these comparative studies suggest that many countries are advancing much faster than Serbia.

According to the Heritage Foundation ranking [7], by the index of economic freedom in 2010, Serbia takes 104th position (together with Algeria, Cambodia and Bhutan) out of 179 countries and by the number of points (56.9 points, which is below the world average) it is classified among "mostly economically non free countries", which is certainly not a recommendation for foreign investors.

The safety of their investments i.e. risk of investing in individual countries, is of vital importance for foreign investors. One of the popular indicators used for measuring investment risk in each country is the country's credit rating which is issued by renowned ratings agencies such as Standard & Poor's, Moody's et

al. The following table shows the credit risk of the Western Balkan countries by rating agencies Standard & Poor's [8]:

Table 4: Credit risk of the South-East European countries

Country	Domestic Rating	Foreign Rating	T&C Assessment
Serbia	BB-	BB-	BB-
Macedonia, FYR	BB+	BB	BB+
Montenegro	BB	BB	AAA
Bosnia and Herzegovina	B+	B+	BB+
Albania	B+	B+	BB-
Croatia	BBB	BBB	A-
Romania	BBB-	BB+	BBB+
Bulgaria	BBB	BBB	A

Source: Standard & Poor's

According to this report Serbia has a moderate credit risk, but investing in the Serbian economy is still considered as speculative. By analyzing the previous data it is obvious that only Albania and Bosnia and Herzegovina have a worse credit rating than Serbia. Also, there is another fact for concern i.e. the credit rating from 2005 has weakened and since then has stagnated with no signs of improving. However, it should be emphasized that in the period of turbulence of the economic crisis, the rating is not exacerbated, as was the case with a lot more developed European countries (like Portugal, Spain, etc.).

Table 5: Corruption Perception Indecies the of the Western Bakan countries

Country	2005	2006	2007	2008	2009
Serbia	2.8	3.0	3.4	3.4	3.5
Macedonia, FYR	2.7	2.7	3.3	3.6	3.8
Montenegro	n.a	n.a	3.3	3.4	3.9
Bosnia and Herzegovina	2.9	2.9	3.3	3.2	3.0
Croatia	3.4	3.4	4.1	4.4	4.1
Albania	2.4	2.6	2.9	3.4	3.2

Source: Transparency International

For the determination of foreign investors, the efficiency of the legal system, institutions and state corruption is essential. Foreign investors perceive corruption as a major obstacle for investment. According to reports by Transparency International Organization [5], Serbia takes 83rd position with an index of 3.5. It is followed by Bosnia and Herzegovina and Albania, traditionally the most

corrupt country in the region. Progress that Serbia has recorded in recent years in the area of reducing corruption is constant, but unfortunately it is still pretty slow.

And last but not least, the level of investment in a country also depends on the perception by the world community and business circles. According to research of East West Nation Brand Perception Index (one of the few studies of this profile, which includes Serbia), which is based on the analysis of hundreds of thousands of articles from many countries, shows that Serbia is quoted very badly in the world's media [6].

Out of the 200 ranked countries (of which 192 are UN members) Serbia was ranked at 170th place at the end of 2008, and at 182nd place at the end of 2009. According to this survey, Serbia was a country with the worst rank in the region, right after Bosnia and Herzegovina.

Table 6: Rank of Serbia and countries in the region, Country Branding Global Index 200 (CBI) for 2008. and 2009. year

Country	2008	IVQ 2009
Serbia	170	182
Macedonia	127	66
Montenegro	35	88
Bosnia and Herzegovina	185	188
Croatia	132	146
Albania	81	112
Bulgary	148	109
Romania	47	158

Source: West Nation Brand Perception Index 2009

MAIN OBSTACLES AND PERSPECTIVES OF FDI IN SERBIA

The listed researches and indicators point to the fact that Serbia is faced with numerous challenges and obstacles in attracting FDI, especially when it comes to business environment and investment climate. Therefore, despite the implementation of continuous transition process and improving of the business environment for the inflow of FDI, foreign investors are still very cautious and they rarely enter the Serbian market, particularly when it comes to greenfield investments.

A large number of foreign investors still consider investing in Serbia as insufficiently safe. The fact that there are opportunities for achieving respectively

higher profits in Serbia, that the income tax rate is among the lowest in Europe, that wages are comparatively low, that there is a possibility for customs free trade with the Russian Federation, CEFTA, Turkey, doesn't mean a lot to them, because their perception of a significant risk of losing the invested capital persists. Because of the global economic crisis, investors have become more cautious and conservative, and security of investment has become the most important factor. This investment climate does not favor a larger inflow of FDI in Serbia, especially when credit rating is low and the "country risk" high.

Likewise, the perception of the world public and business circles regarding Serbia, which are important for attracting FDI, are still not too good (due to the armed conflicts in the 1990's, the assassination of the Prime Minister, political instability, the crisis over Kosovo's recognition, etc., while occasional successes of Serbian athletes cannot alleviate the existing image). At the same time, Serbia still invests insufficiently in the process of national branding and promotion of the investment image, which would assist in the repositioning and preventing any possible doubts about investing in Serbia.

Based on consideration of key issues in business, foreign investors that are already present in the local market [15] indicate that it is necessary to: a) accelerate the transition reforms that would improve the business environment while bringing Serbia closer to the European Union, b) create conditions for competition in the regulated market; c) complete the adoption of the "Regulatory Guillotine", d) improve the organization and increase the efficiency of all preparatory activities related to the withdrawal of already approved loans from international financial institutions, e) oblige all public companies and other users of public funds to realize their payments to suppliers in maximum 60 days f) consider adopting an action plan to improve Serbia's credit rating.

Another obstacle for the massive inflow of FDI was the absence of well-formulated and effective investment policy. However, it should be noted that in this respect Serbia made significant progress in the recent years. On the basis of the adopted National Strategy for Promoting and Developing Foreign Investments, system of financial support for new investments is developed in Serbia. Serbian Government, through allocation of grants, stimulates the investment projects even up to 25% of total investments, and from 1000 to 10 000 € per job created. These measures undoubtedly represent one of the key generators of current and future intensive inflow of FDI in Serbia, and its application already had stimulating effect on attracting foreign investors and boosting industrial production (e.g., *Leoni* - the German company which built the capacity in Prokuplje, *Jura* - South Korean company that invests in Nis and Raca, etc.) [13].

Expectations are the highest from the joint venture of the Government of the Republic of Serbia and the Italian company *Fiat* (which has invested nearly one billion € in facility in Kragujevac, which should allow the opening of about 5 thousand jobs, and production of over 200 thousand cars per year from 2012) [13].

Despite some criticism that occurred in the domestic professional and general public, it seems that in current conditions this model can quickly lead to the desired much-needed acceleration of greenfield FDI. By following the example of Slovakia, which, based on attraction of primarily high-value investments in the automotive and electronics industries, managed to make its economic activity much more dynamic, it seems that Serbia must lead an active incentive policy when new greenfield FDI are at stake.

With gradual recovery from the global economic crisis, the FDI are expected to recover as well. Most indicators show that the level of FDI in the world in 2011 was higher than in 2009 [9]. Given that, with some variations, the trend of FDI inflows in Serbia followed the trends of FDI worldwide, and one can optimistically anticipate that a greater inflow of FDI would also apply to Serbia. Of course, in order for the latter to happen, it is necessary to meet the appropriate preconditions.

In fact, Serbia is respective, but not very large local market, with not high purchasing power. Also, Serbia is not sufficiently rich in natural resources in order to count on massive inflow of FDI on that basis. In addition, because of the politics of the 1990's, Serbia lagged behind in the attraction of FDI, so that many, especially the large transnational companies, that targeted the South East Europe, have already located their facilities in the neighboring countries. The introduction of further incentives and following an active investment policy is therefore necessary, in addition to continuous efforts to improve the economic environment.

CONCLUDING REMARKS

FDI is essential to the dynamic economic development and social well-being of the host country. Therefore, most countries in the world, especially after the onset of the global economic crisis, have taken measures to attract foreign direct investment.

Unfortunately, in the past period Serbia has not achieved the desired results when it comes to the amount and structure of FDI. The value of FDI inflows in Serbia is far behind the leading transition countries of similar size, but also from many countries in South East Europe. In fact, most FDI has been made in the form of M&A, a major part of FDI was directed to "buying the local market". There were

very few greenfield and export-oriented FDI. These tendencies are the result of numerous circumstances and problems when it comes to business environment and investment climate in Serbia.

What is most needed in Serbia is greenfield investment, whose attraction has to be improved. Especially due to the fact that the privatization process in Serbia is ending, wherefore it cannot be a significant basis for attracting FDI. But to ensure the intense inflow of FDI to Serbia, it is necessary to increase the attractiveness of Serbia for foreign investors, primarily through improving business environment and keeping active investment policy. Bearing in mind that creating a propulsive investment business climate and modern institutional infrastructure (and reducing risks for investment) requires a lot of time, special attention must be paid to an active policy of attracting FDI. This involves an intensive promotion of the country in the international public, the targeting of potential investors and providing financial support to realize their projects in Serbia.

References

- [1] Basic macroeconomic indicators, Data of the Ministry of Finance of the Republic of Serbia, July 2010
- [2] Boris Begović, Boško Mijatović, Marko Paunović and Danica Popović Greenfield foreign direct investment in Serbia, Center for Liberal-Democratic Studies, Belgrade, 2008
- [3] Country Risk Reports, www.ihsglobalinsight.com
- [4] Doing Business, 2010, World Bank, www.worldbank.org.
- [5] Economic Freedom of the World, www.freetheworld.com/reports.html
- [6] East West Nation Brand Perception Index, www.eastwestcoms.com
- [7] Index of Economic Freedom, www.heritage.org/index
- [8] International Country Risk Guide, www.prsgroup.com/icrg.aspx
- [9] Investing Across Borders 2010, Indicators of foreign direct investment regulation in 87 economies, Investment Climate Advisory Services -World Bank Group
- [10] Ivan Stošić, Results and Problems of Serbian Real Sector Privatization, Economic Analysis, 2007/1-2, Institute of Economic Sciences, Belgrade
- [11] Marco Neuhaus, The Impact of FDI on Economic Growth: An Analysis for the Transition Countries of Central and Eastern Europe, Physica-Verlag 2006
- [12] Radovan Kovačević, The importance of foreign direct investment for economic development of Serbia, Foreign capital as a factor of development transition economies, May 2008
- [13] SIEPA, www.siepa.gov.rs
- [14] WIIW Database on FDI, www.wiiw.ac.at
- [15] White Book-proposals to improve the business climate in Serbia, Foreign Investors Council, 2009
- [16] World Investment Report 2010, UNCTAD, Geneva, July 2010

CHAPTER 4.

ACCESSION TO THE EUROPEAN UNION, INTEREST RATES AND INDEBTEDNESS: GREECE AND PORTUGAL

Pedro Bação¹

António Portugal Duarte²

Abstract

The increase in both public and private indebtedness has been one of the main macroeconomic developments in recent years. This trend has been accompanied by large current account deficits, especially in smaller countries, such as Greece and Portugal. One possible explanation for this behaviour is the reduction in interest rates that convergence to the European single currency produced. At the same time as interest rates declined, these countries experienced a strong increase in domestic demand and a real exchange rate appreciation. Adoption of the euro implied that the appreciation of the real exchange rate could not be compensated by means of nominal devaluations, resulting in reduced competitiveness. In this paper we study the macroeconomic performance of Greece and Portugal during the process of convergence to the single currency and their prospects, in the light of the current financial crisis. To this end we make use of a consumption model developed by Gabriel Fagan and Vítor Gaspar. The experience of these two countries may give important lessons for candidate countries.

Key words: *consumption, euro, interest rates, indebtedness, exchange rates.*

INTRODUCTION

Greece and Portugal share more than just membership of the PIIGS group. They were both under dictatorships until the mid-1970s. They joined the European Economic Community (EEC) in the 1980s, first Greece, in 1981, and later

¹ Pedro Bação, GEMF and Faculty of Economics - University of Coimbra, Portugal

² António Portugal Duarte, GEMF and Faculty of Economics - University of Coimbra, Portugal

Portugal, in 1986. They both joined the euro area, with Portugal in the founding group and Greece following shortly afterwards, in 2001. In both cases, doubts were raised concerning their ability to meet the convergence criteria. Finally, both countries have since posted large budget deficits, large public debts and large external deficits. This has earned them the mistrust of financial markets and forced the governments of Greece and Portugal to implement austerity measures, at the cost of recession and social unrest.

But what lies beneath the economic problems that Greece and Portugal have faced in the first decade of the XXI century? In a curious twist, a low interest rate has generally been viewed as one of the main villains. As will be described in the next section, the interest rate in these countries declined significantly during the 1990s and early 2000s. In fact, the interest rates in these countries converged to the level of German interest rates, a process which currently appears mystifying to many observers that now benefit from hindsight.

According to this view, the decline in interest rates stimulated consumption, which led to external imbalances and indebtedness. The international financial crisis, following the collapse of Lehman Brothers in September 2008, magnified the budget deficits and reminded financial institutions of the need to inspect more carefully the characteristics of the borrowers. Within the eurozone, countries such as Greece and Portugal were pointed out as high-risk investments. Funding for the banks of these countries dried out, making them dependent on the European Central Bank, which has had to take extraordinary measures to avoid the possible collapse of European financial markets. As for the governments of these countries, demand for bonds issued by them dwindled, while the interest rate shot up, reflecting an increase in the spread against German bonds. In fact, the interest rate on 10-year Portuguese government bonds reached the maximum value (6.51%) since the start of the euro on September 28, 2010. The rate on Greek bonds reached a maximum of 11.28% on September 24. Meanwhile, the rate on German bonds is around 2.3%.

The model developed by Fagan and Gaspar [9] formalizes the view that movements in interest rates are central in the explanation of Greece and Portugal's problems. Our goal here is to attempt a first quantitative evaluation of this hypothesis. To put the problem in context, in the next section we describe the evolution of Greece and Portugal in the last decades. After that, we present Fagan and Gaspar's model and fit it to the consumption data. Finally, we will discuss the results and their implications for macroeconomic policy in a small open economy considering adhesion to a monetary union.

THE ROAD TO CURRENT PROBLEMS

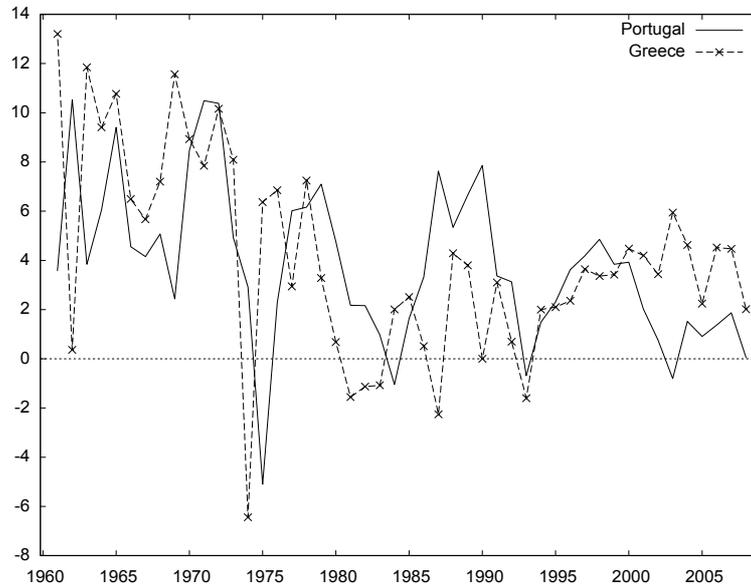
With the transition to democratic systems in the mid-1970s, the macroeconomic performance of Greece and Portugal changed considerably. In the Portuguese case, the last 30 years of dictatorship were marked by an extraordinary, and unprecedented, economic growth. The average annual growth rate between 1955 and 1973 was 9.64%. Public finances were viewed as highly sustainable, with public debt reaching the minimum level of 15.2% of GDP just before the 1974 Revolution.

However, the return to democracy was accompanied by a growth slowdown and a downturn in the state of public finances – see [3], [13], [15], [16] and [17]. Policy priorities changed, relegating sustainability of public finances to the bottom of the list. This was justified with the need use to public policy instruments to bridge the wide economic and social gap that still existed, despite the strong growth mentioned above, between advanced economies and Portugal. A similar evolution occurred in Greece, where average annual growth between 1950 and 1973 was 7%. However, this high growth rate was achieved at the cost of increased inequality, which fuelled political tensions.

The transition to democracy was made especially difficult by the international economic crisis of the 1970s, brought about by the two oil shocks in 1973 and 1979, and by the intense internal political fighting that followed the regime change. Therefore, it is not surprising to see that the macroeconomic scenario changed, with a clear decline in growth and unsustainable public finances. With the revolution, ownership of a significant part of the means of production was transferred to the state. The repressive structure that limited workers' rights and demands was eliminated. As a result, wages increased, leading to a overheated economy, with a large external debt. Restrictive measures were required. In the Portuguese case, the International Monetary Fund (IMF) was called in to help in 1978-1979 and again in 1983-1984. The agreements with the IMF allowed access to foreign currency funding, indispensable for meeting external debt obligations and also to pay for imports of goods such as oil. In return, severe austerity measures were put in place.

With the international crisis of the 1970s behind, accession to the EEC in the 1980s created new opportunities for Greece and Portugal. Both countries recorded strong growth rates until 1992. However, mounting inflation problems in many member-states of the European Monetary System (EMS) brought this expansion period to an end – see Graph 1.

Graph 1: Real GDP growth rates in Greece and Portugal, 1961-2008 (gross domestic product at 2000 market prices, source: AMECO)

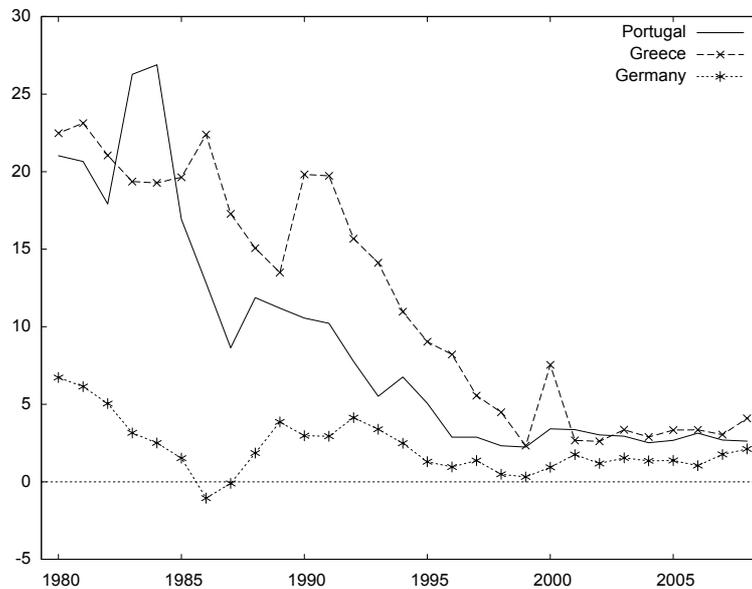


To fight inflation, a disinflation process was initiated, based on restrictive monetary and exchange rate policies. Matching its anti-inflation credentials, Germany posted the lowest inflation rates during this period (the German reunification process temporarily changed this) and the Deutsch-mark was used as a nominal anchor for the disinflation process in other countries, such as Portugal – see [4], [6], [7], [10], [11], [12] and [18]. Nominal exchange rates were pegged to the German currency. The credibility gains attached to the pegging helped bring down inflation expectations and contributed to the success of the disinflation process.

As a result of this process, the inflation rate in Greece dropped from 24.3% in 1981 to 4.5% in 1998, significantly reducing the differential with respect to Germany and France. A similar outcome was observed in Portugal: the inflation rate came down from over 25% in 1983 to 5% in 1994 – see Graph 2. Note that the pegging of the Portuguese currency marks a departure from previous policy goals. In fact, before joining the EEC, exchange rate policy was characterized by a crawling peg. The goal was to compensate the inflation differential relatively to the main trade partners and thus support the external competitiveness of Portuguese industries. The crawling peg was replaced in October 1990 by a policy based on bounding the fluctuation of the Portuguese escudo with respect to the five main currencies in the Exchange Rate Mechanism (ERM) of the EMS. As a

consequence, the Portuguese escudo kept a stable external value. In fact, it gained a tendency towards appreciation, between 1990 and 1992, which the central bank (Bank of Portugal) had to counteract through the purchase of foreign reserves in the foreign exchange market – see [10].

Graph 2: Inflation in Germany, Greece and Portugal, 1980-2008 (private final consumption expenditure deflator, source: AMECO)



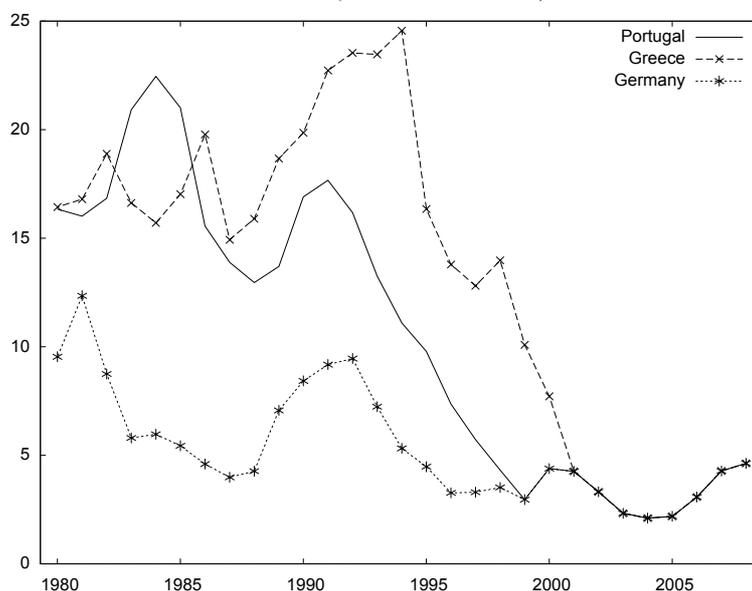
Given the success of the disinflation process, the governments of Greece and Portugal decided to apply for membership of the ERM of the EMS. The Portuguese escudo joined the ERM on April 6, 1992, while the Greek drachma joined on March 16, 1998. Portugal would then be a founding member of the euro area in 1999, while Greece would join in 2001.

However, the success of the anti-inflation policy was not costless. Economic growth began to slow down in 1990. The situation was made worse by the fact that the EMS went through a profound crisis between 1992 and 1994, which led the British pound and the Italian lira to leave the system. During this period, there was a succession of realignments, which culminated in the widening of the fluctuation bands to $\pm 15\%$ in August 1993. The Portuguese escudo was also a target of speculative pressures. These were fought by the sale of foreign reserves and by means of the capital controls that were still in place.

Despite the success in fending off the speculative attacks, the Portuguese escudo was devalued 6% and 6.5% in November 1992 and in May 1993, respectively,

following the 6% and 8% devaluations of the Spanish peseta. Nevertheless, the policy directive aiming at exchange rate stability was not altered. Therefore, once the turbulence period was over, the Portuguese escudo was kept within the $\pm 6\%$ fluctuation band vis-à-vis the German mark. In 1996, this policy actually caused an appreciation of the Portuguese currency, as a by-product of the appreciation of the German currency. The stability of the exchange rate and the disinflation achieved permitted a gradual decrease of interest rates in Greece and Portugal. Graph 3 illustrates this evolution.

Graph 3: Short term nominal interest rates in Germany, Greece and Portugal, 1980-2008 (source: AMECO)

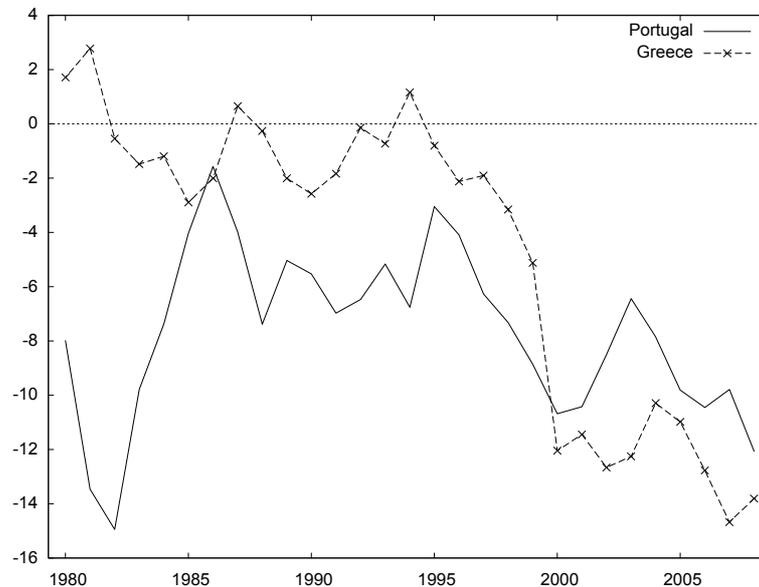


Between 1995 and 1999, economic growth accelerated in both countries, though still at lower rates than those observed a decade before. Besides, contrary to what happened at the end of the 1980s, this acceleration was not driven by exports. In the Portuguese case, the largest stimulus came from domestic demand, specially from certain public budget items of a social nature or related to state intervention in the economy. It is also during this period that Greece and Portugal's current account deficits explode – see Graph 4 – and the external debt begins the climbing that has led to the current predicament.

In the Portuguese case, two fundamental elements, directly related between them, appear to have contributed to this situation. First, the exchange rate was kept at a level that harmed the external competitiveness of the Portuguese economy. When the Portuguese escudo joined the ERM, the central parities were 178.735 escudos

per ECU and 86.9393 escudos per German mark. The fact that the escudo remained close to the upper limit of the fluctuation band appears to support the view that it was over-valued at entry. The subsequent realignments were not enough to recover the loss of competitiveness. Secondly, there has been a real appreciation of the Portuguese exchange rate since 1990, the disinflation process notwithstanding – see [2] and [7]. Along the path towards the euro, devaluation has been removed from the set of policy options, so that competitiveness can no longer be maintained through that “artificial” means. Globalization, with the emergence of new competitors in the world markets, has made life even harder for many Greek and Portuguese firms, especially those in low-technology sectors.

Graph 4: Current account balance (% of GDP), Greece and Portugal, 1980-2008
(source: AMECO)



Fixed exchange rates and low interest rates (which reduced the incentive to save) combined to foster excessive indebtedness, consumption and the reallocation of production from tradable to non-tradable sectors, especially construction, which also benefited from public investment programs. With public spending rising faster than GDP, wages rising above productivity, tradable sectors facing stiff competition from abroad, and a rising external deficit, Greece and Portugal are faced with the imperious need to make difficult macroeconomic adjustments.

Portugal's budget deficit reached 9.3% of GDP in 2009, more than three times the limit imposed by the Stability and Growth Pact. The government's goal is a reduction of the deficit to 7.3% in 2010 and 4.6% in 2011. To this end, the

government has announced, in September 2010, a package of new austerity measures. This package includes a 5% average reduction of public sector wages above 1500 euro per month and an increase in the VAT rate from 21% to 23%. It is feared that these measures may throw the economy back into recession and raise further the unemployment rate, already at 10.2% in September 2010. Measures such as these had already been suggested years ago in the wake of a Bruegel Report – see [1] – and have therefore been criticised for being late.

Greece's situation is seen as particularly worrying. Greece has had a credibility problem which makes Greece's participation in the euro area troublesome. During the last decade, Greek governments systematically manipulated public finance data in order to ensure entry to the euro area and to elude the restrictions imposed by the Stability and Growth Pact – see [8]. By comparison, Portugal has made less use of creative accounting and has made an important reform of Social Security. Greece has avoided such measures, under the pressure of trade unions and public opinion in general.

Therefore, it is not surprising that Greece had a 14% budget deficit in 2009 and that its public debt reached 115% of GDP. The financial market turmoil over this evolution and the talk about the possibility of Greece going bankrupt, which could have serious repercussions on the eurozone, led to the intervention of the European Union and the IMF. The Greek government has taken measures with the aim of bringing the public deficit down to 4% in 2010 and 3% in 2011. These measures also include a 5% to 20% cut in public sector wages, as well as a cut in the number of public sector workers (who represent 20% of total workers in Greece), to be achieved by not replacing all those who retire. The Greek government is also proposing an increase in the retirement age from 60 to 63 years and a drastic cut in welfare subsidies, investment in public hospitals and military spending. On the income side, the government is increasing tax rates, namely on income and on value added, besides selling public property.

A MODEL OF CONSUMPTION BEHAVIOUR

In this section we fit the model proposed by Fagan and Gaspar [9] to Greek and Portuguese data. The goal is to make a, to our knowledge, first attempt at evaluating quantitatively the importance of the decrease in Greek and Portuguese interest rates, brought about by the single currency, to the evolution of consumption and the external deficit. We begin by briefly presenting the model. We then discuss the estimation of the model's parameters. Finally we will discuss the results.

Main Equations

Fagan and Gaspar set up an overlapping-generations model, in continuous time, of an exchange economy that follows the lines of Blanchard [5]. It is assumed that there are an infinite number of atomistic agents who face uncertainty only concerning their time of death. The distribution of the agents' age (t) at the time of death has a density function given by:

$$f(t) = \rho \cdot \exp(-\rho \cdot t) \quad (1)$$

One implication of this assumption is that, on average, on each date a fraction ρ of the population dies. However, it is also assumed that an exactly compensating number of new agents are born, so that the population size is constant. If the population size is large, then the fraction of agents that die/are born on each date will approach ρ – making appeal to this property, Fagan and Gaspar assume that it will always equal ρ .

Given an exogenous endowment, each agent in this economy has to make two decisions. The first is how much to consume/save. The second is how much to consume of each of the two goods assumed to exist: traded (c^T) and non-traded (c^N). The price of the traded good is assumed to be exogenous, while that of the non-traded good will be determined by the equilibrium between domestic supply and demand for it. This distinction allows Fagan and Gaspar to discuss the evolution of the real exchange rate, defined as the relative price of the non-traded good in terms of the traded good. The quantities consumed of the two goods enter the utility function through a Cobb-Douglas aggregate:

$$c = \kappa (c^T)^\alpha (c^N)^{1-\alpha} \quad (2)$$

The utility function itself depends on this Cobb-Douglas aggregate and also on the stock of habit. Fagan and Gaspar assume that the stock of habit (H) evolves according to the differential equation (note that dotted variables represent the derivative of the variable with respect to time):

$$\dot{H} = \gamma(C - H) \quad (3)$$

where C is aggregate real consumption, in fact assuming that agents want to “keep up with the Joneses”.

Given these assumptions, the agent wishes to maximize the intertemporal utility function:

$$\int_t^\infty \log(c_s - \mu H_s) \exp(-(\theta + \rho)(s - t)) ds \quad (4)$$

where θ is the discount factor when agents are immortal – the fact that they are not makes them more impatient.

Agents maximize the utility function subject to a budget constraint given by:

$$\dot{f} = (r + \rho)f + p^T(\omega^T - c^T) + p^N(\omega^N - c^N) \quad (5)$$

where f represents the agent's net assets, r is the interest rate, ω^T and ω^N are the agent's endowments of traded and non-traded goods, respectively, and p^T and p^N are the prices of traded and non-traded goods, respectively.

What equation (5) says is that the agent's net assets increases (decreases) with the interest the agent receives (pays) on beginning of period assets (liabilities, when $f < 0$) and with the receipts (expenditures) from selling (buying, when $\omega < c$) traded and non-traded goods. Note that the effective interest rate on net assets is equal to the interest rate (r) plus ρ . This is because it is assumed that the agents enter the following contract with an insurance company operating in a competitive market: agents receive (pay) interest at rate ρ to the insurance company in exchange for the insurance company receiving the net assets (either positive or negative) of the agent when the agent dies. Since the market is competitive, insurance companies have zero profits, so that in fact the wealth of agents that die is redistributed among surviving agents in the form of interest payments. Note also that in the aggregate, i.e., vis-à-vis the rest of the world, the term corresponding to $\rho.f$ will disappear from the budget constraint, since it originates in these operations that take place between domestic agents only. In fact, the equation of motion for aggregate net assets (F) is:

$$\dot{F} = r.F + \omega^T - \alpha.Z \quad (6)$$

where Z is aggregate nominal consumption. The hypotheses of the model also imply that a domestic price index (p) may be computed from:

$$p = \varphi Z^{1-\alpha} \quad (7)$$

where φ depends on α , κ and the endowment of non-traded goods.

Finally, the equation of motion for aggregate nominal consumption is:

$$\dot{Z} = \frac{(\mu\gamma + r - \theta)Z - \mu\varphi(\gamma + r - \theta)Z^{1-\alpha}H - \rho(\theta + \rho)F}{1 - (1 - \alpha)\mu\varphi Z^{-\alpha}H} \quad (8)$$

The empirical analysis, presented in the next subsection, will focus on equations (7) and (8).

Empirical Implementation

Our goal is to assess how well the model fits the main trends observed in Greek and Portuguese data. If that is the case, then this will lend support to the view that the decline in the interest rate, and consequent upward adjustment of consumption, was the main cause of the serious problem with external imbalances that Greece and Portugal have been facing.

The first issue we must discuss when trying to estimate the model is the identification of the parameters. Equation (8) makes use of six parameters: α , γ , θ , μ , ρ and φ . Given the structure of the model, unless we pin down either μ or φ we cannot identify the other parameters. In addition, μ must be different from 1 to allow identification of γ and θ . Finally, if we allow an additive markup to the interest rate, in order to allow the actual interest rate to differ from that on government bonds (for which we have data) then we cannot identify ρ and θ . Instead, we will consider the possibility of a multiplicative markup, i.e., we will replace the interest rate, r , by $\iota.r$, where ι is the markup parameter.

Of the six parameters mentioned above, two (α and φ) also appear in equation (7). Since equation (7) relates in a log-linear way two observable variables, it may be estimated, for example, by OLS. One difficulty is that the period we are interested in, concerning the adhesion to the euro, is relatively short (Greece: 1995-2007; Portugal: 1995-2008) and therefore reflects the influence of short-run business cycles besides the influence of long-run trends. In order to isolate these long-term trends, we employ the Hodrick-Prescott filter, using the usual smoothing parameter for annual data, $\lambda=100$. We then estimate by OLS the regression of the filtered logarithm of the price index on a constant and the filtered logarithm of nominal per capita consumption, obtaining, in the case of Greece, $\alpha=0.38$ and $\varphi=17.97$, and, in the case of Portugal, $\alpha=0.41$ and $\varphi=18.56$. Fagan and Gaspar's calibration assumes that $\alpha=0.3$, while they do not specify values for the calibration of φ .

Now that we have a value for φ , we may turn our attention to the other parameters. Values for these will be chosen so as to minimize the distance, in the mean square sense, between the observed data (filtered as above) and the simulated data

obtained from equation (8). Equation (8) appears highly complex. To avoid potential convergence problems while solving the equation, we simplify it by using the actual (filtered) values for F and the powers of Z . As for H , which is also necessary to solve equation (8), we simulate it from equation (3). As in Fagan and Gaspar, we assume that the H begins in a steady state, i.e., $\dot{H} = 0$.

The reader must have noticed by now that, while the model is set in continuous time, the data is annual. How can we fit one to the other? To overcome this problem we estimated polynomials to approximate the filtered data. Our experiments have shown that polynomials of the seventh degree provide a very good approximation to our data and thus were used to build a continuous-time version of the variables.

Discussion of the results

We have fitted equation (8) to Greek and Portuguese nominal consumption per capita data in the period 1995-2008 (2007 in the case of Greece, for which we lack the 2008 data). We chose this time span because it includes, besides the period of existence of the euro (since 1999), the period that is usually considered to be of convergence (between 1995 and 1999) to the euro. Data sources are reported in Table 1. Since the model is highly non-linear, we have chosen to use a grid search procedure for the optimization of the parameters. The grid (which follows for the most part the intervals suggested by Fagan and Gaspar) and the optimized values are presented in Table 2. Note that, regarding the multiplicative markup, ι , we have also experimented with a wider interval, but with a coarser grid for the various parameters; in this case, the optimized value was 1. We made use of the Octave (<http://www.octave.org>) function “lsode” to solve the differential equation (8).

Table 1: Data sources

Z: Private final consumption expenditure at current prices, AMECO.
C: Private final consumption expenditure at 2000 prices, AMECO.
p: Implicit price index, Z divided by C.
H: Net foreign assets, Lane and Milesi-Ferretti [14].
Pop: Total population (National Accounts), AMECO.
r: Nominal short-term interest rates, AMECO.

Table 2: Optimization of the parameters – grid and results

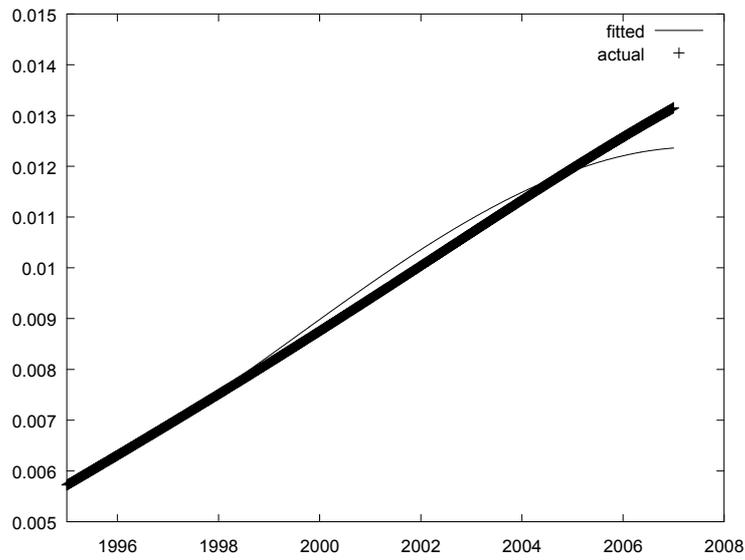
Parameter	Grid			Value	
	start	step	end	Greece	Portugal
μ	0.00	0.10	0.90	0.60	0.50
γ	0.00	0.10	1.00	0.20	0.20
θ	0.00	0.01	0.10	0.01	0.00
ρ	0.00	0.01	0.05	0.00	0.00
ι	1.00	0.10	1.10	1.00	1.01

Graphs 5 and 6 show that the model fits the filtered consumption data very closely, at least in the Portuguese case. Notice, however, that our approach does not allow us to report statistical tests and therefore the results must be interpreted with caution. As for Greece, the model predicts a slowdown in consumption at the end of the period that appears not to have occurred.

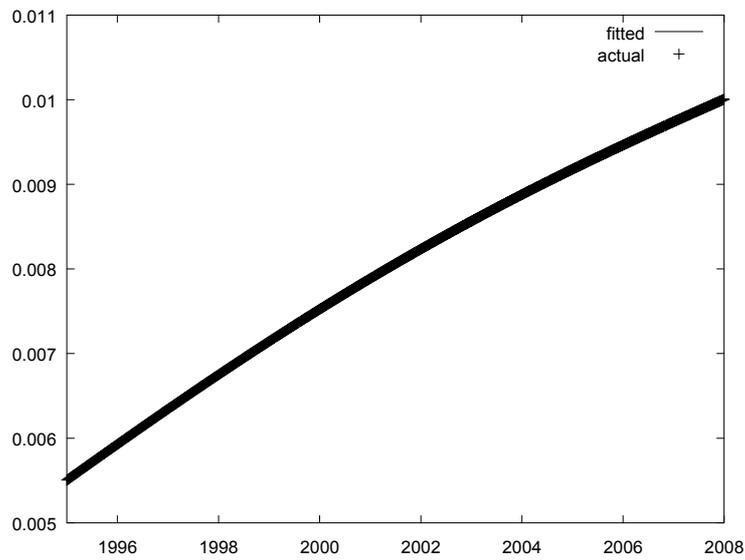
What do our results suggest? Note first that the optimized value for the discount rate (θ) is zero for Portugal and 1% for Greece. In addition, the results also imply that Greek and Portuguese consumers behave as if they are immortal, since the optimized value for ρ is also zero. This reinforces the finding concerning the discount rate. Together, they suggest that Greek and Portuguese consumers have actually been behaving in an extraordinarily restrained manner, valuing their future consumption (expected to extend forward indefinitely) as much as present consumption. This confirms Fagan and Gaspar's remark concerning the fact that their model predicts interest rate changes to produce very large effects.

This conclusion appears to imply one of two things: either the model is approximately correct and interest rate changes are truly powerful drivers of consumption, or the model is not even approximately correct and we need to search for an alternative. In this paper we will not attempt to follow the second route, which we leave for future research.

Graph 5: Greek Nominal Consumption (HP filtered) – actual and fitted



Graph 6: Portuguese Nominal Consumption (HP filtered) – actual and fitted



As for the first view, it has a clear implication for prospective members of the European Union and the eurozone: beware of the effects of a decline in interest rates. During the process of joining the European Union/eurozone, the initial decline in interest rates may boost consumption and, consequently, domestic output and income. However, this increase may lead to excessive indebtedness and current account problems. Cautious macroeconomic policy makers should take this into consideration. A policy designed to moderate consumption growth, though probably unpopular in the short run, may prevent the need for draconian measures later on.

CONCLUSION

In this paper we have presented a quantitative evaluation of the hypothesis that the decline in the interest rate has been at the root of the external imbalances that have developed in Greece and Portugal in recent years. Our quantitative exercise has estimated the parameters in Fagan and Gaspar's [9] consumption model. The estimates run counter conventional wisdom in that they suggest that Greek and Portuguese consumers' preferences are characterized by extreme patience and forwardlookingness. If the model is approximately correct, this implies that interest rates have high leverage over consumption. Future members of the eurozone should therefore be aware of this effect and take adequate measures. If the model is not even approximately correct, then further research is needed to gain a better understanding of the effects of joining a monetary union.

ACKNOWLEDGEMENTS

We are grateful to Miguel Portela for help with the computations. Financial support from *Fundação para a Ciência e a Tecnologia*, research grant PTDC/EGE-ECO/100825/2008, through *Programa Operacional Temático Factores de Competitividade* (COMPETE) of the Community Support Framework III, partially funded by FEDER, is gratefully acknowledged.

References

- [1] Ahearne, Alan and Jean Pisani-Ferry (2006), "The Euro: Only for the Agile", Bruegel policy brief, No. 1, February.
- [2] Alexandre, Fernando, Bação, Pedro, Cerejeira, João and Miguel Portela (2009), "Employment and Exchange Rates: The Role of Openness and Technology", Discussion Paper No. 4191, The Institute for the Study of Labour (IZA), May.
- [3] Amaral, Luciano (2010), *Economia Portuguesa, As Últimas Décadas*, Fundação Francisco Manuel dos Santos, Lisboa.

- [4] Barbosa, António and José Machado (1996), “O Custo da Desinflação Portuguesa: Uma Nota”, *Boletim Económico*, Banco de Portugal, September, pp. 47-50.
- [5] Blanchard, Olivier (1985), “Debt, Deficits and Finite Horizons”, *Journal of Political Economy*, Vol. 93, No. 2, pp. 223-247, April.
- [6] Cohen, Daniel, Mélitz, Jacques and Gilles Oudiz (1989), “Le Système Monétaire Européen et l’Asymétrie Franc-Mark”, *Révue Économique*, Vol. 39, No. 3, May, pp.667-676.
- [7] Duarte, António Portugal (2009), “The Portuguese Disinflation Process: Analysis of Some Costs and Benefits”, *Transition Studies Review*, Springer, Vol. 16, No. 1, pp. 157-73, May.
- [8] Eurostat (2004), “Report by Eurostat on the Revision of the Greek Government Deficit and Debt Figures”, November 24.
- [9] Fagan, Gabriel and Vítor Gaspar (2007), “Adjusting to the Euro”, Working Paper Series No. 716, European Central Bank, January.
- [10] Gaspar, Vítor (1994), “Desinflação e Competitividade”, *Boletim Trimestral*, Vol. 16, No. 2, Banco de Portugal, June, pp. 35-40.
- [11] Gaspar, Vítor and Ildeberta Abreu (1999), “Price Stability and Intermediate Targets for Monetary Policy”, Working Paper No. 1-99, Banco de Portugal, January.
- [12] Giavazzi, Francesco and Alberto Giovannini (1989), “Modèles du SME: L’Europe n’Est-elle q’une Zone Deutsch-mark?”, *Révue Économique*, Vol. 39, No. 3, May, pp.647-666.
- [13] Lains, Pedro e Álvaro Silva (2005), *História Económica de Portugal, 1700-2000*, Vol. III, - O Século XX, ICS, Lisboa.
- [14] Lane, Philip and Gian Milesi-Ferreti (2006), “The External Wealth of Nations Mark II: Revised and Expanded Estimates of Foreign Assets and Liabilities, 1970-2004”, IMF Working Paper 06/69.
- [15] Lopes, José da Silva (1996), *A Economia Portuguesa desde 1960*, Gradiva, Lisboa.
- [16] Marinheiro, Carlos (2006), “The Sustainability of Portuguese Fiscal Policy from a Historical Perspective”, *Empirica*, Springer, Vol. 33, No. 2, pp. 155-179, June.
- [17] Mateus, Abel (2006), *Economia Portuguesa – Crescimento no Contexto Internacional (1910-2006)*, Verbo, Lisboa.
- [18] Todter, Karl-Heinz and Gerard Ziebarth (1997), “Price Stability vs. Low Inflation in Germany: An Analysis of Costs and Benefits”, Working Paper 6170, National Bureau of Economic Research, September.

CHAPTER 5.

FINANCIAL SYSTEM INTEGRATION OF SERBIA IN THE EUROPEAN FINANCIAL SYSTEM

Zoran Grubišić¹

Periša Ivanović²

Nikola Fabris³

Abstract

This paper aims to address key issues in maintaining financial system integration of Serbia in the European financial system, through inevitable structural changes in financial sector. The primary task of the NBS's policy in the previous years was to regulate the inflow of capital into the banking system in such a way that it supports, rather than impedes sustainable economic growth through its unchecked expansion. In the coming period supervision of financial institutions will be improved which is an important condition for stability of the financial system as a whole, and guarantee for timely and compatible integration in wider European financial system framework.

Exchange rate volatility during the global financial crisis was the price Serbia had to pay for imported instability because of its new monetary framework adopted in 2006 (very similar to targeted inflation). This is in accordance with the principle of impossible trinity and general idea was the expectation that the fluctuating nominal exchange rate reinforces the adaptability and eases the effects of possible shocks.

The authors` aim was to recognize effectiveness of implied measures in maintaining financial stability as guarantees for the further development of Serbian financial system and its integration in the European financial system.

Key words: *financial system, banks, exchange rate, capital market, monetary policy, financial stability, confidence*

¹ Zoran Grubišić, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

² Periša Ivanović, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

³ Nikola Fabris, Faculty of Economics, University of Belgrade, Belgrade, Serbia

INTRODUCTION

General idea of this paper is give an overview of the financial system structure in Serbia and to objectively assess obstacles in the integration process in the European financial system. Section one discusses the key challenges strike at the heart of the financial system and financial infrastructure, especially important for financial stability and Basel II implementation.

Section two discusses capital market in Serbia trying to assess objectively the role of FDI flows in the present financial crisis. Serbia`s example strongly supports the case that FDI can be described as a double-edge sword.

In section three very specific problem of managed floating exchange rate regime implemented in Serbia has been analyzed. This concept rules out the possibility that the central bank, apart from the targeted inflation rate, could have any other goal. This is in accordance with the principle of impossible trinity. It suggests that certain exchange rate instability was the price Serbia had to pay in the global financial crisis.

ASSESSING THE FINANCIAL SECTOR CHALLENGE

The past three years have been one of the most challenge periods in Serbian economic development. For the Serbian financial system, risk and challenges remain abound. The key challenge strikes at the heart of the financial system and financial infrastructure - regaining confidence about their compatibility with EU standards and practices. Trust in our emerging market mechanism, as well as its regulator, has been severely tested. The task of setting right balance in regulation, going forward, is still a main debate, in which the NBS is closely engaged trying to provide adequate macroprudential and microprudential framework capable to support sustainable growth. The crisis has highlighted the complexity of the Serbian financial system, and the potential impact of external factors. Thus, there was a critical need for the Serbian authorities and the financial market to work together to ensure that the emerging global standards and regulations can handle such complexity, and remain risk-focused at the economic and financial system.

Just like in other countries the Serbian financial system has been going through a phase of major structural change in recent decades, and far from slowing down, the pace of change seems to be accelerating. The technology for breaking down risk into its elementary components has spawned an extraordinary variety of new instruments and markets (fx swap market). The volume of transactions has surged of unprecedented highs. New players have emerged (foreign banks and

investment funds) and gained possession of large parts of the financial territory, while others have grown larger and more complex at the heart of the financial system. Functional distinctions between intermediaries have been eroded even as financial intermediaries and markets have become even more tightly interdependent. Finance has become cross border oriented and moreover international. Households are now more directly responsible for the management of financial risks than ever before. The financial sphere has greatly expanded relative to the 'real economy'.

On the financial sector front, the Serbian financial system is still bank-based, with banks forming the dominant part. The strength of our banking system is evident in its continuous solid performance. During the toughest times, Serbian banks remained strong and resilient against the backdrop of FDI inflows and economic slowdown⁴. Loan acceleration rate slowed, partly due to contraction in corporate portfolio and deceleration in household portfolio, as a result of more cautious business undertaking and household spending, and partly due to tightened loan underwriting standard. The good news is the figures and confidence is already starting to pick up again. Moreover, profit continued to be recorded for ten consecutive years, and the overall capital position of the banking system strengthened further, with BIS ratio above 20%⁵. Much of the current strength and resiliency of our banking sector owes a great deal to the reform groundwork laid during the past decade. On prudential supervision, as part from requiring banks to conform to international best practices on risk-based supervision under Basel I and now Basel II, the National Bank of Serbia also moved to strengthen supervisory function, utilizing both on-site and off-site supervision as well as asking banks to carry out stress tests on a regular basis. The key here was to strengthen bank's own risk management culture and system. Works on strengthening the financial infrastructure were started and are still on-going. In this regard, various initiatives were introduced, including the long-term effort to reshape the financial system, and address inherent structural weaknesses.

Experience with financial crises and financial development

A cause of the banking crisis in Serbia was also poor corporate governance and risk management at the corporate level as well as in financial institutions. Lending practices in some institutions did not involve proper credit assessment and were dubious regarding lending or collateral-based lending. Collateral based lending was also highly risky given the asset price bubble leading up to the crisis,

⁴ Serbian banking system consists 34 banks (21 banks foreign owned; 9 banks owned; and 4 banks private owned) with total assets around 22 billion euros.state

⁵ See NBS Banking Sector Report for 2nd quarter 2010.

particularly in property markets. At the same time, the corporate sector was involved in many inefficient investments and takeovers from privatization process, while its debt also rose significantly with greater access to funding. This was partly from financial liberalization which led to greater shorter-term capital flows, propelled among all by the ‘carry trade’ and floating exchange rate system⁶. The crisis took a significant impact on the corporate sector and the banking system, exacerbated by the vicious circle between market risk, from the currency depreciation and interest rate hikes, and credit default. This was an important lesson which led to a concerted effort on the part of banks, regulators and the corporate sector to improve corporate governance and risk management. The roles of the board of directors and various subcommittees, such as risk management and audit committees, have been strengthened. For banks, improvements in risk management have been noteworthy.

Table 1: Selected parameters of the Serbian banking sector (1eur=106d)

	Number of banks	Profit/Loss Billion Before tax	%	ASSETS billion	%
Total domestic banks	13	6.1	40	620	26
State owned	9	3.1	20	428	18
Privately owned	4	3.1	20	192	8
Total foreign banks	21	9.1	60	1.724	74
Austria	4	2.9	19	480	20
Italy	2	5.9	39	486	21
Greece	4	0.7	5	358	15
France	3	0.2	1	163	7
Others	8	(0.6)	-4	236	10
Total Sector	34	15.2	100	2.343	100

Source: National Bank of Serbia – Second Quarter Report

⁶ ‘Carry trade’ usually refers to the practice in which loans are taken in a low interest rate country with a stable currency and ‘carried’ for investment in the government debt or central bank debt of a high interest rate economy.

Selected table shows situation in Serbia regarding structure of the banking sector. The world economic crisis did not affect the Serbian banking system directly, but the negative effects were felt indirectly through the domestic real sector. The recession tendencies in the world economy, as well as the deceleration in the domestic growth, had negative reflection on the enterprises' financial capacity, their liquidity and capability for regular servicing of the liabilities. This resulted in enhancement of the financial stability risks arising from the corporate sector, leading to worsening of the bank's credit portfolio quality and consequently, to deterioration of their profitability. The macro prudent measures undertaken by the NBS created preconditions that will enable banks to cope with higher risks arising from the recession movements in 2009, and to endure the slow pace of the economy' recovery in 2010.

Therefore, the primary task of the NBS's policy in the previous years was to regulate the inflow of capital into the banking system in such a way that it supports, rather than impedes sustainable economic growth through its unchecked expansion. In doing so, it had to be borne in mind that all large banks in Serbia actually operated as subsidiaries of financial conglomerates (groups), and as such, they directed the employed foreign capital and alternative forms of domestic savings to the markets, with a view to maximizing returns at the group level.

Under such policy approach, in selecting monetary policy instruments priority was given to those which made the banks' external sources of funds more expensive and limited their credit multiplication (indirectly reduced return on bank capital which is main motive for aggressive credit supply). To this end, the NBS has primarily applied, and gradually tightened, direct influence measures (higher policy rate on account of sterilization of exceeded liquidity; intervention on foreign exchange market; ratio of gross household lending to share capital; ratio of indebtedness of natural persons on their wages/salaries and maintaining of high reserve requirement rate for new fix deposits and loans from abroad), and, complementarily, prudential measures aimed at maximizing the effects and reducing the linearity of direct measures. In spite of all abovementioned problems NBS has succeeded to maintain inflation inside targeted range.

The large presence of the foreign currency component in the enterprises and households' debt distinguishes the foreign exchange rate stability as the main factor for their capability for debt servicing, i.e. the main pillar the country's financial stability founds on. The other segments of the financial system have moderate influence on the total financial stability in the Serbia, because in comparison with the banks they still have smaller funds and impact. In the forthcoming period, the main risks to the financial stability refer to the recovery pace of our main trading partners and the public debt stock with these economies.

The possibility that the smaller turnover and the lower liquidity of the domestic economic entities will spill over on the labor market is of especial importance, which can cause further rise in the risks to the banking system. Having in mind the potential channels for spill over of the negative effects between individual segments in the Serbian economy, including the financial system as a whole, the maintenance of the macroeconomic stability is key precondition for preserving the financial stability.

In recent years, major progress has been made in strengthening the financial system – even so, there is scope for improving the balance of different types of policy initiatives. Much has been done to strengthen the payment and settlement system infrastructure and accounting standards. Similar progress has been made in developing minimum capital and liquidity standards, and with a telling question mark about cross border arrangements, in articulating crisis management mechanisms (‘buffers’). But more could be done in designing policies that would seek to limit overextension in risk taking and balance sheets. Admittedly, very good work has been done in encouraging improvements in risk measurement and management and in risk disclosures (especially in foreign banks). Even so, given limitations in risk perceptions and incentives, the effectiveness of these steps may not, in the end, fully match expectations.

Basel II is a major step forward in strengthening the NBS incentives for the ongoing improvement of banks’ risk measurement and management systems. The new capital framework is both incentive-based and risk-based. Its implementation in Serbia therefore offers the opportunity to ensure that supervision and regulation takes a forward-looking view on risk, that it remains up to-date with sound practices in the industry and that our supervisory framework motivates responsible risk-taking and prudent behavior in our markets. The NBS hopes that improved and more formalized risk management will bring better assessment, better quantification and greater awareness of risks in Serbian banks. To the extent that risk assessment and control methods become more formalized and rigorous, this will lessen the likelihood of making bad decisions and will improve risk-adjusted pricing policies. It will also contribute to the prompt detection of errors and deviations from targets, allowing banks to implement corrective measures at an early stage. Increased awareness of the risks and early reaction to problems is likely to lead to a smoother adjustment to new conditions or to the correction of mistakes, making decisions less abrupt. Basel II is built on the expectation that banks operating inside Serbian financial system should be able to manage their risks today and respond to challenges tomorrow.

Under a forward-looking risk-based supervisory framework, all financial institutions are encouraged to be proactive in assessing and managing their own

risks, relying largely on their own analysis, auditing skills and risk management tools, while NBS and other authorities are responsible for overseeing systematic risks and maintaining the stability of the whole financial sector and the economy. In this regard, the NBS and other authorities will implement measures to improve the risk management capability of the financial sector as well as initiating reform and structural change in order to address the weaknesses in the system.

In the coming period supervision of financial institutions will be improved which is an important condition for stability of the financial system as a whole, and guarantee for timely and compatible integration in wider European financial system framework. Many activities will be taken to harmonize supervision of banks and other financial institutions in line with the Basel II principles and the EU regulations, starting from adopting new regulations to training employees in the supervisory bodies and financial institutions.

CAPITAL MARKET IN SERBIA

Serbia is nowadays considered to be one of the countries that entered the process of transition a bit later in comparison with other countries. The reform progress in Serbia in recent years has been reflected in large foreign direct investment inflow from 2001 until 2008. Thus, as a result of further legislation improvements, macroeconomic and political stabilization, future outlook includes an increase of FDI inflows and various investment opportunities. Serbia's example strongly supports the case that FDI can be described as a double-edge sword. "In the period of great expansion (2004-2007) it shows the feature of FDI flows that its *share in total inflows is higher in riskier countries*, those with risk measured either by countries' credit ratings for sovereign (government) debt or by other indicators of country risk. It also shows that FDI share is higher in countries where the quality of institutions is lower" [9]. In the context of the present financial crises FDI seemed to be very sensitive to macroeconomic instability and adequate country risk in Serbia.

Despite the strong theoretical case for the advantages of free capital flows, the conventional understanding seems to be that many private capital flows pose countervailing risks. Hausmann and Fernández-Arias [10] suggest why many host countries, even when they are in favor of capital inflows, view international debt flows, especially of the short-term variety, as "bad cholesterol": "*Short-term lending from abroad is driven by speculative considerations based on interest rate differentials and exchange rate expectations, not on long-term considerations. Its movement is often the result of moral hazard distortions such as implicit exchange rate guarantees or the willingness of governments to bailout the*

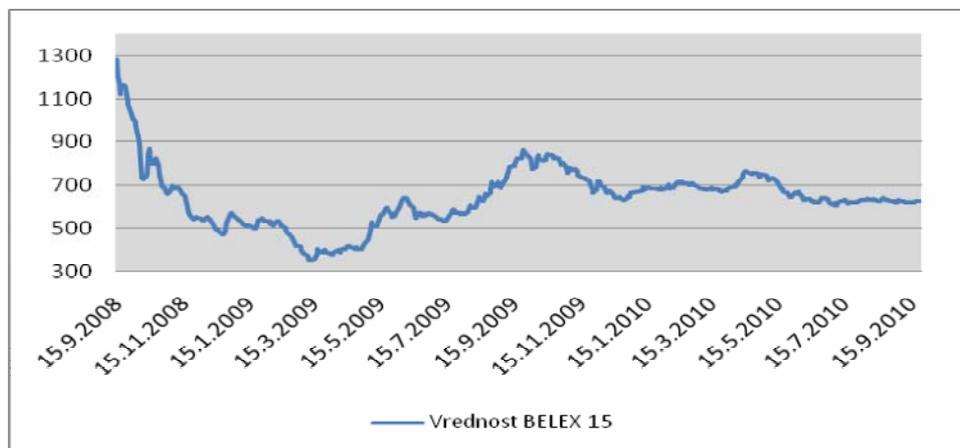
banking system. It is the first to run for the exits in times of trouble and is responsible for the boom-bust cycles of the 1990s."

Quite the opposite, FDI is viewed as "good cholesterol" because it can award benefits listed previously. An additional benefit is that FDI is thought to be "bolted down and cannot leave so easily at the first sign of trouble."

The main obstacle in the Serbian equity market is that there are no many quality securities to invest in and potential to diversify portfolio is very low, especially bearing in mind that there are no municipal bonds and corporate bonds. First index in the Belgrade stock exchange was constructed several years ago in 2004 (belexline, former belexfm) and another one (belex 15) was constructed in 2005 which is clear evidence of underdeveloped capital market.

In September 2009, Serbian financial market has been struck by the second wave of global financial crises. Due to this fact, certain number of foreign investors has exited the market. The result was that Belgrade stock exchange indices sunk over 20% in the last quarter in 2009. Volatile trend has continued in the first half of 2010. Leading economic indicators still show that Serbian economy has not started with stable recovery and that overall risk is high.

Graph 1: BELEX 15 index value from 15. August 2008 to 24. August 2010

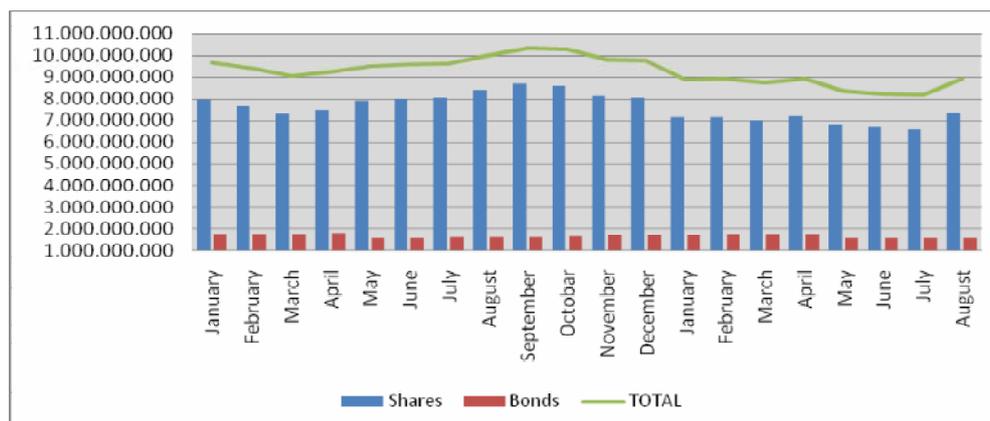


Source: Belgrade Stock Exchange (www.belex.rs)

If we consider market capitalization, we can see that the downward trend is the same as with indices. Market capitalization of government bonds, series A, has been steady since country risk has been stable (BB) and negative sign has been removed. Green line in the graph below represents aggregate market

capitalization in Serbian financial market. The effect of global financial crises is 7 billion Euros fall of market capitalization at the beginning of 2010.

Graph 2: Market Capitalization from 01. January to 24. August 2010 (EURO)



Source: Belgrade Stock Exchange (www.belex.rs)

Very low liquidity over the period makes Serbian financial market very narrow. This again supports the fact that Serbian financial market is very illiquid and that trading volume only jumps with takeovers. Conclusion is that Serbian capital market is “market of firms”, rather than market of stocks.

In the current year significant change cannot be expected with respect to the last year. Indices might be volatile over certain periods due to the lower trading volume and expectations that big investors will avoid risky investments. Investors may be attracted to the market by eventual IPOs of public companies, such as NIS. Also, 40% of Telecom, owned by the government, is expected to be privatized and traded at Belgrade stock exchange. All these actions, as well as issue of blue chip corporate bonds could lead to more diversified offer of financial instruments.

THE ROLE OF EXCHANGE RATE REGIME

Exchange rate is an important determinant of the economic policy of each country. It influences the inflation, payments (dis)equilibrium, social status of population, level of debt, profitability of economy and many other variables. Different social, economic, as well as political relationships in Serbia are mirrored in fluctuations of the exchange rate.

Although countries of the region are similar in many ways, a number of discrepancies can be observed in the foreign exchange systems. Nevertheless, one common characteristic among all these countries is that their currency is, in some way, connected to the Euro: the rate is either fixed or in some fluctuation zone of the Euro. This is a rather logical situation taking into consideration that all these countries aspire to enter the European Union, which in turn, as a part of the integration process, asks for their national currencies to be linked to the Euro. The following table shows the foreign exchange systems of the countries in the region.

Table 2: Foreign Exchange Systems of the Southeastern European countries

Country	Foreign Exchange Regime
Albania	Free fluctuation
Bulgaria	Currency board (Euro)
Bosnia	Currency board (Euro)
Montenegro	Eurisation
Croatia	Free fluctuation (smaller interventions by the National Bank of Croatia)
Macedonia	Fixed exchange rate (Euro)
Serbia	Free fluctuation (greater interventions by the National Bank of Serbia, managed floating according to the IMF)

Source: Web sites of the central banks in the region

In *Memorandum of the National Bank of Serbia about the Principles of New Monetary Policy Framework* (further referred to as the *Memorandum*) dated September 2006, the National Bank of Serbia (NBS) introduced new measures and new principles of carrying out the monetary policy, aimed at accomplishing goals related to the inflation, to the public. New monetary framework was enforced from September 2006 and was very similar to the system of targeted inflation.⁷ One of the introduced changes was transformation of the foreign exchange system. In *Memorandum* the National Bank of Serbia expressed its firm commitment to carry out the flexible exchange rate system. Main reason for introducing the fluctuating exchange rate was the expectation that the fluctuating nominal exchange rate reinforces the adaptability and eases the effects of possible shocks.

⁷ National Bank of Serbia emphasized that it is a transitional period until complete changeover to targeted inflation. Although the difference between the current system and the system of targeted inflation was not formally explained, the only difference noticed is that the formation of the exchange rate is not completely ruled by the free market. For that reason this system could be classified as „softer version of targeted inflation“. For details about this system [20]

This concept rules out the possibility that the central bank, apart from the targeted inflation rate, could have any other goal. This means that in this system it is not possible to use exchange rate as a nominal anchor. In fact, determining the exchange rate target and the inflation target can represent conflicting goals which, in turn, yield the necessity to prioritize. In other words, this system supports the policy of flexible exchange rate, which is freely formed based on the influence of demand and offer [5].

According to the principle of impossible trinity, countries can only choose two of three possible outcomes: financial integration into international capital flows (open capital markets), monetary independence and exchange rate stability. This is in relation with Mundell-Fleming model [14] which states that creators of economic policy are faced with two principle choices:

- 1) to choose effective instruments of economic policy with the given level of financial integration and exchange rate regime;
- 2) to choose level of financial integration and exchange rate regime under certain preferences to the instruments of economic policy

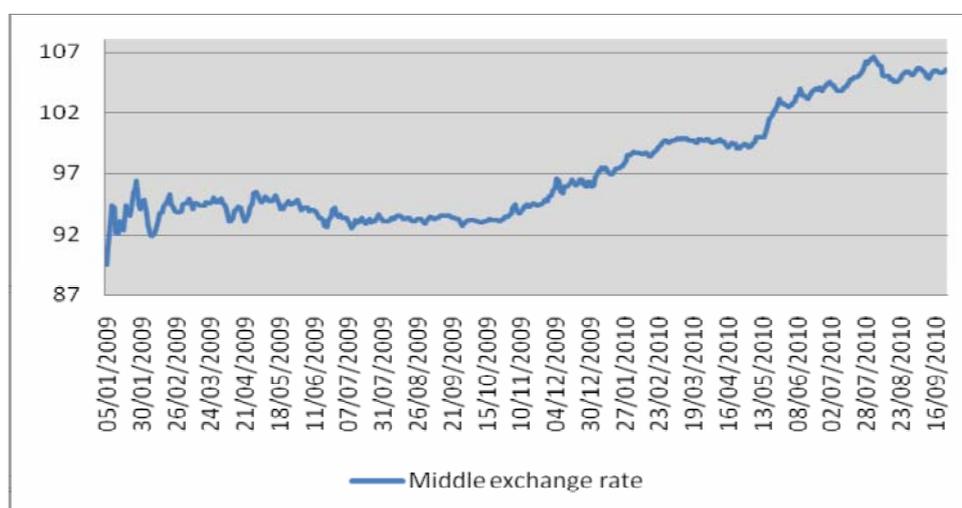
Policymakers in Serbia decided to choose the first option and as a consequence there is certain exchange rate instability. Emerging markets have stronger links to international capital markets than do other developing economies. To test that case in Serbia two parameters were constructed by Grubisic, Djukic and Redzepagic [8]. To measure the degree of integration of Serbian equity market in relationship to equity markets in emerging markets correlation between Belex15 and MSCI EM indexes are analysed. The result supports the principle of impossible trinity in the case of Serbia. Exchange rate volatility during the global financial crisis was the price Serbia had to pay for imported instability because Serbia's financial market is integrated into international capital flows. This is absolutely in accordance with the principle of impossible trinity and Mundell-Fleming model.

In 2006, the National Bank of Serbia, by implementing the system of targeted inflation, introduced more flexible exchange rate system. This was in response to high capital inflow and was the first step in carrying out the new monetary policy framework, in which the exchange rate did not represent a political instrument but was an indicator of the realised measures of the monetary policy. This kind of policy was possible during the second half of the 2006, 2007 and part of 2008, at the time in which, due to the high foreign capital inflow, the dinar continued to rise.

However, as soon as the problems and the capital outflow occurred in 2008, the condition clearly showed that the long-term withdrawal of the National Bank

from the foreign exchange market was not possible. The problems continued at the end of 2009 and during 2010. At the end of May 2010 the biggest intervention by the central bank occurred, when the National Bank of Serbia sold 100 million Euros at the interbank market, in order to prevent excessive daily fluctuation of the exchange rate [3]. During 2010 the National Bank of Serbia spent close to 2 billion Euros in order to stabilize rate fluctuations. During this period the exchange rate lost more than 10% of its value and seriously endangered the targeted inflation rate as well.⁸ The fluctuation of the exchange rate of the Dinar is best seen in the following graph.

Graph 3: Exchange rate EURO /DINAR from January to August 2010



Source: National Bank of Serbia

Serbia is highly sensitive to fluctuations of foreign exchange rate. It is the problem that has been inherited from nineties, as a result of numerous speculative actions on foreign exchange market (it was not unusual that dinar lose more than 30% of its value in a single day). Therefore, as a result of small fluctuations of foreign exchange rate, there are panic reaction and massive conversion of dinar in foreign currency, mainly euro. Under such circumstances there are a lot of threats to financial stability. It results in increasing velocity of circulation of money and additional pressure on the demand side and the final outcome is higher loss of value of dinar. Bank's clients, in such conditions, are withdrawing huge amount of their deposit, in order to protect their assets (converting them in foreign

⁸ At the moment this paper is being written (beginning of October 2010), it seems unlikely that the targeted rate of inflation will be reached in this year.

currency), with negative influence on the liquidity of banking system. On one hand we have increased inflation, as a result of movements of exchange rate, and on the other hand, development of capital market securities nominated in dinars is completely blocked. For banks it is too risky approving long-term credits in dinar, due to high instability of exchange rate of dinar. So instead of supporting real sector banks are more engaged in speculative actions in order to protect their assets. It means that financial sector does not provide good allocation of financial resources. Instability of exchange rate significantly deteriorates business of real sector and in combination with limited credit support from banking system, there are great number of companies that are not liquid or have losses in their balances. So, it is not surprising that there are increasing number of companies that are not able to repay their credits and it directly influence increasing share of bad assets in banking system with negative influence on financial stability.

Great fluctuations in the exchange rate of the Dinar are still present and are unlikely to stabilize. Judging from the exchange rate trends until now, we can ascertain that they are in concordance with the EU recommendations about fixing the exchange rate to the Euro. However, the present exchange rate policy creates numerous problems, such as macroeconomic instability and social problems; it also brings in the uncertainty effect and speeds up the money flow. Moreover, it is well-known that all countries aspiring to join the European monetary union have to spend two years in ERM II. This mechanism allows fluctuations of $\pm 15\%$ of the daily exchange rate in relation to the Euro. A great dilemma is that whether this criterium would be accomplished in this year. Nevertheless, it should be taken into consideration that Serbia still has enough time to modify its exchange rate policy before joining ERM II. In the current phase of the EU integration, it is not expected that the exchange rate system would present an obstacle.

CONCLUSION

Looking ahead, it is crucial for the Serbia to avoid the re-emergence of macroeconomic imbalances in the future and to ensure a sustainable convergence process towards EU and new Basel II/III regulation. To date, substantial improvements have been made, including the introduction of risk management tools for banks and clients, the adoption of Basel II guidelines and capital allocation for market and operational risk, and the planned adoption of Basel II by 2011. Moreover, the financial infrastructure will be strengthened by fortifying the capital market, foreign exchange market and money market; and legal reforms, including a move to introduce deposit insurance, which will pave the way for the removal of a blanket deposit guarantee, a legacy of the crisis. Beside recent improvement in the legal framework, namely the set of risk management linked

sub acts, NBS will remain committed to performing risk-based supervision and ensuring proper governance within individual financial institutions. There has also been increasing recognition of the need for macro-prudential policy in dealing with the problem of systemic risk as well as coordination between monetary policy and financial system policy, given that such measures could likely have a macroeconomic impact.

Despite the strong theoretical case for the advantages of free capital flows, the conventional understanding seems to be that many private capital flows pose countervailing risks. In the context of the present financial crises FDI seemed to be very sensitive to macroeconomic instability and adequate country risk in Serbia. Although countries of the region are similar in many ways, a number of discrepancies can be observed in the foreign exchange systems. Nevertheless, one common characteristic among all these countries is that their currency is, in some way, connected to the Euro: the rate is either fixed or in some fluctuation zone of the Euro. The floating exchange rate regime implemented in Serbia rules out the possibility that the central bank, apart from the targeted inflation rate, could have any other goal. This means that in this system it is not possible to use exchange rate as a nominal anchor. In fact, determining the exchange rate target and the inflation target can represent conflicting goals which, in turn, yield the necessity to prioritize. Policymakers in Serbia decided to choose effective instruments of economic policy with the given level of financial integration and exchange rate regime and as a consequence there is certain exchange rate instability. However it can be discussed how effective these instruments are.

References

- [1] Banq de France, The Future of Financial Regulation, Financial Stability Review, September 2009.
- [2] CGFS (2009), "Capital flows and emerging marekt economies", report submitted by a working group established by the CGFS, CGFS Papers, No. 33 (January); and G20 (2008), "Study group on Global Credit Market Disruptions", paper prepared by Australia.
- [3] Belgrade Stock Exchange (www.belex.rs)
- [4] Business magazine, "Untill now the greatest foreign exchange intervention of the National Bank of Serbia", <http://www.poslovnimagazin.biz/magazin/do-sada-najveca-dnevna-intervencija-narodne-banke-28-2491> , 27. May 2010.
- [5] ECB (2010), The Impact of the Financial Crisis on the Central and Eastern European Countries, ECB Monthly Bulletin, July 2010.
- [6] Fabris, N., 2006., "Central banking in theory and practise", CBCG, Podgorica
- [7] FSA, The Turner Review, A regulatory response to the global banking crisis, March 2009.

-
- [8] Herzberg V. and Watson M. (2007), *Economic Convergence in South-Eastern Europe: Will the Financial Sector Deliver?*, SUERF, Vienna, 2007.
- [9] Grubišić, Z., Đukić, M., Redžepagić, S (2010), „The Principle of Impossible Trinity: Does it Count for Serbia during the Pre-Crisis and Post-Crisis Period?”, *Influence of Global Economic Crisis on CEE Region: Possible Way Out*. Kosice: Technical University of Kosice, Faculty of Economics, p.161-169.
- [10] Grubišić, Z (2009), “FDI in Serbia: is it always superior solution”, *Business Opportunities in Serbia: the case of Italian business sector and the role of management education*. Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Institute of Economic Sciences, p. 293-302.
- [11] Hausmann, Ricardo and Fernandez Arias (2000), “Foreign Direct Investment: Good Cholesterol?”, *Research Department Working Paper, No 417*, IADB.
- [12] Ivanović P. and Balaban M. (2009), *The Impact of Global Financial Crisis on Serbian Banking Sector – The NBS Response*, University of Nice-Sophia Antipolis, CEMAFI Nice, October 2009.
- [13] Jelašić R. (2009), *Current monetary and macroeconomic trends*, Beograd, 10. July, 2009. Presentation of Governor.
- [14] McCauley R., McGuire P. and Goetz von Peter (2010), *The architecture of global banking: from international to multinational?* BIS Quarterly Review, March 2010.
- [15] Mundell, R.A. 1963. »Capital mobility and stabilization policy under fixed and flexible exchange rates« u *An Open Economy Macroeconomics Reader*. 2002. Routledge. London.
- [16] National Bank of Serbia (2009), *Financial Stability Report*, May, 2009.
- [17] National Bank of Serbia (2009), *Annual Report 2008*.
- [18] National Bank of Serbia (2010), *Banking Sector Report 2nd quarter 2010*.
- [19] National Bank of Serbia (2008-2010), *Statistics*.
- [20] Rohatinski Ž. (2009), *Economic Crisis and Monetary Policy*, Speech prepared for a round table at the HAZU Department of Social Sciences: Crisis and Economic Policy Frameworks, Zagreb 7 July 2009.
- [21] Stone, M., (2003.), «Inflation Targeting Lite» *Challenges to Central Banking from Globalized Financial System*, IMF, Washington.
- [22] Watanagase T. (2010), *Strengthening the banking and financial sector – what needs to be done?*, Speech, Seminar organised by The Banker Magazine and Financial Times Business, Bankogk, 22 February 2010.

CHAPTER 6.

HARMONIZATION OF SERBIAN ACCOUNTING STANDARDS WITH THE EU STANDARDS

Gordana Vukelić¹

Sonja Đuričin²

Grozdana Belopavlović³

Abstract

The Treaty establishing a European Economic Community, known as the Treaty of Rome, brought the need for the harmonization of the international legislative solutions for bookkeeping and financial reporting. With an aim to improve and facilitate the access to accounting information, the International Federation of Accountants (IFAC) took the role of shaping the accounting information by working on compliance of the national with the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). The economic, corporate, political and social factors have distinguished themselves among the other ones which influence the formulisation and the implementation of the IAS. In Serbia the conditions and methods of bookkeeping, configuration, presentation, distribution and disclosure of financial reports are regulated by the Law on Accounting and Audit. The professional regulation is composed of the Code of Ethich for Professional Accountants, IAS, IFRS, International Standards on Auditing (ISA) and the national standards adopted in accordance with the IFAC's statements. The internal regulation applies on the concrete artificial persons' general acts, which are composed of guidelines related to bookkeeping and adoption, distribution and disclosure of financial reports, accounting policies and other related issues.

Key words: *national accounting standards, International Accounting Standards, harmonization, Law and professional regulation, internal regulation*

¹ Gordana Vukelić, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

² Sonja Đuričin, Institute of Economic Sciences, Belgrade, Serbia

³ Grozdana Belopavlović, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

INTRODUCTION

The accounting profession and quality financial reporting have an impact on the pace of the development of the market economy. That influence originates from a complex impact of the accounting practice and financial reporting. Investors opt for markets which they are familiar with and have the international accounting standards and international standards of financial reporting adopted. The capital owner demands reliable and complete pieces of information disclosed in time, all in compliance with the unique system of accounting standards which is characterized by quality, transparency, comparability, the mitigation of risks of making investments and costs of acquiring capital.

Financial reports, as the bearers of pieces of information about an enterprise's financial, proprietary and yield position, represent unique instruments of communication, and a free flow of their pieces of information requires standardization in view of their preparation and presentation. The creation of equal conditions for the placement of the capital covers the elimination of differences in the manner of the valuation (assessment) of property, liabilities, capital, incomes and expenses of an enterprise. The comparing of financial reports of different companies requires the disclosure of financial pieces of information in the same form simultaneously applying the same criteria during the assessment and accounting measuring. The harmonization of financial reports has an aim to make it possible for pieces of information of financial reports of enterprises from different countries to be compared. The goal is to apply and adjust the set of high-quality global accounting standards which have transparent and comparable pieces of information about generally accepted financial reports.⁴

HARMONIZATION OF ACCOUNTING STANDARDS IN EU

The development of the global economy imposes a need for the harmonization of financial reporting. In order to make relevant decisions, capital investors demand a unique system of financial reporting at the global level, and also expect that

⁴ The International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC), established by the International Accounting Standards Committee Foundation (IASFC), reach the International Accounting Standards (IAS) and the International Financial Reporting Standards (IFRS) inclusive of interpretations. The IASB cooperates with the national standards makers in order to accomplish the uniformity of the accounting standards throughout the world, whereas the IASCF is in charge of the selection of members, supervises and finances the IASB's activities. The IAS and IFRS have been applied in Serbia since January 1, 2004.

domestic competent institutions will create such a regulatory framework which will elevate the domestic financial reporting to a higher level. Hence they have expectations in view of legal solutions, which would provide conditions for the standardization and compliance with the best solutions in the countries with developed market economies. The purpose of financial statements is to provide the beneficiaries with information to forecast, compare and evaluate the financial position, profit and loss levels and financial position changes.[4] Given the fact that business decisions have material consequences for their makers, financial reports have an undoubted importance in a true and fair presentation of the financial position and profitability of an enterprise. Increased requests of users for the qualitative features of accounting pieces of information and number of financial reports have given priority to the concept of the quality of financial reporting and the need for planning different activities with an aim to reach a higher level of the quality of reporting. The reliability, understandability and comparability of financial reports as well as the enhancement of the quality of the base on the grounds of which business decisions are made are a must so as to provide the security of investors, creditors and other stake holders.

In order to provide the needed quality of financial reporting, the standardization of the qualitative features of financial pieces of information has been carried out. Quality financial reporting understands the creation of and accepting the accounting standards, whose application enables the comparability of financial reports within the international framework. The globalization of the world's economy requires a further improvement of the process of the standardization of financial reporting. Significant differences in the practice of financial reporting in different countries lead to substantial complications for those who prepare, revise and interpret financial reports. The accounting profession must intensively and seriously be dedicated to the compliance of the professional regulations: the Directive of the European Union, Generally Accepted Accounting Principles and Practices (GAAP) and the International Accounting Standards, i.e. International Financial Reporting Standards.

The GAAP, on the basis of which financial reports are prepared and presented, have a huge significance for the quality of financial reporting. In some countries, the GAAP are, in whole, regulated by the legal regulations, whereas in other countries they can hardly be said to have any legal support at all. [1] The most important of all GAAPs – American and British, have had and still have a strong impact on the international professional regulations. The American and British GAAPs are internationally predominant due to the traditions, development of the accounting profession and economic powers of these countries. The accounting profession in the United Kingdom has a significant role in the development of modern accounting and international professional regulations. The specificity of

the British model lies in an almost full and complete absence of the legal authority which would impose the application of the UK GAAP. [1] These standards have had a significant impact on the IAS, which they have a lot of similarities with. On the other hand, the US GAAP standards are characterized by a significant influence imposed by the state, which, via the Securities and Exchange Commission, has been influencing financial reporting. Although there are significant differences between the US GAAP and IAS, a need is evident for a gradual removal of the differences in order to harmonize financial reporting within international frameworks.

Financial reporting in the European Union's member-countries is carried out in compliance with the IAS/IFRS, while simultaneously paying respect to regulations prescribed by special directives, namely and in particular Directive IV, which regulates annual accounts, Directive VII, which regards requests related to consolidated financial reports, and Directive VIII, which is related to the legal audit of annual and consolidated financial reports. The European directives emerged as a result of a compromise made between the EU member-countries so as to harmonize the process of financial reporting and the creation of a unique European financial market. The directives have remained at the level of minimal requests which the EU member-countries must satisfy in the process of financial reporting. A possibility of making choice among different models of financial reporting while transferring them to national legislations has led to differences in the preparing of financial reports, so that a satisfactory level of comparability has not been reached. Problems related to the comparability of financial reports in the EU have emerged as a consequence of the manner in which directives have been decided on, as minimal rather than optimal requests. In order to improve financial reporting and comparability at a global level, the EU stands as a powerful defender of the accepting of the IAS and IFRS. The adoption of the IAS and IFRS, as a base for the preparation of financial reports by all countries, would be a good manner to overcome differences in national accounting regulations and the integration of financial markets all over the world.

Apart from all positive effects which standardization brings about, it is possible to observe certain problems as well. The reasons are to be looked for in insisting on the national sovereignty and non-complied tax regulations of different countries. The problem emerging in the application of the IAS/IFRS is related to an existing dilemma regarding the limitation of freedoms in financial reporting or allowing them. The introduction of strict rules and their consistent implementation is justified in the demonstration of an objective and true business situation at an enterprise and in the provision of comparable pieces of information. The freedom of choice between accounting policies, accounting assessments and alternative actions, accounted for in the standards, can be abused. Each freedom of choice of

different alternatives can cause inadequate accounting treatments of business transactions, non-objective reporting and a high risk of possible manipulations. Accounting assessments and different accounting methods in the preparation of financial reports, which are allowed by the IAS, can endanger the quality of pieces of information. The application of different accounting treatments of the same transactions with different entities can lead to significant differences in financial reports. Such pieces of information can confuse potential users and make them reach wrong conclusions. In such circumstances, one question is asked: to what extent does the application of the standards provide a high quality of reporting?

The accounting profession accepts flexibility in financial reporting and allows accounting assessments and alternative accounting actions. The reason for that can be found in the fact that business activities are too complex and that one rule cannot be applied in different situations. In the process of an accounting cover of transactions, there are needs for subjective interpretations, and, for that reason, not a single financial report can be claimed to be a correct one for sure. In the best case, financial reports can offer a sufficiently good approximation of the real standing of an enterprise. The introduction of subjective attitudes of persons responsible for anticipation as well as too great a flexibility bear a risk of manipulations in financial reports. The accounting profession must define the optimal degree of freedom in financial reporting and stipulate the balance between uniformity and flexibility.

INSTITUTIONAL FRAMEWORK OF FINANCIAL REPORTING IN SERBIA

The institutional framework of financial reporting in Serbia consists of legal, professional and internal regulations. In accordance with the given regulations, legal entities and entrepreneurs are obliged to keep their business books, acknowledge and assess their property, liabilities and incomes and expenses, as well as to prepare, submit and disclose financial reports and carry out both external and internal audit over their financial reports. Small legal entities and entrepreneurs are not obliged to prepare and disclose financial reports in compliance with the IAS and IFRS except for those who issue securities and other financial instruments which are traded in an organized market. Medium legal entities are obliged to apply the IAS, i.e. IFRS, in the preparation and disclosure of their financial reports. For small legal entities and entrepreneurs who do not prepare and do not disclose their financial reports in compliance with the IAS and IFRS, the minister of finance prescribes the manner of acknowledging, measuring and assessing their property and liabilities, incomes and expenses.

The legal regulation consists of acts and by-laws which regard the execution of law in the field of accounting. Here we mean the Act on Accounting and Auditing [1] and the by-laws, decrees and rule books reached in accordance with it.⁵ An enterprise is legally bound and obliged to periodically report on the financial position, yield power and change in the financial position. According to the Act on Accounting and Auditing, enterprises prepare the balance-sheet, profit and loss account, cash flow statement, statement of stockholders' equity, statistical annex and notes accompanying their financial reports. An exception is found with small legal entities and entrepreneurs, who prepare and present the balance-sheet, profit and loss account and statistical annex.[1] Not a single financial report does provide all pieces of information for the user's needs; however, viewed as a whole, a set of financial reports do provide us with a complete picture of an enterprise's business operations.

The professional regulation consists of the IAS, IFRS, interpretations which are an inseparable part of the standards, the International Standards of Audit (ISA) and the Code of Ethics for Professional Accountants. The professional regulation also consists of the International Accounting Standards for the Public Sector (IASPS), International Standards of Audit of the Public Sector and International Information Standards. For the needs of guidelines and communiqués for the education of professional accountants, the International Standards for Education of Professional Accountants are applied, whereas the International Standards of the Control of the Quality of Professional Accountants' Performance are used as instruments for the control of quality. The IAS/IFRS, having been introduced with an aim to harmonize accounting worldwide and to enhance financial reporting, represent an elaboration of certain particular accounting principles, regulating the scope of accounting categories and being a base for making choice and application of accounting policies. By the mandatory use of the IAS and IFRS in our accounting practice, we have been making an effort to provide the compliance of the accounting system with international scientific and expert achievements in that particular field. The accounting standards, acknowledged as such in the world as the standards of a high quality, have been accepted in our country so as to make it possible for the accounting practice to be improved and provide the comparability of financial reports at a global level. In a situation in which Serbia is trying to be included in the world's economic flows, the inclusion of the

⁵ The legal regulation also consists of the Decree of Budget Accounting (The Official Gazette of the Republic of Serbia", No. 125/03 and 12/06), Act on Budget System (The Official Gazette of the Republic of Serbia", No. 9/02 and 86/06) and Rule Book on Standard Classification Framework and Account Plan (The Official Gazette of the Republic of Serbia, No. 20/07 and 63/07), Act on State Audit Institution and all the rule books and schemes which arise from them (The Official Gazette of the Republic of Serbia", No. 20/07 and 63/07).

international professional regulation in the domestic laws has partly created presuppositions for quality financial reporting. Due to the non-existence of an efficient control over the application of the regulation, a fact can be established that the quality of financial reporting and auditing is not at a satisfactory level.

The international accounting standards do not prescribe the contents, structure and form of financial reports [9]; however, in compliance with IAS 1 Presentation of Financial Statements, minimal requests are prescribed regarding pieces of information which financial reports should contain. [3]

The internal regulation is related to general deeds of particular concrete legal entities which regard manuals and guidelines related to the keeping of business books and the adoption, submitting and disclosure of financial reports, accounting policies and other questions which are, legally, prescribed [1] to be dealt with according to the general deed of the legal entity.

REGULATIONS AND FINANCIAL REPORTING IN SERBIA

The legal obligation of preparing financial reports, balance-sheet and profit and loss account and inventories has its origins in the mercantile (business/commercial) law, which is also confirmed by the wording of a French document: “Decrees on Commerce” (Ordonance du commerce) from the year of 1673. After almost three centuries, this legal obligation was prescribed, and for the first time then, in our legislation in the Mercantile Act for the Kingdom of Yugoslavia in 1937, created on the pattern of the “Mercantile Book” of the German Mercantile Act. The Mercantile Act for the Kingdom of Yugoslavia has never completely been applied.

In the post-war time, the obligation of keeping business books, their balancing/closing and the preparation of balances and inventories was transferred to the Act on Book Keeping and Act on Determination and Allocation of Total Incomes and Revenues. That acts were complied with the Act on Associated Labor. The Act on Book Keeping treated the rights of the workers to make their own decisions on the total revenue and other issues related to the labor and business operations of the basic organization of associated labor. The Act regulated issues related to the manner of the keeping of books, their contents and their connectedness with the account plan, investments related issues, issues of the preparation of the annual closure/balance, interim balance, sum and consolidated balance, issues related to the maintenance of business books and so on and so forth. Very poorly were the principles and basics of balancing referred to, and that was mentioned in the Rule Book on the Contents of Individual

Accounts in the Account Plan for Organizations of Associated Labor, this being done only in the case of just a few balance-sheet positions. The mentioned acts were in force until the year of 1989, when they were replaced by the Act on Enterprises and Act on Accounting.

The establishment of the European Economic Community by the Rome Agreement in 1957 brought about a need for the harmonization of international legal solutions for the keeping of business books and financial reporting. The creation of conditions for the compliance of national business (economic) rights and the comparing of financial reports started in the year of 1965. As a result of working on the uniformity of legal regulations in the time period from the year of 1968 to the year of 1985, the European Community's Commission reached ten regulations so as to protect interests of the member-countries and the Community as a whole.

The implementation of regulations conditioned an increase in the degree of comparability of financial-accounting pieces of information. The field of accounting and balance (sheet) was specially regulated by Directives IV, VII and VIII, whereas Directive IV is definitely the most significant one of all. It is related to annual financial reports of individual enterprises doing business in a form of a Joint Stock Company (JSC), company with a limited liability (CLL) and in a form of a limited partnership with stocks. A special emphasis was on the just mentioned legal forms because business operations of these companies frequently crosses the borders of national business doing and because national regulations in the domain of the contents and form of financial reports, principles of assessment, contents and form of additional reports and so on, were different between the member-countries. This directive contains the basic rules of making assessments and it was a base for the writing of the Act on Accounting. The most important regulations stipulated in this Act were taken from the Fourth Directive, namely:

1. Integral parts of a set of financial reports (balance sheet, profit and loss account, as well as annex),
2. General principles of making assessments and
3. Rules for assessing the positions of the balance sheet and profit and loss account.

In Serbia, the beginning of complying accounting regulations, their standardization and deregulation of the legal regulation in favor of the professional regulation is connected with the mid-nineteen-eighties, when there were significant investments in the agricultural production in Old Yugoslavia made by the World Bank. During the year of 1986, the Federal Executive Council (FEC) signed an agreement of the preparation, adoption and disclosure of the Yugoslav Accounting Standards (YAS) with the Federation of Accountants and

Financial Workers. After that, the Act on Financial Business Operations [15] was reached as well as the mentioned one – Act on Accounting [16]. They prescribed an obligation of keeping business books and preparing financial reports by competent people and an obligation of complying accounting licenses with the accounting standards and accounting principles [16]. For the first time, the Act on Accounting [16] prescribed a possibility of carrying out an economic and financial audit of legal entities. The Federation of Accountants and Financial Workers also focused on the preparation of a unique code of accounting and financial personnel (1981) as well as on the reaching of accounting principles (1989).

The Act on Accounting [17] has made the Federation of Accountants and Auditors of Serbia more significant, due to their dedication to the translation and implementation of the accounting standards and other business regulations, education of professional accountants and auditors etc. In 1992, as a certified professional organization, the Federation published thirty Yugoslav Accounting Standards; in the year of 1993, it reached two specific Yugoslav accounting standards: YAS 31 – Needed expertise of a person keeping business books and preparing accounting reports, and YAS 33 – Accounting software which serves to identify accounting licenses and standardization of the accounting software. It can be said that, in the year of 1993, the Federal Republic of Yugoslavia had a professional regulation complied with the international professional regulation, and five years later, YAS 34 – Consolidated Accounting Report was reached.

The Act on Accounting was modified and amended for several times. The December 2002 modification of the Act of Accounting, upon proposal for the modification made in the month of July in the same year, conditioned the elimination of the provision on rule of assessing the positions of the balance sheet and profit and loss account and the acceptance of the IAS for assessing positions of financial reports. In the Republic of Serbia, the regulation and organization of the accounting profession is under the Act on Accounting and Auditing [1] which established the institutions of the Chamber of Certified Auditors and the National Accounting Committee.

COMMENTING ON PROFESSIONAL REGULATION

The domestic legal regulation, Act on Accounting and Auditing, as well as its accompanying by-laws have accounted for a large number of weaknesses, incomplete wordings and shortcomings, which were pointed out by the expert public/audience even at the very moment of their reaching. An appeal made by science, profession and practice regarding the fact that the proposed legal

solutions were bad and that would cause implications to all users of financial reports was ignored. Today, after more than four years since the Act was reached, a fact can be established that the quality of financial reporting is at an extremely low level. All that gives rise to numerous discussions over the issues of what is to be done so as to provide a more quality base for making business decisions. It is evident that the current state of the matters is a result of the wrong creation of the legal regulation in the field of accounting, which has caused a cessation in the development of the accounting profession as well as an already reached level of standardization in financial reporting.

It is a fact that there is no such thing as perfect legal and professional regulations. However, there are more and more people pointing at significant shortcomings in the Act reached in the year of 2006. As a shortcoming of the Act on Accounting and Audit, they cite the lack of the basic conditions for its implementation/application, referring to the lack of interpretation of the application of the IAS/IFRS and ISA. Different bases of financial reporting, unclear allocation of competences and giving up on a national professional regulation are just some pieces of criticism. The result of the application of the Act is accounted for by unreliable financial and, then, auditor's reports as well. An unreliable piece of information bears a high risk, and is a base on which wrong economic decisions are made, which, in turn, lead to far-reaching consequences for the user of the piece of information and the society as a whole. The mitigated quality of the financial reporting as well as large skepticism in the trustworthiness of pieces of information in financial reports have brought about an issue of revising the existing legal solutions and also a proposal for a novel Act on Accounting and Auditing.

At the beginning of the year of 2010, changes in the Act contributed to the harmonization with the EU provisions in order to enhance the quality of financial reporting. Compared to the previous Act from the year of 2006, the new Act was more precise and accurate in its provisions, there was more control and it stipulated strict measures to be taken against those who are all but disciplined in financial reporting. What was new was the establishment of Register of Financial Reports and Data on Financial Standing of Legal Entities and Entrepreneurs with the Serbian Business Registers Agency. The Agency took control over what was under control of the National Bank of Serbia (NBS) regarding financial reports. The execution of modifications related to the merging of financial reports into one institution as well as the public disclosure of financial reports on the Agency's Internet page served as a means to comply with the accounting practice in the EU. The Act from the year of 2006 incorporated the right but not the liability/obligation on the part of small legal entities and entrepreneurs to apply the international professional regulation. A possibility of making choice in view

of the application of the IAS and IFRS left room for the preparation and presentation of financial reports in compliance with current circumstances, which brought to question the quality of financial reporting for this particular group. On the grounds of the Act, the Rule Book on the Manner of Acknowledging and Assessing Property, Liabilities, Incomes and Expenses of Small Legal Entities and Entrepreneurs [14] was prescribed, being unclear and impossible to apply in many parts. The shortcoming of this solution was in that there was no insight into the frequency and manner of applying the Rule Book.

According to the modifications of the Act, all legal entities, no matter what size they may be, are obliged to apply the IAS/IFRS if they issue their securities via a public offer, if they are traded in an organized market or if they prepare consolidated financial reports. Other small legal entities and entrepreneurs can make choice and not apply the international regulation but to apply the Rule Book instead. In our opinion, all legal entities (small, medium and big) as well as entrepreneurs should acknowledge, assess and present the balance positions by applying the IAS/IFRS. Of course, we suggest that all legal entities, irrespective of their size, should base their financial reporting on the international regulation, which has an aim to introduce standardization at the national level and to enhance the quality of financial reporting. Therefore, a strong application of the international standards and paragraphs which are related to their business operations leads to standardization at both national and international levels, while, simultaneously, through adopted accounting policies, pays due respect to the specificities of each particular legal form of legal entities and entrepreneurs. The full and complete standardization and acceptance of the accounting rules for all legal entities and entrepreneurs would contribute to more quality decision-making grounded on a reliable information base.

The international accounting standards and accompanying regulations do not prescribe the account frameworks and patterns of financial reports. This is rather left to be an issue which national professional accounting organizations should be dealing with. In the modified Act, there is an emphasis on a strengthened function of the Securities Committee. The Securities Committee prescribes the account framework and accounts for investment funds, companies for managing investment funds, stock exchanges and broker-dealer companies. The Committee are entrusted with the prescribing of the contents and form of the patterns/templates of financial reports for the aforementioned companies. In this manner, compliance with provisions of other acts, first of all with acts stipulating rules in the securities market and investment funds, has been carried out.

CONCLUSION

A consistent application of the IAS/IFRS contributes to the credibility of financial reporting and the development of the capital market. Economic development is directly connected with a degree of trust investors have in the correctness and objectiveness of financial reports. The neutralizing of a loss of trust in financial reporting demands making efforts and a professional relationship among and between all participants in the procedure of financial reporting, ranging from standard creators to regulatory bodies to external and internal auditors to the management, managing boards and other participants in the procedure of financial reporting. The maintenance of the credibility of financial reports requires that the above mentioned groups should focus on and be oriented towards interests of the broadest community in their work.

The shortcomings of the Act on Accounting and Auditing have had an impact on the stagnation and weakening of financial reporting in Serbia, which has had as a result a huge number of unreliable financial reports, and, simultaneously, bad business decisions. It is in the interest of the overall world community that we should overcome differences in accounting and auditing standards, all with an aim to eliminate misunderstandings, mistakes and fraudulent handlings. The solution lies in a unique set of international standards of the top quality, which are determined and stipulated by the international expert body with simultaneous open consultations and respect for legitimate interests of the international community.

A new Bill contains the chronology of events for the needs of making comparisons between the previous and current legal accounting regulations so as to make it possible to avoid similar mistakes in the future. The reaching of a novel Act on Accounting and Auditing would create suitable regulatory conditions for the standardization of financial reporting, which stands for one of the conditions for Serbia's joining the European Union.

References

- [1] Act on Accounting and Auditing, "The Official Gazette of the Republic of Serbia", No. 46/2006 and 111/09
- [2] Aleksić, B., (2004), Quality of Financial Reporting According to International Professional Regulations, Collection of Papers: Challenges in Front of Accounting Profession under Globalization of Financial Reporting, XXXV Symposium, Accounting and Business Finance in Modern Business Operations, Association of Accountants and Auditors of Serbia, Belgrade

- [3] International standards of financial reporting and International accounting standards, (2008), Official Gazette of the Republic of Serbia, No. 16, Belgrade
- [4] Kapić, J., Cash flow statements, Economic Analysis, Institute of economic sciences Belgrade
- [5] Manual on application of chart of accounts for enterprises, co-operatives and entrepreneurs, (2006), Group of authors, Privredni savetnik, Belgrade
- [6] Milojević, D., (2006), Revizija finansijskih izveštaja, Faculty for trading and banking "Janičije i Danica Karić", Belgrade banking academy, Belgrade
- [7] Novičević, B., (2007), Balancing and IAS (work paper), Niš
- [8] Rodić, J. Vukelić, G., Andrić, M., (2007), Teorija politika i analiza bilansa, Faculty of Agriculture, Belgrade
- [9] Stevanović N., Malinić D., Miličević V., (2009), Management Accounting, Faculty of Economics, University of Belgrade, Belgrade
- [10] Stickney, C. P., Brown, P. R., Wahlen, J. M., (2007) Financial Reporting, Financial Statement Analysis, and Valuation, A Strategic Perspective, Thompson, South – Western
- [11] The Official Gazette of the Republic of Serbia, No. 20/07 and 63/07
- [12] The Official Gazette of the Republic of Serbia, No. 125/03 and 12/06
- [13] The Official Gazette of the Republic of Serbia, No. 9/02 and 86/06
- [14] The Official Gazette of the Republic of Serbia, No.105/06 and 111/06
- [15] The Official Gazette of the Social Federal Republic of Yugoslavia, No. 10/89
- [16] The Official Gazette of the Social Federal Republic of Yugoslavia", No. 12/89
- [17] The Official Gazette, No. 18/93
- [18] Mercantile Act for the Kingdom of Yugoslavia in 1937., (1990), Mladost, Belgrade
- [19] White, G., Sondhi, A., Fried, D., (2003) The Analysis and Use of Financial Statements, Wiley
- [20] Wild, J., Subramanyam, K., Halsey, R., (2007) Financial Statement Analysis, McGraw-Hill/Irwin, New York
- [21] www.nbs.rs

CHAPTER 7.

CREDIBILITY AND MONETARY POLICY: THE CASE OF SERBIA

Gradimir Kožetinac¹

Abstract

The efforts made by Serbia and other transition economies to control inflation led their central banks to pay close attention to the credibility of their monetary policy, particularly during the last decade. The monetary policy credibility in Serbia has always been a matter of discussion. One of the main indicators of the lack of credibility in Serbia's monetary policy is a high level of foreign currency deposits in the M3 monetary aggregate caused by high eurization level. The lack of trust by the public in the national currency and its exchange rate is reflected in the large proportion of foreign deposits in the sum of demand deposits and savings and time deposits. Furthermore, the process of indexation of transactions to foreign currency (primarily the euro) is still evident. As the result, the national currency has merely the function of the means of payment and conducting transactions, but lacks the functions of measuring value, saving and crediting. This article considers the concept of credibility from both the theoretical and practical viewpoint. The advantages of high credibility are discussed, with a particular focus on Serbia's experience with explicit inflation-control targets, and measures taken by the National Bank of Serbia to enhance the credibility of its monetary policy are explained.

Key words: *monetary policy, credibility, Central Bank, inflation targeting, Serbia.*

INTRODUCTION

The attempt of Serbia (but in many other countries before) to control inflation, led the central banks to pay attention to their monetary policies' credibility. The monetary policy, with the realization of a low rate of inflation as its ultimate objective, will be credible if the public trust that the central bank is ready to undertake measures necessary for achieving such an objective. Consequently, the

¹ Gradimir Kožetinac, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

inflation expectations will be tightly linked to the monetary policy's ultimate objective announced by the central bank.

The inflation expectations influence the creators of the economic (i.e. monetary) policy in deciding on the future economic and financial commitments they will accept to realize and announce them in public. When the expected (targeted) and realized inflation rates are equal and there are no surprises referring to the flows of prices, wages and interest rates in a longer time period, the transactions between the economic subjects will be performed as anticipated (in the moment of setting the initial decision). Then the improvement of the economic performances can be rightfully expected.

The focus of this paper is on the credibility of monetary policy. The concept of credibility is observed from both the theoretical and the practical aspect. The policy's credibility is very important to the central banks taking care about their reputation. Namely, the credibility of their policy is directly connected to a number of disputable problems, with which they constantly grapple with in practice. The first section of the paper deals with the theoretical basis referring to the credibility of monetary policy. The second section turns to the practice of monetary policy to examine how the central banks have drawn on the lessons of theory: the advantages of credibility and the way of its improvement. This section focuses on Serbia's experience with explicit inflation-control targets.

THE THEORETICAL BASIS FOR CREDIBILITY

On the theoretical level, the preoccupation with the credibility of economic policy (and monetary policy in particular) stems directly from the rule of the classical macroeconomic theory. The work of Kydland and Prescott [6], establishing the theory of time consistency, was particularly important for developing the theory of the economic policy credibility. The rational economic agents use a particular economic model and take into consideration all the disposable information in setting their expectations regarding the future. Among other, the economic agents should evaluate the credibility of the announced economic policy in setting their expectations and making decisions regarding the activities to be undertaken. However, it is not simple to evaluate the credibility of the economic policy. The evaluation should be based on the results of a complex "game" with the observations by the economic agents, referring to the sustainability and the efficiency of the announced forms of the economic policy, the obligations of the creators of the policies to support those agents and the prospects of changing the directions of some forms of the economic policy. Consequently, such an evaluation depends on a kind of circular logic: the economic policies are regarded

as effective only in case of being credible for the private economic agents, but the policies are regarded as credible only if being considered as effective in the future (Blackburn and Christensen [2]).

From the perspective of monetary policy, the term “credibility” refers to the level of trust of the economic subjects to the effort and ability of the central bank to fulfill its announced objectives. The term “time inconsistency” was applied by Kydland and Prescott for the first time in monetary analysis. The problems of time inconsistency appear when the public believes as uncertain that the central bank will fulfill all its announced objectives, since that public considers them as incompatible. Most central banks dispose of the mandate to defend the purchasing power of money and to maintain the economy in good health. Those objectives may be consistent in the long run, but not necessarily be in accordance in shorter time periods, due to the character of the relations between aggregate demand, inflation and inflation expectations. The monetary authorities may improve the prospects for achieving their inflation objectives by acting so that the public’s expectations regarding inflation coincide with the announced inflation objective. Once when the monetary authorities believe that the expectations are tightly anchored around the target rate, they may be tempted to grant a harder boost to the economy than the public would expect. Then, on the basis of expectations that the inflation rate will exceed the announced one, the public will make their decisions regarding finances and economics, in order to be protected from the erosion of wages and returns from investment. Such a consequence is possible to occur if inflation is created on a higher level than anticipated.

CREDIBILITY IN PRACTICE

The problem of credibility may appear in two different situations: first, when the inflation rate exceeded a given level and the monetary authorities decide about its lessening, and second when inflation is under control and the monetary authorities try to maintain it in the scope of the target range. In the first case, the monetary authorities will lose their credibility for being incapable to prevent the least favorable situation². They should be aware of the problem, to show their ability to find the solution and their capability to improve the situation. In the second case, the central bank has already presented its capacities to decrease inflation and the problem of credibility refers to its ability to maintain the inflation rate in the scope of the announced target range. While the first situation is interesting from the theoretical aspect, the analysis of the second case refers to another situation,

² It’s possibly due to a weak connection between the operational objective of monetary policy and inflation.

reflecting Serbia's experience in the application of its inflation targets, starting from 2006.

When the central bank attempts to decrease the inflation rate in an economy, it is easier to achieve in case of its transfer to the new regime of performing monetary policy. If such a policy's credibility is low and the public expects the central bank to abandon some of its activities before its target's realization, the price and salary trends will be gradually adapted to decreasing the aggregate demand (resulting from the disinflation process). On the other side, a high level of credibility favors the transition to the targeted inflation rate, since the economic subjects will provide a greater weight to this rate in setting the wages and prices. A high level of credibility will also contribute to holding inflation near the target when unexpected events disturb the existing behavior of prices. The inflation control is not a precise activity and the inflation rate may be separated from the targeted rate in any moment, due to the events being out of the central bank's control. In such a situation credibility will help to maintain the expectations focused on the target. If the public realizes that the central bank is willing to do its best in order to return inflation towards the target, they will not react very strictly to the fluctuations of the wage trends and thus the scope of fluctuations in the inflation rate, output and interest rates will tend to decrease³. Furthermore, high credibility allows the monetary authorities to make a much more precise evaluation of the economy's capacities to produce goods and services and generate employment, without an automatic stimulation of inflation expectations of the economic subjects; such a situation is very favorable to the central bank, due to its facing a high level of uncertainty in evaluating the potential output and output gap.

In order to increase credibility, the monetary authorities should convince the public that their objectives are not incompatible. A way of solving the problem of time inconsistency is to make an official agreement between the government and the central bank about a clear target on inflation. The monetary authorities would acquire a greater responsibility with such an agreement. The government and the central bank announce a mutual responsibility in achieving the objective of monetary policy and the central bank starts the realization of an appropriate strategy of monetary policy: the central bank follows the established target and the economic subjects accordingly adapt their expectations regarding inflation. Since the established targets are a kind of implicit contract between the central bank and all the economic subjects in an economy, the central bank should be

³ Such a hypothesis was supported in the research carried out by Amano, Coletti and Macklem [1] where they concluded that the benefit from credibility is in its ability to decrease the rates of inflation, interest rates and output and simultaneously increase the average level of output.

responsible to the public regarding its activities and its results. Furthermore the clear targets of monetary policy of the central bank provide the necessary guidelines to the economic subjects to formulate inflation expectations and to evaluate the efficiency of such a policy. Also, the established and initially announced targets will provide a stimulus to the central bank to be more open and more transparent in its activities.

However, the monetary strategy based on explicitly established targets regarding inflation control bear some risks as well. Several quarters should run out before the measures of monetary policy start to influence inflation. Also, any time the inflation rate could be disturbed through unpredictable events making control particularly hard to be effected. Due to those two factors a reliable evaluation of the central bank's success becomes complicated, consequently damaging its credibility. Namely, with unpredictable events on the "scene", it is difficult to establish the level up to which a given result regarding inflation may be connected to the activities of the central bank or other unnoticed factors. The central bank may be alleviate this problem through an appropriate program of communication and explain clearly to the public why the measures that have been undertaken are compatible to the announced inflation target.

Since the ultimate purpose of the targets regarding inflation control is the improvement of the given economy's "health", the realized economic performances on the macro plan are an important factor of strengthening and maintaining the credibility of monetary policy. If the experience referring to the economy' functioning points to the prolonged downturn, due to events out of the monetary policy's control, credibility may be compromised even if the central bank undertakes appropriate measures in the aim of achieving the announced target⁴. The credibility of monetary policy may be created (and strengthened) only after a long time period containing the inflation rate close to the target and the fulfilled healthy performances regarding employment and output.

Inflation targeting in Serbia

Inflation targeting was accepted as the frame for implementing monetary policy in a number of countries during the last two decades. The adoption of the monetary policy strategy explicitly focused on inflation maintained an increased belief among numerous economists that monetary policy is most suitable to contribute to a country's economic growth, i.e. economic welfare in the long run, with the provision of maintaining a low and stable inflation rate. Such an assumption was

⁴ See, Drazen and Masson [5].

supported by empirical proofs about harmful effects of high inflation on the economic growth without a trade-off between inflation and the economic growth.

There is a wide agreement between the academic economists and the experts from the central banks about the capabilities and limitations of monetary policy. The monetary policy may also influence the average level of inflation, as well as its fluctuation in time. On the other side, the average level of real amounts, like output and employment, cannot be considerably influenced through monetary policy. The average level of those values is determined by other factors: demography, the physical capital level, research and development in technology, education of the human factor, natural resources. A strict interpretation of the monetary policy's abilities regarding its influence on the real sector of the economy can be easily interpreted in somewhat incorrect sense, namely that the banks are capable to exert influence only on inflation. Naturally, such a conclusion would be incorrect. Although monetary policy is incapable to influence the average level of the real variables in the economy (output, employment, etc.), it doesn't mean that such a policy has no result in stabilizing the movement of those variables. The monetary policy may contribute to a higher level of using the economic resources and the stabilization of such an application at an optimal level. The central banks having established inflation target, in most cases implement such a monetary policy called the flexible inflation targeting. Such flexibility means that – besides a long-term inflation target – the central banks tend also to create conditions where they would be able to hold in the scope of acceptable limits both the fluctuations of inflation rates and those of the real flows of the economic activities. Usually a well-balanced monetary policy means a right balance between inflation and amounts (or variables) from the real sector of the economy.

The inflation target is in the center of monetary policy of the National Bank of Serbia (NBS). This target requires the movement of the annual rate of inflation to remain in the limits of the established range. In NBS they decided to transfer to the regime of inflation targeting after having led their policy without a clear (monetary) strategy for a number of years. They decided to adopt the concept of inflation targeting. This concept, as one of the strategies of monetary policy⁵, is a mode of carrying out monetary policy being different from both monetary targeting and the exchange rate targeting. Two reasons justifying such a claim

⁵ In principle there are four broader strategies of monetary policy possible to make the nominal anchor: the foreign exchange targeting with two sub-variants – “tight” connection of foreign exchange and “soft” connection of foreign exchange, monetary targeting and inflation targeting. The fifth possible strategy is the nominal income targeting. This strategy's essential problem is that it has never been realized in practice, neither in the developed countries, nor in the developing ones.

may be cited. First, inflation rate may be influenced only with considerable and (as a rule) variable time lags. On the contrary, money supply and the exchange rate may be influenced relatively rapidly through the measures of monetary policy. Second, for the central bank's monetary policy money supply is not its ultimate objective. However, the inflation rate may be considered as such an objective of the central bank's policy.

Inflation targeting is an acceptable strategy of monetary policy for two reasons:

- a) Monetary policy is capable to provide a low and stable rate of inflation if such rate is defined as an average in a longer time period (2-3 years);
- b) The price stability contributes to a general economic welfare in making transparent the whole system of prices, leading to reducing some kinds of uncertainty, possible to damage the process of investment in the long run. Also, the price stability contributes to eliminate an unequal redistribution of income, appearing in the conditions of inflation.

Preconditions for the implementation of inflation targeting

According to the experience of those countries being *inflation targeters* for a long time, some preconditions should be satisfied in order to implement successfully inflation targeting. The first (and probably the most important) preconditions for implementing inflation targeting is the *absolute instrument independence* that must be accorded to the central bank. The central bank should be free in setting its instruments of monetary policy, so that the objective may be achieved in the most adequate way. The second precondition of implementing inflation targeting is to provide the *efficient monetary policy instruments*. In the inflation targeting process the central bankers need an instrument useful in stabilizing the inflation movements. The third but not least important precondition for inflation targeting is closely connected to the *credibility and transparency* of the central bank's functioning. The credibility as well as transparency is dominantly determined by the quality of the central banks communication to the public. It is very important for the central bank to inform the public about each circumstance connected to its policy, in order to make its goals and instruments clear and controllable. In a transparent monetary policy is more difficult for the central bank to deviate from its set targets, since such a behavior would have a serious and long-lasting impact effects on its credibility (Pétursson [8]).

The implementation of inflation targeting in Serbia, like in other countries, requires the fulfillment of the implementation preconditions. The credibility and transparency of the central bank's functioning is the third precondition for inflation targeting. The transparency of NBS activities is confirmed by its adequate and ordinary communication to the public. Besides the regular

publications (Inflation Report, Statistical Bulletin, Annual Report, Macro-prudential Analysis), NBS issues also occasional publications (working papers, surveys, other publications), thus increasing the level of its transparency.

Concerning credibility, the situation is slightly different. Although in case of NBS some important elements for creating credibility of the central banks (like the central bank's independence or transparency) have been satisfied the credibility problem remains prominent for a number of years already. The lack of trust of the economic subjects in the national currency and its exchange rate is reflected in the large proportion of foreign deposits. The Bank's accounts evidence about the amount of foreign deposits exceeding the sum of demand deposits and savings and time deposits during the whole period 2003-2009 (Table 1 and 2). Furthermore, the process of indexation of transactions to foreign currency (primarily the euro) is still evident. As a result, the national currency has merely the function of the means of payment and conducting transactions, but lacks the functions of measuring value, saving and crediting.

Table 1: Banks' Accounts, Liabilities – deposits (in million dinars, end of period)

	2003	2004	2005	2006	2007	2008	2009
Transaction deposits	59.918	62.485	88.197	133.663	177.823	147.120	159.946
Dinar saving and time deposits	25.588	34.934	47.224	78.873	141.612	154.281	178.342
Foreign currency deposits	124.544	179.341	271.071	359.025	517.009	599.180	769.894

Source: National Bank of Serbia, Statistical Bulletin, May 2010.

Table 2: Household Savings (In million dinars, end of period)

	2003	2004	2005	2006	2007	2008	2009
Dinar savings	4.233	3.152	3.267	7.551	10.766	9.859	11.843
Foreign currency savings	73.971	113.865	193.403	268.212	392.367	423.447	577.137

Source: National Bank of Serbia, Statistical Bulletin, May 2010.

Three functions of money are widely known: the medium of exchange/ payments, unit of account and store of value. All the functions provided by money are those

that should be performed in one economy – otherwise, the situation in such an economy would be bad. Accordingly, the problem is that the dinar (as the domestic currency) is not the only medium of payments and is not keeping its value. If the national currency is not performing well, people will try to use some foreign currency to perform those functions (if there is such a possibility and if the foreign money is good) or they will try to get along in some other way. The deposits in foreign currencies in banks of Serbia are the manifestation of one among the functions of money – the function of “standard of deferred payments”, i.e. the “store of value”. The monetary theory points to the information function of money in the conditions of uncertainty. The less information the market economic subjects have on other economic subjects, the more important is the money. The real quantity of money in circulation used to perform the function of the medium of exchange/payments, is not dependent on the central bank, but on the market economic subjects. It becomes evident in inflation when the real quantity of money in circulation starts to decrease, and when the inflation expectations become crucial. Regardless to the monopoly of the monetary authorities in issuing money as a legal medium of payments, in such conditions people look for other media of payments – for example, the foreign currency. Also, in the conditions of growth of the general level of prices (and an unpredictable change of the relative prices), money becomes ever less applicable as a unit of value and the “store of value”.

The traditional transmission of monetary policy would not work properly as the central bank has no direct control over the foreign currency assets. In the circumstances where the residents lose confidence in their own currency, the capacity of the central bank to conduct the stabilizing monetary policy in the short run is very limited. Also, the ability of the monetary authorities to gain credibility in the long run becomes considerably limited.

The overall macroeconomic performance under the inflation targeting regime

The National Bank of Serbia started to perform the inflation targeting regime in the last quarter of 2006. Sufficient time has elapsed to permit the analysis of the achieved results of this monetary strategy, not only those referring to stabilizing inflation around a given target, but also referring to the stabilization of the real sphere of the Serbian economy (accordingly, the results from the aspect of output, employment, payments/balance flows). After three years of experience with the inflation targeting regime, the evidence on its total effects is much less encouraging, and much more pointing to discontent. The positive results are achieved in lowering the inflation rate and its maintenance at such lowered levels, observed in comparison to the period of adopting the new frame for performing

monetary policy. In 2006 a strong decrease of the total inflation at such lowered levels occurred (measured in the consumption prices) from the level of 17.7% (basic inflation 14.5%), as it amounted to in 2005, at the level of 6.6% (basic inflation 5.9%). In 2007 inflation was accelerated again, but NBS succeeded in achieving the inflation target for that year – the basic inflation (7.9%) was in the limits of the targeted range (4-8%). In 2008 the basic inflation exceeded the upper limit of the targeted range (3-6%), amounting to 10.1% at the end of the year. From 2009 the National Bank of Serbia performs the regime of explicit inflation targeting and sets the medium-term objectives for the total inflation measured in consumption prices. The objective for the end of 2009 amounted to $8 \pm 2\%$, and inflation achieved amounted to 6.6%.

Table 3: Inflation target of monetary policy

	2006	2007	2008	2009
Consumer prices (in %, relative to the same month a year earlier)	6.6	11.0	8.6	6.6
Core inflation (in %, relative to the same month a year earlier)	5.9	7.9	10.3	4.1
Targeted range of core inflation	7-9%	4-8%	3-6%	-
Targeted inflation range measured as an annual percentage change in the consumer price index (CPI)	-	-	-	6-10%

Source: National Bank of Serbia, RS Statistical Office.

According to data on the achieved rates of the real growth of the gross domestic product (GDP) of Serbia in the period 2006-2009 are not encouraging in any way. The deceleration of the economic activities was present during the whole period. In 2009 the economy of Serbia is in deep recession and the realized real growth of GDP had a negative sign, amounting to -3.0%.

The data on the rate of employment point that in the period after the adoption of inflation targeting regime (after 2006) a slight decrease of those rates occurred, compared to those recorded in some years before that regime's adoption. In Serbia during a number of years the rate of unemployment stays at a very high level - between 16 and 21%.

Table 4: Key macroeconomic indicators

	2003	2004	2005	2006	2007	2008	2009
Real GDP growth (in %)	2.4	8.3	5.6	5.2	6.9	5.5	-3.0
Consumer prices (in %, relative to the same month a year earlier) ⁶	7.8	13.7	17.7	6.6	11.0	8.6	6.6
Core inflation (in %, relative to the same month a year earlier) ¹⁾	6.1	11.0	14.5	5.9	7.9	10.3	4.1
NBS foreign exchange reserves (in EUR million)	2.840	3.117	4.935	9.025	9.641	8.160	10.602
Exports (in EUR million)	3.847	4.475	5.330	6.949	8.686	10.157	8.478
Imports (in EUR million)	-7.206	-9.543	-9.613	-11.971	-15.578	-17.878	-13.237
Current account balance (in EUR million)	-1.347	-2.620	-1.778	-2.356	-4.615	-6.089	-1.743
Current account balance, as % of GDP	-7.8	-13.8	-8.8	-10.1	-16.0	-18.2	-5.7
Unemployment according to the Survey (in %)	14.6	18.5	20.8	20.9	18.1	13.6	16.1
RS budget deficit/surplus (in % of GDP)	-2.6	-0.3	0.3	-1.9	-1.7	-1.8	-3.4
RS public debt (external+internal, in % of GDP)	63.7	50.9	50.6	40.1	31.4	26.3	32.4
RSD/EUR exchange rate (end of period)	68.31	78.89	85.50	79.00	79.24	88.60	95.89

Source: National Bank of Serbia, RS Statistical Office, RS Ministry of Finance Bulletin.

In the payments-balance flows, the deficit of the current account is one of the weakest points of the Serbian economy. Naturally, such a qualification is not referring only to the observed period 2006-2009. Such deficit is primarily the

⁶ Retail prices until 2006

consequence of the deficit in the trade balance (import exceeding export), amounting in 2007 approximately 7 billion euro, and 8 billion euro in 2008. Such a situation in the trade balance is not surprising taking into account the scope of the appreciation of the domestic currency's rate (dinar) in relation to euro. As a result of a massive inflow of capital from abroad during 2006, the appreciation of the dinar compared to euro amounted to 4% with the inflation rate amounting to 6.6%, meaning that a gap of over 10% appeared between inflation and the exchange rate. During 2007 and 2008 that gap was even more deepened.

CONCLUDING REMARKS

With a high level of credibility the realization of the objectives of monetary policy may be easier both through alleviating the economic fluctuations and by lowering the price which should be paid in the society in order to achieve the objectives. The public is aware that the monetary authorities may be tempted to abandon their stated objectives in order to achieve some other in the short run they consider (or were imposed) as important. Accordingly, the monetary authorities should activate appropriate measures to assist them in establishing and maintaining their credibility. The characteristics of the monetary policy regime applied by the central bank are not very important for gaining credibility. The important factor for credibility is the perception by the public regarding the central bank's previous performance and its willingness to fight inflation in the future. The performance of the current monetary regime in Serbia is not satisfactory. In Serbia, like in most developing countries, the preconditions for adopting inflation targeting are not present yet. The credibility problem is still unsolved. This problem is emphasized by the lack of trusting in the national currency and its exchange rate. The analysis of the current monetary policy outlook brings to the conclusion about the National Bank of Serbia not reacting proactively to movements that happen both in the monetary and in the real sector of the economy.

References

- [1] Amano, R., D. Coletti, and T. Macklem (1999) "Monetary Rules When Economic Behaviour Changes" Bank of Canada Working Paper, No. 99-8.
- [2] Blackburn, K. and M. Christensen (1989) "Monetary Policy and Policy Credibility: Theories and Evidence" *Journal of Economic Literature*, Vol. 27, No. 1, March, pp. 1-45.
- [3] Crujisen, C.van der and M. Demertzis (2005) "The Impact of Central Bank Transparency on Inflation Expectations" DNB Working Paper, No. 31/March.
- [4] Blinder, B.S. (2000) "Central Bank Credibility: Why Do We Care? How Do We Build It?" *The American Economic Review*, Vol. 90, No. 5, pp. 1421-1431.

-
- [5] Drazen, A. and P. Masson (1994) "Credibility of Policies Versus Credibility of Policymakers", *Quarterly Journal of Economics*, Vol. 109, pp.735-754.
 - [6] Kydland, F. and E. Prescott (1977) "Rules Rather Than Discretion: The Inconsistency of Optimal Plans" *Journal of Political Economy*, Vol. 85, No. 3, pp. 473-491.
 - [7] Mishkin, F. (2000) "Inflation Targeting in Emerging-Market Countries" *The American Economic Review, Papers and Proceedings*, Vol. 90, No. 2, May, pp. 105-109.
 - [8] Pétursson, T.G. (2000) "Exchange Rate or Inflation Targeting in Monetary Policy?" *Central Bank of Iceland Monetary Bulletin*, Vol. 2, No. 1.
 - [9] Siklos, P.L. (2002) "The changing face of central banking: Evolutionary trends since World War II", Cambridge: University Press.
 - [10] Walsh, C.E. (2003) "Monetary theory and practice", 2nd ed., Cambridge, Mass.: The MIT Press.

CHAPTER 8.

CULTURAL BARRIERS TO SERBIA JOINING THE EUROPEAN UNION

Živka Pržulj¹

Gordana Vukelić²

Abstract

The question of culture and its influence on behaviour and decision making is unavoidable in the modern world characterized with processes of globalization, integration and intensive changes. Serious intercultural researches in the past decade confirm the importance and help us understand barriers to the process of integration.

National culture is an important determinant of behaviour, decision making and problem solving faced by individuals in the society. It especially affects leadership, motivation and relations to change by unconsciously influencing basic premises about world and relations in the world, that are articulated in values, customs and behavioural norms.

Serbia is in a group of European countries which are waiting to join European Union. It is not accidental that the other countries are from the same region. Therefore, in this paper we are looking for an answer to the question if and to what extent Serbian national culture and the culture of the region influence that process and what barriers it brings? To answer this question we will rely on famous intercultural studies by Geert Hofstede and group of eminent authors gathered around the Globe study. Seeing that culture is not an isolated factor, but in interaction with historical, geographic, religious, political, economical and other factors, in this paper we analyze possible influence of those factors on change of basic cultural premises and cultural divergence, or eventual convergence in a multicultural community such as European Union.

¹ Živka Pržulj, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

² Gordana Vukelić, Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

Key words: *culture, nation, values, premises, changes, barriers, influence, research*

INTRODUCTION

Serbia as one of the countries in Europe which are finding themselves in front of the door of unique economical, political and social space called European Union has to progressively work on removing barriers to enter this door. Often, joining is connected to the political or normative conditions that are fulfilled too slow or not at all. Joining the European Union implies establishing systems of functioning market economy, reign of laws and justice and ability to develop democratic society. In Serbia, on one side we find political factors and the majority of people who are supporting integration to Europe, but on the other side we are witnesses of the very few changes needed to speed up the process and the leftover behaviour patterns from the socialists' era. Europe is often seen as economically prosperous, high standards of living and monetary investments that could stimulate economic development, and the fact that to "join Europe" requires many written and unwritten rules and laws as well as mental adjustments to the new value system and behavioural models that are different then old habits. Therefore, very often in statements made by officials from European Union, we can hear a position that Serbia's joining the European Union depends more on Serbia itself then on the European Union. This would mean looking into inside barriers, and into the one of the most important barrier, which is culture as the framework for understanding reality, decision making and acting. Knowledge of cultural barriers and differences in values, beliefs and behaviours of others, can be of significant help in the processes of change and adaptation to the world we want to belong to.

Diversity of cultures that exist in the world and number of cultural adjustments to similar economical situation leads us to believe that they are not all equally rational. Finally, it is questionable if human beings behave as beings who try to maximize individual benefits or beings that see themselves as the part of brother social group. (Fukuyama, 1995 [1]) In times of global tendencies and attempts to impose economical systems all around world, proved as rational and successful, little attention is paid to cultural assumptions and limitations. However, those questions are not beyond the interest sphere for social, organizational and management sciences. Many authors in their researches brought arguments that confirmed link between culture, leadership, structure systems, behaviour, decision making and finally efficiency and economic success in societies. Therefore, it is important that Serbia, as the society in the process of transition, looks into cultural assumptions and barriers in the context of joining the family of other European countries.

With this paper we would like to determine if it is by chance that Southeast Europe is still waiting to join European Union and how important are cultural barriers in the process of integration. We believe that facing up those truths could help in overcoming barriers, especially if it is confirmed that they are not rational in today's reality.

NATURE OF CULTURE

To understand the nature of culture, the Edgar Schain's definition is often used. He defines culture as: "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." (Schein, 2004 [9]). Hofstede sees culture as: *the collective programming of the mind which distinguishes the members of one human group from another.* (Hofstede, 1994 [2]) Based on this is the strong but mostly invisible influence of culture on the individual behaviour. *„It is possible that our mental programs are physically determined by states of our brain cells. Nevertheless, we cannot directly observe mental programs. What we can observe is only behavior, words, or deeds... Mental programs can be inherited – transferred in our genes – or they can be learned after birth.“* (Hofstede, 1994 [2]) With a help of social influence culture equalizes and stabilizes behaviour of the members of particular social entitee and orients them with decision making. Mental programming is influences by basic underlying assumptions that individual adapts as the part of culture of certain society. The basic permises are characterisits of a certain group, therefore the memebbers of that group consider every behaviour based on different assumptions to be unacceptable. To get to kow a certain culture, we need to discover structure of basic assaptions, as they are the core of the culture. Without them, we can't correctly inerpret facts and assess truthfulness of articulated values.

Basic Underlying Assumptions relate to core questions of an individual and his/hers life in the world and present something always known but not explained-something that is just like that forever. Those assumptions society adapts during its long history and express ways of solving problems of survival. They are developed under the influence of number of factors such as history, religion, geography, climate, politics, and economy. *...“Basic assumptions, in the sense in which I meant to define that concept, have become so taken for granted that one finds little variation within a social unit. Third degree of consensus results from repeated success in implementing certain beliefs and values, as previously described. In fact, if a basic assumption comes to be strongly held in a group, members will find behaviour based on any other premise unconceivable.“* (Schein,

2004 [9]) Basic premises or assumptions are in the root of culture of our surroundings and they affect behaviour for which we don't usually have rational explanations. They produce values and beliefs and symbolically visible part of culture such as customs, language, architecture and everything that makes visible characteristics of the society. According to Schein, basic premises are related to:

The Nature of Reality and Truth. *The shared assumptions that define what is real and what is not, what is a fact in the physical realm and the social realm, how truth is ultimately to be determined, and whether truth is revealed or discovered. (Schein, 2004 [9])* The question could be whether beliefs and definitions of the reality by group members are real. Defining social reality depends not only on objective reality but also on the interpretation (interpretative schemes) of the reality by group members. Group members in their interpretations of reality depend on values and beliefs that are product of joint experiences. In some societies the authorities are never questioned because people in those societies for some reason, through their experiences got used to accepting what comes from the authority as the truth, even when it is obvious that it is not. In some other societies it is common that all statements need to be substantiated and proved. While for some societies it is important WHO says it, for others it is important WHAT was said. In countries that make a core of European Union interpretation of reality and truth is based on facts and proofs, while Serbian culture is characterized with accepting as of truth and reality interpretations given by the authority. Such perception of reality enables manipulation of beliefs and attitudes and passive attitudes by individuals, and the relation toward the question of joining European Union depends on actual political authorities.

The Nature of Time. *The shared assumptions that define the basic concept of time in the group, how time is defined and measured, how many kinds of time there are, and importance of time in culture. (Schein, 2004 [9])* Premises in relation to time could be monochrome and polychrome. Monochrome time is considered "planning time" or the time dimension is seen as divided and limited. Time is limited and everything that is missed can be hard to make up for. This type of time horizon is characteristic of managers in western cultures. If we see time as monochrome, as the planned dimension, we see the world around us as objects that can be manipulated with and are confident that as "the adults" we can influence change in our surroundings. Polychrome time means time dimension that is unlimited and can have few events happening at the same time. This "developing time", in which processes last as long as they last on it own, and can't be influenced (accelerated or slowed down). This view of time is characteristic for eastern cultures and it is connected with the beliefs in destiny. Monochrome view of time initiates activity and change and those societies have tendency to plan ahead and are directed towards future. Polychrome time

dimension creates passivity, views that things will happen on its own, they are directed towards past with belief that processes are lead by destiny and happen in cycles.

The Nature of Space. *The shared assumptions about space and its distribution, how space is allocated, the symbolic meaning of space around the person, and the role of space in defining aspects of relationships such as degree of intimacy or definitions of privacy. (Schein, 2004 [9])* Basis premises about the space are correlated with premises about the time. They are influencing giving and taking of the space symbolic meanings of personal space, space as the expression of relations such as the level of trust etc. In the culture such as Serbia, personal space is smaller, and people communicate with each other by being physically closer, prone to touching, kissing and hugging in order to express support and warmth, which for people in some other cultures may look offensive and repulsive.

Time and space have great importance for communication in different cultures. Because of various ways of understanding messages in the process of communication Kreitner and Klincki talk about the culture with a broad or precise context. (Kreitner R., Kinicki,2001 [6]) A Cultures with a broad context consider communication as a process in which non verbal communication, space and time add meaning to the content of a message. Therefore, it is not only important what was said but also aspect, time, space and personal relationship to what was said. Cultures with precise context pay more attention to what was said then non verbal communication. Cultures from the East (example Japan, China, Korea) are cultures with broader context (the communication is not to the point, but it is needed to “read through the lines”), and cultures of western Europe are regarded as cultures of broader context (the communication is open, direct and clear). Serbia is closer to cultures of broader context (as well as the other countries of south Europe), and very often messages that come from leading countries of European Union are seen as the pressures, which leads to resistance and hostility.

The Nature of Human Nature. *The shared assumptions that define what it means to be human and what human attributes are considered intrinsic or ultimate. Is human nature good, evil, or neutral? Are human beings perfectible or not? (Schein, 2004 [9])* Societies’ activities are determined by the basic premises about the individual. If the opinion that people are good or bad is commonly accepted, passivism and fatalism are developed. If the individual is seen as the person that is changing, evolving and self-actualising, active relation toward individual’s professional development, responsibility for own actions and pro-activity are developed.

In western cultures human being is seen pro-active, or there is a common belief that a person is not born good or bad and that with diligent work person can become self actualized. This implies the individual is responsible for her/his own destiny and his/her acts and like that he/she represents basic unit in the society in which she/he lives.

The view of the nature of human nature is seen in the principle of equity and equal chances, which is one of the key basis of democratic society. Those views determine relations towards marginalised groups. Serbia is still the county in which people commonly believe that a person is a prisoner of her/his nature and destiny, so the conspiracy theories are sometimes present.

The Nature of Human Nature. *The shared assumptions that define what is the right thing for human beings to do in relating to their environment on the basis of the above assumptions about reality and the nature of human nature. In one's basic orientation to life, what is the appropriate level of activity or passivity?* (Schein, 2004 [9]) According to Schein, the essence of human work is determined by following orientations: working orientation, orientation to existence, orientation to development. (Schein, 1995 [8]). Working orientation is connected with the premise of possibility to change and manipulate nature, pragmatic orientation in relation to essence of the reality and belief in self actualizing through work. It is understood that this belief implies person is active in his/her relations and controls surroundings. This belief is characteristic for American and Western European cultures. Orientation to existence is opposite to the above and is in close relation with the belief that humans are insignificant beings in cosmos, belief in destiny and inability to master nature to which humans are subordinate.

Nature and surroundings, by this belief should be accepted they way they are and people should enjoy what they have. The opposite of first belief that produces attitude "live to work", the second produces "work to live" attitudes. The second assumption characterizes Serbian culture Serbia is different in this basis premises from the most countries of Western Europe. The reasons for this orientation we can find in the fact that destiny of people of Balkans was never determined by their diligence, but outside circumstances. Frequent wars and foreign conquerors influenced the belief that we need to take from life and the moment the most and that the future is uncertain. Unfortunately, those perceptions were confirmed in the newer history (civil wars, NATO bombing). Orientation to development is between the two mentioned orientations (working and existence) Person is by this belief developing or the being in "existence". This means that individual during her/his development gains balance (harmony) with the nature, and with that the whole surroundings. The emphasis is on activities that contribute developing

personality as the integrated (holistic) entity. The main accent is on what the person can do, and not on what she/he is.

The Nature of Human Relationship. *The shared assumptions that define what is ultimately the right way for people to relate to each other, to distribute power and love. Is life cooperative or competitive; individualistic, group-collaborative, or communal?* (Schein, 2004 [9]) In the basis of every culture there are basis beliefs about the correct ways of relations amongst people. In the base of this premise is the trust between people. The level of trust amongst people is expression of their interactions and directly affects system of control. The lower the level of trust in the society, the higher is the potential for conflict, the need for more laws and regulations, and control of their use, which then increases operational costs and decreases social synergy. Serbia belongs region with low level of trust amongst people, which means lower “social capital.” This has negative consequences on attracting foreign capital, operational costs, companies’ development and growth and development of professional management. (Fukuyama, 1995 [1]) Market economy and democratic society assume certain level of freedom and fair play, which is based on trust.

DIMENSIONS OF CULTURE

Basic premises that determine characteristic of national culture could be perceived through few key dimensions. Those dimensions were identified in the research by Geert Hofstede at the beginning of 70es that initially had sample of 40 countries and 116 000 people. This research was later broadened, but it is still important in determining characteristics of national cultures. Later, after the results from Chinese culture, another dimension, long-term orientation (LTO) was added. Hofstede explains cultural dimensions as: (www.geert-hofstede.com [11])

Power Distance (PDI) *that is the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally. This represents inequality (more versus less), but defined from below, not from above. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders.* This dimension has strong influence on leadership style and decision making in one society. High power distance is a characteristic of autocratic societies and is not supporting development of democracy.

Individualism (IDV) *on the one side versus its opposite, collectivism, that is the degree to which individuals are inte-grated into groups. On the individualist side we find societies in which the ties between individuals are loose: everyone is*

expected to look after him/herself and his/her immediate family. On the collectivist side, we find societies in which people from birth onwards are integrated into strong, cohesive in-groups, often extended families (with uncles, aunts and grandparents) which continue protecting them in exchange for unquestioning loyalty. Alternative to individualism is a group orientation, orientation that dominates in Mediterranean and Asian cultures. In those cultures commitment and loyalty are to the family or the group (tribe) the individual belongs to. Individualistic societies encourage competitive spirit, which supports entrepreneurship and market economy, while collectivistic societies are closer to equality and social harmony. As this dimension doesn't influence economy, there is a successful market economy in USA as typically individualistic and Japan as typically collectivistic society.

***Masculinity (MAS)** versus its opposite, femininity, refers to the distribution of roles between the genders which is another fundamental issue for any society to which a range of solutions are found. The IBM studies revealed that (a) women's values differ less among societies than men's values; (b) men's values from one country to another contain a dimension from very assertive and competitive and maximally different from women's values on the one side, to modest and caring and similar to women's values on the other. The assertive pole has been called 'masculine' and the modest, caring pole 'feminine'. The women in feminine countries have the same modest, caring values as the men; in the masculine countries they are somewhat assertive and competitive, but not as much as the men, so that these countries show a gap between men's values and women's values. Cultures with high masculinity index initiate big corporation and economic development. Schooling system is directed to preferences for high productivity. Youth is expected to have careers and the if they don't are considered failures. Work place is stressful, and competition expected. Not many females are in high positions. Masculine societies, in which achievement and result (doing culture) are appreciated, have better predispositions to develop market economy than societies dominated by "female" values such as relations among people, emotions, harmony (being culture).*

***Uncertainty Avoidance Index (UAI)** deals with a society's tolerance for uncertainty and ambiguity; it ultimately refers to man's search for Truth. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, different from usual. Uncertainty avoiding cultures try to minimize the possibility of such situations by strict laws and rules, safety and security measures, and on the philosophical and religious level by a belief in absolute Truth; 'there can only be one Truth and we have it'. People in uncertainty avoiding countries are also more emotional, and motivated by inner*

nervous energy. The opposite type, uncertainty accepting cultures, are more tolerant of opinions different from what they are used to; they try to have as few rules as possible, and on the philosophical and religious level they are relativist and allow many currents to flow side by side. People within these cultures are more phlegmatic and contemplative, and not expected by their environment to express emotions. In cultures with high level of uncertainty avoidance, risk and changes are more reluctantly accepted. However, this is the condition for entrepreneurship, and competitions in market economy.

Long-Term Orientation (LTO) versus short-term orientation: this fifth dimension was found in a study among students in 23 countries around the world, using a questionnaire designed by Chinese scholars It can be said to deal with Virtue regardless of Truth. Values associated with Long Term Orientation are thrift and perseverance; values associated with Short Term Orientation are respect for tradition, fulfilling social obligations, and protecting one's 'face'. Long term orientation initiates planning, patience, rationality, orientation to future, while short term orientation directs society to instant results and past. In societies with short orientation it is more important to “save a face” and balance of social relations then consequences that are results of those actions. Lon term orientation has positive correlation with prosperity of one society.

As we can notice, all above mentioned dimensions are interconnected and express basic premises. Hofstede's research shows this dimensions have important influence on leadership, decision making, motivation, control and overall economic activities. Researches concluded that those dimensions have direct influence on development of certain countries. “Social health and general satisfaction are positively and significantly correlated with practice scores of Performance Orientation. Future orientation and Uncertainty Avoidance. They are negatively and significantly related with Collectivism and Power Distance practices” (House et others,2004 [4]). This is shown in the following table:

Table 1: Cultural Practices and Economic Health (House et others, 2004)

Cultural Practices	Economic Prosperity	Government Support for Prosperity	Societal Support for Competitiveness	World Competitiveness Index
Masculinity (MAS)	.29* n = 57	.50** n = 40	.58** n = 40	.61** n = 41
Future Orientation (LTO)	.54** n = 57	.63** n = 40	.48** n = 40	.61** n = 41
Collectivism (IND)	-.78** n = 57	-.67** n = 40		-.45** n = 41
Power Distance (PDI)	-.53** n = 57	-.65** n = 40	-.47** n = 40	-.53** n = 41
Uncertainty Avoidance (UAI)	.60** n = 57	.74** n = 40	.44** n = 40	.60** n = 41

Source [4]

+ Only significant coefficients are reported, n = GLOBE sub sample

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Former Yugoslavia was a part of Hofstede's research, but after the breakup of the country, the author divided results based on area where the questionnaires were answered (Slovenia, Croatia, Serbia), and presented those countries in the newest data.

Table 2: Data from the countries of former Yugoslavia compared with western European countries (www.geert-hofstede.com)

	Countries	PDI	IDV	MAS	UAI	LTO
	Dimensions of cultures					
Countries from former Yugoslavia	Serbia	86	25	43	92	52
	Croatia	73	33	40	80	58
	Slovenia	71	27	19	88	49
Germanic countries	Germany	35	67	66	65	83
	Austria	11	55	79	70	60
	Switzerland	34	68	70	58	74
Countries from Scandinavia	Sweden	31	71	5	29	53
	Denmark	18	74	16	23	35
	Finland	33	63	26	59	38

Latino-European countries	France	68	71	43	86	63
	Italy	50	76	70	75	61
Anglo-Saxons countries	United Kingdom	35	89	66	35	51
	Ireland	28	70	68	35	24
Hispanic Countries	Spain	57	51	42	86	48
	Portugal	63	27	31	104	28

Source [11]

The above data shows there are only slight differences in cultural dimensions of the countries of former Yugoslavia (Hofstede, 2002 [3]). It is interesting to see that Slovenia, the first country (from countries of former Yugoslavia) to join European Union, has more similarities with Croatia and Serbia than with Germanic countries she shares border with, even though the common bias is that Slovenia is more similar to Germanic countries.

Common trait for all countries from former Yugoslavia is that they have unique combination of high power distance and uncertainty avoidance, with lower individualism and masculinity and medium long term orientation. We can see that this is exactly the combination that House and others consider adverse to success and economic development of the society (House, 2004 [4]). If we analyze characteristic of those dimensions, we can see that this combination is also negative for development of democratic society and market economy as the basic assumptions for integration to Europe.

High power distance as the cultural dimension that differentiates Serbia (and other countries of former Yugoslavia) has many negative implications on European integration of Serbia. First and foremost it affects leadership style; countries with high power distance (such as Serbia) tend to choose authoritarian and autocratic leaders. In those cultures, changes in the power structures don't mean new distributions of power but personal change of people that have power and the same behavioral models (Janićijević, 2008 [5]). This is the opposite of democratic principles proclaimed by European Union. This cultural dimension is manifested in tolerating the practice of making certain powerful individuals above the law and norms, which destroys the system and creates an environment vulnerable to bribe and corruption. Everyday affairs in Serbia show that abuse of power and corruption are present to a significant extent in all spheres of life, and especially in the process of privatization, enabling a link between politics, economy and crime. If we look into indexes of corruption, published by Transparency International, we will notice that the index of corruption is proportional to the power distance index. The index of corruption is the lowest in Scandinavian, German and Anglo-American countries,

a bit higher in Latino European and Hispanic and the highest in countries of former Yugoslavia. However, it is interesting to notice that Slovenia is amongst countries with lower index of corruption (27th place) and Serbia is above only Bosnia and Herzegovina and Albania.

Table 3: Corruption perception Index 2009 (Global Corruption Report, Transparency International)

Rank	Country/Territory	CPI 2009 Score	Surveys Used	Confidence Range
2	Denmark	9.3	6	9.1 - 9.5
3	Sweden	9.2	6	9.0 - 9.3
5	Switzerland	9.0	6	8.9 - 9.1
6	Finland	8.9	6	8.4 - 9.4
6	Netherlands	8.9	6	8.7 - 9.0
8	Iceland	8.7	4	7.5 - 9.4
11	Norway	8.6	6	8.2 - 9.1
12	Luxembourg	8.2	6	7.6 - 8.8
14	Germany	8.0	6	7.7 - 8.3
14	Ireland	8.0	6	7.8 - 8.4
16	Austria	7.9	6	7.4 - 8.3
17	United Kingdom	7.7	6	7.3 - 8.2
21	Belgium	7.1	6	6.9 - 7.3
24	France	6.9	6	6.5 - 7.3
27	Slovenia	6.6	8	6.3 - 6.9
32	Spain	6.1	6	5.5 - 6.6
35	Portugal	5.8	6	5.5 - 6.2
46	Hungary	5.1	8	4.6 - 5.7
49	Poland	5.0	8	4.5 - 5.5
52	Czech Republic	4.9	8	4.3 - 5.6
52	Lithuania	4.9	8	4.4 - 5.4
56	Latvia	4.5	6	4.1 - 4.9
56	Slovakia	4.5	8	4.1 - 4.9
63	Italy	4.3	6	3.8 - 4.9
66	Croatia	4.1	8	3.7 - 4.5
69	Montenegro	3.9	5	3.5 - 4.4
71	Bulgaria	3.8	8	3.2 - 4.5
71	FYR Macedonia	3.8	6	3.4 - 4.2
71	Greece	3.8	6	3.2 - 4.3
71	Romania	3.8	8	3.2 - 4.3
83	Serbia	3.5	6	3.3 - 3.9
95	Albania	3.2	6	3.0 - 3.3
99	Bosnia and Herzegovina	3.0	7	2.6 - 3.4

Source [11]

European Union devoted great attention to the fight against corruption. During 1997 conference in Prague it was concluded that the fight against organized criminal implies the adequate reaction to corruption. They demonstrated danger the corruption has to lows, democracy, objectiveness, social justice, economic development, and moral values in the society. Additional Protocol Criminal Low Convention about corruption, adapted in Strasburg on May 15 2003, and came in power in 2005. When Serbia's barriers to integration to European Union are mentioned, usually it is talked about war criminals and cooperation with Hag Tribunal, and ignored that one of requirements is fight against corruption and organized crime.

High power distance creates conditions for powerful individuals to create interpretation of reality and influences citizen's attitudes regarding Serbia's joining European Union.

High level of **uncertainty avoidance** is dimension of culture that blocks changes in one society. Modern world is characterized by high intensity of changes and many countries noticed this in a timely manner and slowly adopted. Serbia is a country that ignored political and economical changes in the world. Common trait for societies with high level of uncertainty avoidance is that they are not ready to change slowly, but ignore the need for partial changes (evolution) unless they encounter situation that they can not function any longer and then they start revolutionary changes. The length of process of transition in Serbia (two decades) speaks the best about Serbia's openness and readiness to change.

When we take into consideration that low level of individualism in one culture negatively affect motives for achievement and increase social motives, we can see that culture of Serbia, mostly collectivistic, doesn't have requirements for efficient and competitive economic system. Individualistic cultures support individual responsibility, while collectivistic emphasizes loyalty and obedience. Individualism is in correlation with human rights and freedoms. Human Freedoms Index, measured by Canadian Fraser Institute, puts Serbia to the bottom, 119th place that is shared with Nepal and Gabon (www.fraserinstitute.org [10]). The main indicators of economic freedoms were freedom of personal choice, free exchange regulated by market rules, freedom of access and competition on the market, personal protection and the protection of personal property.

Presented data shows that Serbia is the society with relatively low masculinity, which means that relations to others are lead by more emotion and less rationality. With lower orientation to future, Serbia is the country that is emotionally connected to its past. This prevents her to relate rationally and calculated to its neighbors and Europe, and to orientate itself to the future. Historical events

(included newer events such as sanctions, bombarding by NATO, and separation of Kosovo) created negative emotional relations and certain lack of trust regarding European Union, even though rationally Serbia has no better solution than joining European Union.

It can be noticed that more prominent collectivism in certain culture with higher female values and uncertainty avoidance, have an adverse effect on the development of liberal capitalism, which was forced on Serbia by political figures in the last decade. Countries with more prominent female values develop model of social market economy, as it is in example of Scandinavian countries.

If we compare dimensions of culture in countries of former Yugoslavia with countries of European Union, we can notice dimensions PDI and UAI are the closest to Latino European countries and Hispanic countries, which have more prominent male values and individualism. However, there is discrepancy in all dimensions when compared with Germanic, Scandinavian and Anglo-Saxon countries.

CONCLUSION

In the last few decades culture was the important factor in interpretation of political, economic and organizational processes. This was contributed by significant comparable cultural research, which allows us to determine cultural dimensions of specific countries and its influence on all spheres of life. Analyzing those dimensions and comparing Serbia with leading countries in European Union shows that reasons for the slow integration of Serbia to European Union were influenced by cultural factors that should be seriously respected. Serbian culture is slightly different than the culture of other countries from former Yugoslavia and significantly different by almost all dimensions from leading countries in European Union. The fact that Slovenia joined European Union even though it has many similarities with Serbian culture, shows that culture is an important determinant in development of the country, but not the only determinant. Knowledge of country's cultural limitations, could help in overcoming them, and even help developing competitive advantage based on those principles (Japan). In addition, culture is subject to change, which most frequently happens when a social group is in crisis and notices that its behavioral models and problem solving used in past are not functioning. In Serbia this belief is already present. For Serbia joining the European Union means not only access to funds and a better standard of living but also changing "mental models" under the influence of requests that would be made when joined. That doesn't mean convergence or "Blanding" culture, but for sure means certain divergence and ability to adjust.

Europe is consisted of many different cultures, but European Union is built on treads that link these cultures and are based on values of civil society, same principles that are a base for market economy. Countries which first joined this most of all economic space, have in its tradition or religion some similarities with those values and depending on level of convergence today they “stick out” from the ”system” of European Union, even though they adapted their regulations and politics to the reigning rules. It is very easy to write (translate) laws, but the behavior required by laws can’t be secured without the change in “mental schemes” in people’s heads, mostly in the heads of the ones that lead the country. Knowledge of characteristic and limitations of one’s own culture and understanding of other cultures is one of the basic assumptions for more efficient processes of change, that are required from Serbia and the countries of the region, if they want to be a part of the European family. However, this would not mean loosing identity, but its own development and adopting “mental schemes” to new economic and political relations. In order for that to happen, we would need to face the fact that old models of thinking and problem solving, which worked in the past, are not functioning any more.

References

- [1] Fukuyama, Fransis: Trust. The Social Virtues and the Creation of Prosperity, Hamisch hamilton, London, 1995
- [2] Hofstede Geert: Culture’s Consequennces, SAGE Publications, 1994
- [3] Hofstede, Geert: : Images of Europe: Past, Present and Future, in Warner M., Joynt P.: Managing Across Cultures, Thompson , 2002
- [4] House, Robert and others: Culture, Leadrship, and Organizations- The GLOBE Study of 62 Societies, Sage Publications, 2004
- [5] Janićijević Nebojša: Organizaciono ponašanje, Datastatus, Beograd, 2008
- [6] Kreitner R., Kinicki A., Organizational behaviour, McGraw-Hill, New York, 2001
- [7] Martin J. Gannon & associates, Understanding Global Cultures, Metaphorical Journeys Through 17 countries, SAGE Publications, Inc. USA, 1994
- [8] Schein, Edgar: Organizational Culture and Leadership, 3rd edition, Jossey-Bass, 2004
- [9] Schein, E.: Unternehmenskultur, Campus, Frankfurt/M.,1995
- [10] www.fraserinstitute.org, 22.9.2010
- [11] www.geert-hofstede.com, 20.09.2010
- [12] www.transparency.org, 22.9.2010

CHAPTER 9.

MONETARY POLICY AND THE PATH TO SUCCESSFUL INTRODUCTION OF EURO IN SLOVAK REPUBLIC

Júlia Ďurčová¹

Eudmila Bartóková²

Abstract

This paper is focused on the process of introducing the euro in Slovak Republic. The first part analyses the strategy of monetary policy during this process, namely the inflation targeting. The second part mentions the road to European Economic and Monetary Union, particular steps and Maastricht criteria fulfilment. The third part deals with possible problem areas during the process of currency changeover, such as inflation criterion, government deficit criterion and the costs of the introduction of new currency. The final part analyses the first year of euro as new Slovak national currency as well as the perspectives of Slovak Republic within Economic and Monetary Union.

Key words: *monetary policy, inflation targeting, euro changeover, convergence criteria*

INTRODUCTION

Independent monetary policy of Slovak central bank, NBS (Národná banka Slovenska) has gone through several changes since 1993. As one of the legal successors of the ŠBČS after the split-up of the former republic, NBS took over the original monetary strategy as well as the whole monetary policy instrumentarium. NBS adopted fixed exchange rate with narrow fluctuation band and opted for the money supply target. In order to adapt to changing economic environment, NBS had been gradually widening the koruna's fluctuation band. In 1998 the exchange rate regime was changed to managed floating. Having no

¹ Júlia Ďurčová, Technical University of Košice, Faculty of Economics, Slovakia.

² Eudmila Bartóková, Technical University of Košice, Faculty of Economics, Slovakia

particular fluctuation band to follow, NBS started to concentrate on price stability and introduced new regime similar to inflation targeting. This regime was based on annual short-term inflation targets and no medium-term targets. In 2000 NBS adopted implicit inflation targeting (so-called “inflation targeting lite”) and announced short-term annual inflation target for core inflation. This type of monetary policy regime had been at force till Slovak koruna’s admission to ERM2 in 2005. Monetary policy was redefined as the “inflation targeting within ERM2”. The sole monetary target of price stability was changed to double objective of price and exchange rate stabilities. After the euro changeover, NBS had basically gone back to the sole target monetary policy. NBS’s current monetary policy is still inflation oriented, but the inflation target is set by the European Central Bank (ECB).

INFLATION TARGETING IN SLOVAKIA

In the pursuit of its primary monetary policy objective, i.e. maintaining price stability, central bank can opt for any of several monetary policy regimes. Inflation targeting currently represents one that is widely-used and rather popular among central bankers. It is medium-term strategy oriented on sole goal of price stability. Inflation goals are announced publicly and they usually concern particular level of inflation as well as time horizon. The whole regime is based on the ability of the central bank to influence the expectations of economic subjects regarding the inflation. Inflation targeting is viewed as one of the most transparent systems of monetary policy as it is subordinated to explicit rules and easily comprehensible to public.

In case of Slovak Republic, inflation targeting became the official monetary strategy of NBS in 2005, i.e. one year after Slovakia joined European Union. In November 2005 monetary strategy was modified to inflation targeting within ERM2. These changes were possible thanks to completion of the price deregulation process, significant improvement of the quality of statistical data as well as the increase of the fiscal policy transparency. Being responsible for the fulfilment of the inflation criterion, NBS had to adopt the strategy which was in compliance with the planned strategy of euro adoption. To accomplish this obligation, NBS set explicit inflation targets for the period of 2006-2008, the targets defined as the end-of-year inflation level, measured by the harmonised index of consumer prices: inflation rate below 2.5% at the end of 2006 and below 2.0% at the end of years 2007 and 2008. [1]

With the newly redefined monetary policy (“inflation targeting within ERM2”, instead of “direct explicit inflation targeting”), NBS was also obliged to monitor

and consider the evolution of exchange rate of Slovak koruna to Euro. In case of unsteady development, NBS had the possibility to intervene by the means of verbal interventions, foreign exchange interventions or interest rate adjustments. If the exchange rate development corresponded with the country's economic situation, monetary policy was operating as if under the regime of common inflation targeting. [16]

To evaluate the regime of inflation targeting in Slovakia and to qualify its impact on the convergence process is rather difficult owing to the short time period. Since 2005 when NBS officially and publicly declared its commitment to target the inflation, there were several distinguishable trends in the evolution of inflation and Slovak koruna's exchange rate. Till 2005, price development and thus the inflation rate were influenced mainly by the adjustments in the regulated prices and the indirect taxes rates. However, in 2005 new inflation target was set for the core inflation so as to monitor the inflation development connected directly to the central bank's policy and its measures. With the final inflation target set as $3.5 \pm 0.5\%$ and the actual core inflation rate at the level of 2.8%, year 2005 can be described as a successful in terms of new monetary policy regime. In 2006, inflation trend turned upward which was caused mainly by the increasing prices of energies, food and excise taxes, as well as rapid economic growth, increasing wages, credits and final consumption of households. The estimates expected inflation to be above inflation target what caused NBS to adopt more restrictive monetary policy and increase its base interest rate. Next year was marked with the slowing down of the inflation rate with the average year-on-year inflation reaching 2.2% what was below the reference value of 3.2%. [8]

One of the most important factors behind this positive development was the evolution of the exchange rate of Slovak koruna against euro. Exchange rate had been appreciating steadily for some time and thus absorbing the impacts of the rapid GDP growth and the growing domestic demand. [3] NBS's monetary policy in 2008 was less successful with its target set as "inflation rate below 2.0%" and actual inflation rate reaching the value of 3.9%. NBS stated that "the overshooting of the inflation target was caused by factors outside the purview of the monetary policy, namely by the increase of the world prices of food and energy commodities". [10] This trend was again reversed in 2009 when world prices affected the evolution of inflation in negative way. Decrease in overall economic activity was reflected in the decrease of various world prices, especially fuel and food prices with average HICP in 2009 reaching the value of 0.9%. [12] From long-term perspective, evolution of inflation in Slovakia could be viewed as volatile but this development can be largely explained by the open character of economy that is susceptible to be influenced by the external factors.

EURO ADOPTION PLAN IN SLOVAKIA

Since 2003, NBS together with the Slovak government had been declaring their interest to introduce the euro in January 2009. Several important documents comprising precise plans and strategies, such as “Strategy of Euro Adoption in Slovak Republic”, “National Plan of euro adoption” and “Communication strategy of euro adoption” were prepared and signed. Euro introduction followed so-called “Big Bang Scenario”, i.e. new currency was introduced in both cash and scriptural form without the transitional period. This method of currency changeover increased the importance of preparation period and later on, the very process of introduction of the new currency. Next table sums up the actual steps and the tasks that NBS had to fulfil on its path to adoption of the new currency.

Table 1: Timeline of euro changeover in Slovakia

2005	
November	Slovakia enters ERM2 and the SKK/EUR central parity is set with the standard fluctuation band of $\pm 15\%$
2007	
	Fulfilment of the Maastricht criteria
	NBS prepares the plan of withdrawal of Slovak koruna from circulation.
2008	
April	Convergence reports of European Central Bank and European Council
May	European Commission proposes that Council of the EU abrogates the derogation
May	Consultations with the European Parliament
June	Council of the EU abrogates the derogation and sets the SKK/EUR conversion rate, mandatory dual display of all prices begins (valid till the end of 2009)
September-December	Frontloading of NBS and commercial banks with the euro cash
2009	
January 1	Slovak Republic joins the euro area - Day €
January 16	Period of dual circulation ends
June	Commercial banks stop the exchange of the old Slovak koruna coins for euro
December	Withdrawal of the old Slovak koruna banknotes from circulation ends

Source: NBS, Stratégia prijatia eura v SR. 2004. NBS document. Online: www.nbs.sk

NBS: Euro changeover. 2009. Online: [http://www.nbs.sk/en/euro/euro-](http://www.nbs.sk/en/euro/euro-changeover/timetable-of-the-euro-changeover-in-slovakia)

changeover/timetable-of-the-euro-changeover-in-slovakia

Šramko, I.: Zavedenie eura na Slovensku, presentation, Košice, October 6, 2006

As stated in the Treaty on European Union, each candidate for Economic and Monetary Union membership is obliged to fulfil the so-called Maastricht convergence criteria (price stability, fiscal deficit, gross government debt, long-term interest rates, exchange rate stability) in order to adopt the euro. In case of Slovakia, the reference date was set as March 2008.

Many transforming countries sometimes struggle with the fulfilment of Maastricht criteria. It could be explained by the ongoing catching-up process, economic growth and many important infrastructural investment projects that yet needed to be realised. In case of Slovakia, price stability and fiscal criterion were viewed as the most problematic ones. Slovak government had been well aware of the importance of these criteria and had been pursuing the policy oriented towards the improving of the monitored variables. Only in 2009, due mainly to the external factors and global economic crisis, fiscal expenditures soared while fiscal receipts decreased considerably. This unfavourable development deteriorated the ratio of fiscal deficit to GDP which exceeded recommended 3% reference level.

The criteria of government debt and long-term interest rates did not pose a problem. Harmonisation of both short-term and long-term interest rates was rather smooth and can be viewed as a part of catching-up process of Slovak Republic. The fact that Slovakia is a small and open economy with close trade relations within the region as well as within the whole European market, contributed largely to the process harmonisation. In case of government debt criterion, Slovak results were rather favourable and below the reference value of 60% ratio.

Table 2: Maastricht criterion fulfilment

	2004	2005	2006	2007	2008
General government deficit (% of GDP)	-2,4	-2,8	-3,6	-2,2	-2,3
General government debt (% of GDP)	41,4	34,2	30,4	29,4	27,7
Long-term interest rates (%)	5,0	3,5	4,4	4,5	4,7
Annual exchange rate (SKK/EUR)	40,022	38,599	37,234	33,775	31,262
Annual HICP (%) - Slovakia	7,5	2,8	4,3	1,9	3,9
Annual HICP (%) - Euro area	2,0	2,2	2,2	2,1	3,3
Annual HICP (%) - EU	2,1	2,2	2,2	2,3	3,7

Source: Eurostat

To achieve the stability of the Slovak koruna's exchange rate had been viewed at the beginning as problematic area because of the rapid economic growth. As a

result, central bank was obliged to adjust koruna's parity several times after the entry into ERM2 on November 25, 2005. Central parity was originally set at the level 1 EUR = 38.4550 SKK with the standard fluctuation band of $\pm 15\%$ (32.6868 SKK/EUR – 44.2233 SKK/EUR). Following the period of rather significant appreciation in 2006-2007, central parity was revaluated to 1EUR = 35.4424 SKK with the whole fluctuation band shifting correspondingly to 30.1260 – 40.7588 SKK/EUR (effective as of March 19, 2007). The last revaluation in June 2008 shifted the parity to the level 1 EUR = 30.1260 SKK which later on served as a final conversion rate of koruna for euro.

EURO AND ITS IMPACT ON VARIOUS ECONOMIC SUBJECTS IN SLOVAKIA

Along with the other analyses and assessments, NBS also estimated possible costs and benefits of euro changeover on Slovak economy. Several sectors were being analysed, namely the business sector, public sector and households sector.

Business sector and Banks

According to NBS's survey the most important costs of currency changeover comprised the technical and organisational costs together with the specific costs of banking sector, the loss of monetary policy independency and central bank's inability to flexible reactions to possible economic shocks and higher inflation rates in long-term horizon.

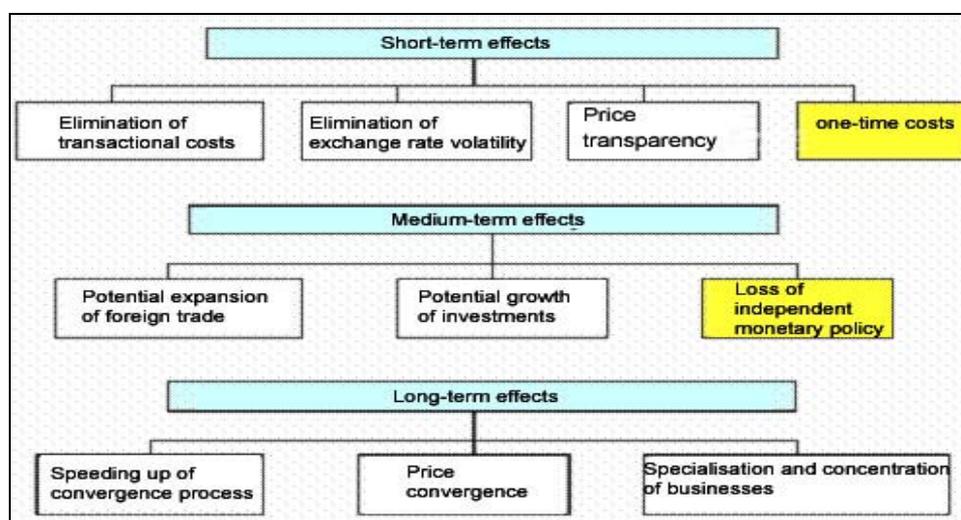
Table 3: Costs of currency changeover for business sector

Disadvantages of euro adoption	Estimated impact on economy
Technical and organisational costs of currency changeover	Changeover costs reaching 0,3 % GDP
Specific costs of banking sector and the narrowing of the scope of their activities, decrease of the bank revenues	Changeover costs related to actual conversion of former domestic currency to euro
Loss of monetary policy independency, loss of tools for the management of asymmetric shocks	Value of the loss of monetary policy's independency assessed as 0.04% of GDP
Possible higher inflation in long-term horizon	Additional contribution to inflation growth compared to euro area average reaching 1.5% annually

Source: ŠUSTER, M., ÁRENDÁŠ, M. a kol.: Vplyv zavedenia eura na Slovenské hospodárstvo. NBS document. NBS Research Department. March 2006. Online: www.nbs.sk

Several rules and principles were adopted in order to facilitate the transition to new currency. One of the rules required that each enterprise would cover the changeover costs from its own sources and there would not be any financial compensations coming from the public sources. The importance of these costs depended mainly on the importance of the particular enterprise, the scope of its activities as well as from early start of the preparations. It was expected that the larger part of changeover costs would be IT costs covering the purchases of new software or the up-grading the old one.

Graph 1: Impact of euro changeover on enterprises



Source: ŠUSTER, M., ÁRENDÁŠ, M. a kol.: *Vplyv zavedenia eura na Slovenské hospodárstvo*. NBS document. NBS Research Department. March 2006. Online: www.nbs.sk

The sector the most significantly influenced was the retail sector. The biggest retailers, such as Tesco stores, estimated that the most costly would not be the software modifications or purchases of new cash registers but additional labour force needed during the period of dual pricing. Time period for the change of thousands of price tags was only 30 days. Many employees needed to be trained, e.g. in case of Tesco 6000 employees. The total changeover costs were estimated to reach approximately 0.3-0.6% of turnover, or ten million SKK respectively.

On the other hand, new currency was supposed to bring also many advantages, such as simplified administrative and accounting. Most retailers sell imported goods and the payment transactions were realised in euro. Adopting the European

currency eliminated many transactions and facilitated the management of the exchange rate risks. [5]

Small and medium enterprises could have experienced the negative aspects of euro in the period of actual changeover. Many of them were concerned about the identification of possible fake banknotes, dual pricing in the propagation materials or commercial leaflets, frontloading and cash changeover, technical and IT adjustments (e.g. POS terminals) and changes in accounting. To avoid all these troubles, the entrepreneurs were recommended to start their preparations in advance, to guarantee the frontloading with the euro cash and to ensure that both the employees as well as the customers were equally informed. Following the experience from other European countries, perceived inflation and its level was one of the valid concerns.

From long-term point of view, the new currency was said to bring entrepreneurs more advantages, such as the simplifying and clarifying the trade with partner euro area countries. It was also expected that the existing trade relations would be strengthened and developed even more. Though the new currency could not have guaranteed the acquisition of new customers or trade partners for Slovak companies, it could have served as a “bridge” for overpassing the psychological barrier between western and eastern euro area countries.

The sector burdened the most heavily by the changeover and its costs was the banking sector. From the long-term point of view bankers expected lower profits caused by the elimination of exchange operations and bank account management fees as many of the enterprises were using accounts both in national currency as well as in euro. Commercial banks played very important role in this whole process. Their tasks included: distribution of euro cash, distribution of information leaflets and manuals, withdrawal of the koruna’s cash from the circulation, modifications of payment systems, conversion of all bank products to new currency and adopting the new rules of common European monetary policy of ECB. All these tasks were to be performed and fulfilled for free and in relatively short period of time.

Despite these preparations, doubts and uncertainties concerning the possible rise of inflation still persisted. Euro-sceptics were pointing out the possible attempts of enterprises to cover the cost of currency changeover by increased prices. So as to avoid this unfavourable development, many entrepreneurs signed so-called “Ethical Code of Entrepreneurs for euro adoption”. Every enterprise involved was committed not to “abuse” the process of currency changeover to justify the unexpected and unreasonable price increases of their products or sell goods and

services. The ones breaking the code were also included in the second, publicly accessible “negative” list that served as a form of negative promotion.

Public sector

The public sector had to prepare for the currency changeover as well. The National Plan of Euro Adoption specified wide scope of measures, concerning the currency changeover. Aside from the list of tasks, it contained the exact dates for each particular step in the whole process.

- Conversion of financial information systems

This concerned mainly the identification of all technical needs in the domain of public administration. Every institution had to guarantee the transition of its accounting and other financial systems to the situation after the changeover.

- Accounting, reporting and taxes

As year 2008 was the last year of Slovak koruna, it was necessary to convert all final accounting documents to euro. Several binding rules concerning the conversion and rounding of the financial amounts to euro cents were adopted. They were applicable to all types of payments, such as wages, salaries, travel allowances, social security insurance and old-age pension saving schemes, social security, social assistance and other social support benefits. According new rules, financial amounts were to be rounded to the nearest euro cent following the basic principle “the euro introduction must not harm citizens or consumers”. Fees and taxes if not precisely converted according to the rounding rules, were to be rounded down; payments to citizens were to be rounded up. More precisely, values rounded in favour of citizens were adjusted to whole 10 euro cents.

- Legislative

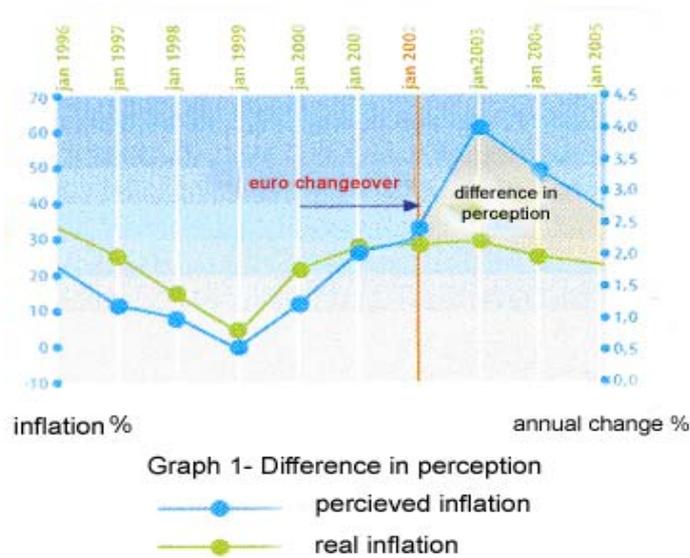
Legislative changes concerned mainly the domain of social policy and public budgets. After the setting of the most important tasks together with their timeline, public sector was obliged to pursue the revision of all respective normative legal acts according to their competence and identify those that needed to be amended before November 15, 2005. This date was also set as a final date for the revision of all financial IT systems in public sector. Specific time plans were prepared and public sector was to guarantee the conversion as well as the testing of all financial and IT systems before the date of December 31. Same dates were effective also for conversion and changes of all official administrative forms and stamps together with their withdrawal from circulation. The costs were to be covered by the public budgets of respective year. [9]

Sector of households

NBS survey evaluated also possible benefits and costs for the sector of households. The expected benefits included mainly the increase of economic growth, increase of employment and wages. But these were rather general expectations with no particular time limit. One of the certain benefits was the elimination of exchange transactions fees when travelling abroad. It was decided that the household sector should not be burdened by currency changeover costs. But the threat of possible indirect costs linked to the changeover persisted.

NBS estimated that the adoption of euro might bring the slight increase in prices, reaching approximately to 0.3% GDP. According to experiences and observation from other countries, even though directly after the changeover inflation rate increased only slightly, the perceived increase was more significant (see Graph 2).

Graph 2: Difference in perceived inflation in countries adopting the euro in 2002



Source: EURÓPSKA KOMISIA: *Spôsobilo euro nárast cien? Information bulletin. KC-70-05-956-SK-D*

Eurostat estimated that the difference between the actual and the perceived inflation rate was caused by the perceived increase in prices of regularly bought items which was actually important when compared to the change in prices of rarely bought items such as IT or insurance etc. Though the impact of regularly bought items on living costs and the whole consumer index basket is less significant, it is usually more followed and visible to the households. That is why

people could have been under the impression that all prices rose after the currency changeover, even though these changes were limited and did not have considerable impact on the living costs.

Rather interesting phenomenon, partly associated with euro changeover was the increase of real estate property prices. This development was quite prominent in the capital city and its region even in the preparation period before the actual changeover. After the changeover prices had risen dramatically also in other regions of Slovakia, including smaller towns. One of the main factors explaining this development could have been the psychological impact of euro introduction. People were worried about the depreciation of their savings and realties were viewed as a more secure option. As demand exceeded supply, the increase touched the prices of new apartments as well as the older ones. Thus we might debate that some of the possible negative impacts manifested themselves even before the actual changeover.

Other issues included getting used to new currency, new values and new prices. NBS expected the increase of insecurity and price awareness of households what might have possibly caused short-term decrease of consumer expenditures on goods and services

The last but also important issue was the necessity to replace all exiting koruna's cash in circulation. Dual circulation was allowed until January 16, 2009. Until this date payments were accepted in koruna's banknotes and coins. After January 16, the exchange of former currency for the new one was possible only in commercial banks. There were certain concerns regarding older people and people not living in the proximity of banks that appeared as unjustified. [2]

FIRST YEAR WITH EURO

In order to evaluate the whole process of currency changeover in Slovak Republic it is important to point out many circumstances that appeared together with this change. In January 2009, right after the changeover, Slovak economy was considerably influenced by so-called gas crisis. The disagreement between Russia and Ukraine resulted firstly in the supply disruptions and later in the halting of the gas shipment via Ukraine to the rest of Europe. Slovakia was one of the countries that were the most severely affected by the cut-offs of their gas supplies. Despite its significance, currency changeover was thus not viewed as the most important country issue at the time. Later on, Slovak economy was influenced by the global economic slowdown that resulted in global recession. The impacts of this development became evident in a short time as a result of the close business relations with foreign trade partners.

Actual changeover started on January 1, 2009. The dual circulation was allowed for the first 16 days, i.e. until January 16. After this date, there was only one official currency in circulation, i.e. euro while the koruna's cash continued to be withdrawn from the circulation. In hindsight, the whole changeover was realised successfully and without any significant problems. Despite some negative scenarios, such as delayed payments, cash shortages or insufficient frontloading of cash, none of these scenarios were fulfilled. Households, public sector as well as enterprises acted in a very responsible manner and the euro was adopted as a new currency very quickly and quite easily.

Possible threat and one of the biggest concerns of Euro-sceptics, significant price increases, were not confirmed. According to one of the NBS's analyses, impact of euro on inflation in January reached 0.13-0.19%. Should we take into consideration also the items with recorded price decreases, the whole impact would be qualified as 0.0% (or interval -0.12-0.12%). Headline month-on-month inflation rose 0.3% in January what was also the lowest January increase of inflation in Slovakia. [11]

Table 3: Contributions of respective COICOP categories to increase of headline inflation in January 2009 (%)

	COICOP	Contribution to the overall month-on month change
01	food and non-alcoholic beverages	-0.011
02	alcoholic beverages, tobacco and narcotics	-0.001
03	clothing and footwear	-0.003
04	housing, water, electricity, gas and other fuels	-0.002
05	furnishing, household equipment and routine household maintenance	0.000
06	health	0.025
07	transport	0.006
08	communication	-0.002
09	recreation and culture	-0.005
10	education	-0.006
11	restaurants and hotels	0.008
12	miscellaneous goods and services	-0.006
	together	0.003

Source: NBS: *Vplyv zavedenia eura na infláciu v Slovenskej republike v januári 2009*. 2009 Online: http://www.nbs.sk/_img/Documents/PUBLIK/MU/vplyvEURA.pdf

As mentioned before, banking sector played rather significant role during the whole process. Banks participated in the process of amending the respective normative legal acts and cash frontloading; they had to guarantee the conversion of bank accounts and the POS terminals and ensure the withdrawal of koruna's cash from the circulation. During the first days of January, banking sector accomplished the conversion of approximately 11 million bank accounts, 32,107 POS terminals and 2,268 ATMs. Most of the ATMs (96%) were fully functional from the first hours of the year 2009. On January 1, 139,291 cash withdrawals were realised what represented the increase of 600% compared to January 1, 2008.

Banking sector viewed the dual circulation period positively and appraised the fact that it took only 14 days, instead of allowed 16 days. On the other hand, many retailers overestimated the need of the cash and had to deposit the excess euro cash on their bank accounts, thus causing the problems to some of Slovak commercial banks. As a result, banks temporarily (until August 2009) eliminated fees for this type of transaction. It was viewed as an additional cost of changeover born by the banks. [6]

Generally, it was necessary to ensure 188 million of euro banknotes (with total value of 7 milliard EUR) and 500 million of euro coins. Frontloading of commercial banks with the euro cash began on October 7, 2008 and continued until December 29, 2008. Minting of the "national" euro coins was ensured by Kremnica's Mint. Slovakia thus became the first of the new euro countries to mint its coins in its own national mint. [18]

The value of overall Slovak koruna cash in circulation on December 31, 2007, i.e. one year before the actual changeover, was 155.154 mld. SKK. During the first 14 days of dual circulation and gradual koruna's withdrawal, 45.57 mld. SKK was withdrawn from the circulation. On April 30, 2009 the value of koruna cash in circulation was 6.5 mld. SKK. [17]

As of January 1, 2009, NBS ceased to figure as a sole national monetary authority in Slovakia. All monetary competences, such as the right to determine monetary policy, issue national currency and influence exchange rate evolution, were transferred to ECB. NBS became member of the Eurosystem and started to participate in monetary policy decisions concerning the euro area as a whole. [14]

CONCLUSION

The whole process of euro changeover in Slovak Republic can be described as successful. Precise and detailed preparations and good coordination between NBS, commercial banks and Slovak Ministry of Interior as well as other general

government bodies and other institutions helped in the whole process. Even European Commission stated that the adoption of euro in Slovakia was successful and without any serious problems. However, more objective and more accurate assessment of real and actual costs of the euro changeover would be possible only after several years with this currency.

References

- [1] Bartóková, L.: The evolution of monetary policy transmission mechanisms of V4 countries. In *Ekonomie a Management*, volume 8. 2/2010. p.6-17
- [2] Ďurčová, J., Raisová, M.: Vstup Slovenskej republiky do európskej menovej únie a jeho vplyv na jednotlivé ekonomické subjekty slovenského hospodárstva. In: „Mezinárodní Baťova konference“. Zlín 2008. Univerzita Tomáše Bati ve Zlíne. ISBN: 978-80-7318-664-7.
- [3] ECB: Konvergenčná správa, May 2008. Online: http://www.nbs.sk/_img/Documents/ecbpub/konvspr/cr200805sk.pdf
- [4] Európska komisia: Spôsobilosť euro nárazníka? Information bulletin. KC-70-05-956-SK-D
- [5] Hüttner, R.: Príprava na euro bude stáť stá milióny, rozhovor s manažérom spoločnosti Tesco pre zavedenie eura – Alešom Doložilekom. January 1, 2008. Online: http://www.tvojepeniaze.sk/priprava-na-euro-bude-stat-stamiliony-dxd/sk-peuro.asp?c=A080121_085356_sk-peuro_p01
- [6] Laznia, M., Hrtko, V.: Pohľad Slovenskej bankovej asociácie. In: *Biatec*. volume 17. 6/2009. p.12-13
- [7] NBS, Stratégia prijatia eura v SR. 2004. NBS document. Online: www.nbs.sk
- [8] NBS: Komentár bankovej rady k rozhodnutiu o určenej výške úrokových sadzieb. 2006. Online: www.nbs.sk
- [9] NBS: Národný plán zavedenia eura v Slovenskej republike. 2005. Online: <http://www.nbs.sk/ZAKLNBS/PUBLIK/BROZURY/NARPLAN.PDF>
- [10] NBS: Výročná správa 2008. p.22. online: http://www.nbs.sk/_img/Documents/_Publikacie/Vyrocnasprava/VSNBS08.pdf
- [11] NBS: Vplyv zavedenia eura na infláciu v Slovenskej republike v januári 2009. 2009 Online: http://www.nbs.sk/_img/Documents/PUBLIK/MU/vplyvEURA.pdf
- [12] NBS: Výročná správa 2009. Online: http://www.nbs.sk/_img/Documents/_Publikacie/Vyrocnasprava/VSNBS09.pdf
- [13] NBS: Euro changeover. 2009. Online: <http://www.nbs.sk/en/euro/euro-changeover/timetable-of-the-euro-changeover-in-slovakia>
- [14] Polónyi, M.: Účast NBS na činnosti Eurosystemu. In: *Biatec*, volume 17. 6/2009. p.30-32
- [15] Šramko, I.: Zavedenie eura na Slovensku, presentation, Košice, October 6, 2006
- [16] Šuster, M., Árendáš, M. a kol.: Vplyv zavedenia eura na Slovenské hospodárstvo. NBS document. NBS Research Department. March 2006. Online: www.nbs.sk
- [17] Vlnková, M.: Sťahovanie slovenských peňazí z obehu. In: *Biatec*, volume 17. 6/2009. p.21-22
- [18] Vrana, J.: Príprava na zavedenie eura do hotovostného peňažného obehu. In: *Biatec*, volume 17. 6/2009. p.14-18

CHAPTER 10.

MISCONDUCT OF THE KEY POLICY RATE: THE CASE OF SERBIA

Branko Živanović¹

Milena Kovačević²

Una Vukoje³

Abstract

During the global economic and financial crisis, namely in the 2008-2009 period, the National Bank of Serbia kept the key policy rate at an unacceptably high level compared to EU member countries. The rationale behind implementation of such monetary policy were attempts to control fluctuations in the dinar exchange rate, keep the current inflation within the planned targets and sterilize capital outflows due to possible repatriation of liquid reserves of foreign commercial banks (the hot money effect).

The strictly firmly monetary-oriented policy of the National Bank of Serbia with a significantly high key policy rate as the main pillar only partially fulfilled the above goals. Such policy led to stagnation in the already high commercial banks' interest rates, which further amplified the downturn in commercial and retail lending, and streamlined the major part of liquid reserves to the National Bank of Serbia through the repo channel. These reasons were the cause of serious recession consequences.

The authors assume that the National Bank of Serbia should have started lowering the key policy rate much earlier, at the very beginning of the global economic and financial crisis. The EU member countries and most of the economies that Serbia compares with began significantly decreasing their key policy rates in the first half of 2008.

¹ Branko Živanović, PhD, Associate Professor, Belgrade banking academy – Faculty for Banking, Insurance & Finance

² Milena Kovačević, MSc, Teaching Assistant, Belgrade banking academy – Faculty for Banking, Insurance & Finance

³ Una Vukoje, Teaching Assistant, University BK

Key words: *the National Bank of Serbia, the two-week repo rate, repo stock, targeted inflation, dinar exchange rate, lending activity.*

INTRODUCTION

This paper focuses on the misconduct of monetary policy pursued by the National Bank of Serbia (NBS) during the global financial downturn. When EU member countries and most economies that Serbia compares with began significantly decreasing their policy rates in the first half of 2008, lowering them below the current inflation level, the NBS kept its key policy rate (the 2-week repo) at an unacceptably low level.

In the first part of this paper, policy rate movements of key European central banks (the Bank of England, European Central Bank) will be presented and compared with the current inflation in the eurozone and the UK. The authors will also present the cases of monetary policy conduct through the minimum interest rates policy and compare it with the current inflation in EU countries, as well as Hungary and Poland that authors believe Serbia can compare with.

In the second part, the controversial NBS monetary policy conduct will be analyzed. The controversy implies that the NBS managed the policy of maximum key policy rates in the period of the global financial crisis, while most European central banks kept the minimum ones. Such policy triggered a chain of negative macroeconomic effects – banks' sharp lending to the economic sector and the sector's considerable illiquidity, declining employment, plummeting value of the national currency and melting of national foreign exchange reserves.

ASPECTS OF EUROPEAN CENTRAL BANKS' CONDUCT OF THE KEY POLICY RATE IN TIME OF THE CRISIS – STRATEGIC APPROACH –

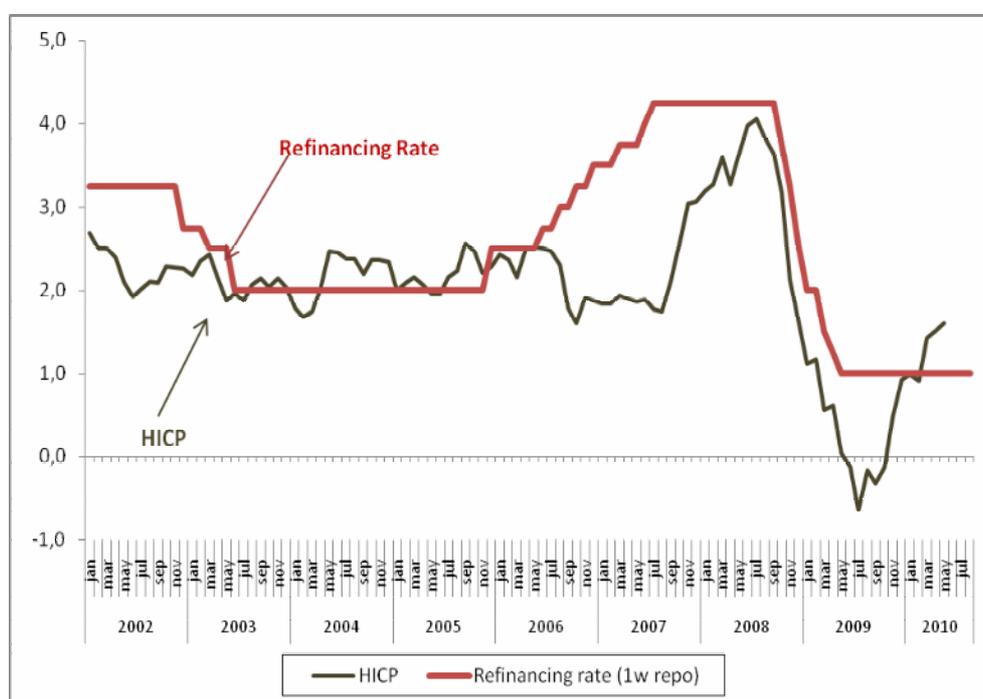
The first signs of the financial downturn in the European Union (EU) were felt in the third quarter of 2008. The cornerstone of European central banks' monetary policy was to be found in key policy rate cuts.

The prominent EU central banks and even their followers (yesterday's red chain countries' central banks) started lowering their key rates in the scope of procyclical monetary and economic policy to beef national business up with a cheap source of funds. The so-called policy of cheap money, recognizable in the

form of new Keynesianism, was implemented to prevent systemic illiquidity and unemployment.

In the dawn of the global financial slump, the European Central Bank (ECB) started reducing its key interest rate to preclude the development of a recessionary spiral. This assertion is confirmed in Graph 1.

Graph 1: Flotation of refinancing rate and HICP (2002 – 2010)



Source: European Central Bank.

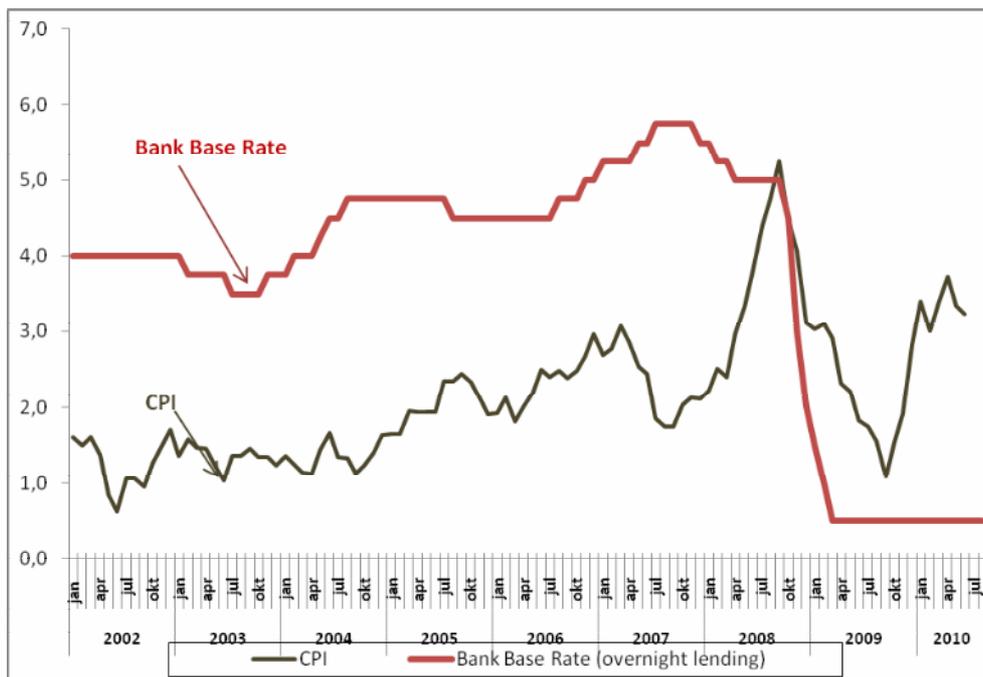
The ECB started breaking the trend on 15 October 2008 and reduced the refinancing rate from 4.25 percent to 3.75 percent. As the recession deepened, the ECB conducted proactive monetary policy by further lowering the key policy rate to beef up the eurozone banking liquidity. Cecchetti (2006:473) pointed out that when ECB policy makers want to “fine-tune” the reserve levels they broadly use refinancing operations. The decrease in the refinancing rate was a clear signal of embarking on a kind of Keynesian policy – right on time.

European monetary policy makers were actively cutting the key interest rate to the level of 1 percent. The rate has remained unchanged since May 2009. In

March 2010, the inflation level measured by HICP surpassed the key policy rate, which from the strict monetary aspect is not highly recommendable. On the other hand, the ECB is determined to boost aggregate demand thus keeping unemployment at the lowest possible level. For this to happen, the system needs to be supported by low sources of funds. Traditionally, the economic dogma accepts the “right on time” central banks’ and government intervention.

The Bank of England started with the policy of “cheap money” by lowering its base rate even earlier. Modestly, at the very beginning, it decreased its base rate from 5.5 percent in January 2008 to 5 percent in September 2008. The level of inflation measured by CPI and HCPI was still pretty low vis-à-vis the current base rate. A sharp decline in the key interest rate started right on time as expected from October 2008 and it plummeted to the historically lowest level of 0.5 percent in March 2009, and has remained unchanged since.

Graph 2: Flotation of bank base rate and CPI (2002 – 2010)



Source: Bank of England.

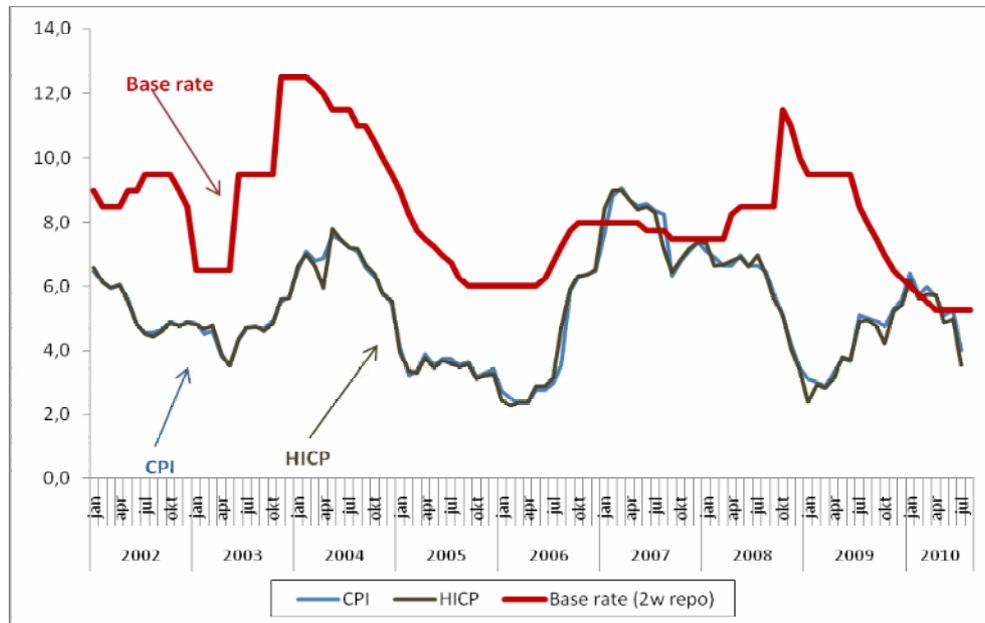
In comparison to the ECB, the Bank of England went even further by tolerating a wider gap between the key policy rate and HCPI. It seemed like “short sighted” policy but it was not – it was the start of the anti-cyclical strategy which has its

Poland as a new EU member followed strictly the European policy-makers' path. Naturally, the central bank of Poland started decreasing its key policy rate from 6 percent in October 2008 to 3.5 percent in June 2009, and has kept it unchanged since.

It is obvious that the central bank of Poland wasted no time and reacted promptly by following the ECB and Bank of England's monetary course – by lowering the one-week repo rate below the floor of the current inflation.

The central bank of Hungary acted as the above EU monetary authorities and started decreasing its key interest rate in November 2008. Until then the base rate had been the key instrument for preventing a rise in inflation. Consequently, it was expected that the decrease in the base rate would precipitate the downfall in economic activity. The base rate was falling sharply – it touched the current level of inflation in December 2009 and closely crawled along the CPI and HICP index until April 2010.

Graph 4: Flotation of bank base rate and CPI/HICP (2002 – 2010)



Source: Central bank of Hungary.

There has been a great deal of discussion about recovery recently. It was expected that European central banks were about to start raising their interest rates in the

last quarter of 2010. That seems unlikely. Rates are likely to remain unchanged throughout the last quarter of the current year and possibly well into 2011 and even beyond. Presumably, key European central banks – the ECB and the Bank of England, will look for a kind of a natural interest rate, which could be defined as the equilibrium real interest rate consistent with price stability (Amato 2005:729). It is easy to see why the natural rate can play the key role in monetary policy, and it will be given the current mandates through key European central banks – among the main goals of monetary policy are price stability and output stabilization. Such “soft” monetary policy could be recognizable as a New Keynesian model or the New-Wicksellian framework and the natural rate will play a key role in output and inflation fluctuations (Weber, Lemke, Worms 2007:52-54). Central banks would set their target short-term interest rates equal to the natural rate plus the targeted rate of inflation, essentially trying to mimic the idle conditions of an economy without nominal rigidities. They will try to employ the natural rate in the daily conduct of monetary policy. According to Amato’s approach (2005:730), most central banks will formulate current monetary policy by setting a target for a short-term nominal interest rate (typically an overnight money market rate) and the natural rate will provide a convenient benchmark that policy rates can be measured against directly. Under the current mandates, central banks, besides output and unemployment gap stabilization will have to provide price stability in the mid-term. After more than two years of very low key interest rates, price stability is becoming questionable.

NBS’S MISCONDUCT OF THE KEY POLICY RATE

EU member countries began significantly decreasing their policy rates in the third quarter of 2008. By contrast, during the global economic and financial crisis – in the 2008-2009 period, the NBS kept the key policy rate at an unacceptably high level compared to European central banks’ key policy rates. The reasons for conducting such monetary policy were attempts to control fluctuations in the dinar (RSD), keep the current inflation within the planned targets and sterilize capital outflows due to possible repatriation of liquid reserves of foreign commercial banks (the hot money effect).

The strictly firmly monetary-oriented policy of the NBS with a significantly high key policy rate as the main pillar only partially fulfilled the above goals. Namely, such policy led to stagnation in the already high commercial banks’ interest rates, which further amplified the downturn in commercial and retail lending, and streamlined the major part of liquid reserves to the NBS through the repo channel. These reasons were the cause of serious recession consequences.

The key policy rate used in pursuance of monetary policy is the two-week repo rate. It appears as the main monetary instrument used by the NBS to fulfill its main goal of achieving the targeted percent of core inflation. The rate is fixed and set by the NBS Executive Board. The repo rate is paid out on a regular basis to commercial banks by the NBS for two-week repo (2W repo) transactions. The NBS has a role of an issuer and seller of its own short-term securities, which are sold to commercial banks in a two-week period and then repurchased.

The repo rate as the NBS's key policy rate is created as a targeted interest rate with a role to guide commercial banks' interest rates. It is set up in a shape of a corridor model, which in the middle has the central repo rate that is followed by two sub-key policy rates. The first one is the NBS interest rate on commercial banks' overnight deposits, which is 2.5 p.p. lower compared to the central repo rate and the NBS interest rate on very short-term credit facilities granted to commercial banks for supporting their liquidity (2.5 p.p. higher than the central repo rate).

The deposit facility interest rate is the lowest NBS interest rate and has a role of floor margin of the corridor. It is a deposit interest rate that is paid out to commercial banks on their overnight deposits, which are deposited in NBS's special accounts, which represent the surplus of commercial banks' daily liquidity.

The choice of the key policy rate in modern theory and practice constitutes an area of very active academic research and debate. Weber, Lemke and Worms (2008:49) suggest that short-term interest rates should play a key role in monetary policy. Their standpoint is that, "short-term interest rates contain important information on the current state of the economy, and on the extent to which past monetary policy measures have already started to take effect. Put differently, interest rates are important as both an input into and an output of monetary policy decisions – they are instrument variables as well as indicator variables."

The NBS two-week repo trading has a shape of a typical open market operation. A typical open market operation appears as repo agreements. Lumpkin (1993:59) describes repo or RP transactions as reverse repurchase agreements – in which a money market participant acquires immediately available funds by selling securities and simultaneously agreeing to repurchase the same or similar securities after a specified time at a given price, which typically includes interest at an agreed upon rate. In a similar frame, the NBS issues and sells its own short-term securities to domicile commercial banks on the regular and roll-over basis. Repo trading is established as an auction trading model with short-run NBS securities via an electronic auction platform.

From the commercial banks' point of view, repo transactions are *par excellence* investments, bearing in mind that the NBS two week repo securities carry minimum credit risk exposure and very low transaction costs. The banking sector preferred repo communication with the NBS for the following reasons:

- effectively positive interest rate,
- *par excellence* secured investment,
- investment with the ability of closing it every two weeks or automatically extending it for the same period,
- investment with a simple procedure and supplementary costs and finally without setting aside any reserves for potential loan losses,
- possibility for earning extra profit based on interest rate-FX arbitrage (*carry trade* strategy).

On the other hand, from the monetary authority's point of view, it is one of the basic kit tools for preventing a rise inflation and controlling volatility of the national currency. By using the key policy rate, domestic monetary authorities are able to shrink and widen monetary supply (monetary aggregate M1), which is a direct way of controlling demand pull inflation and nominal RSD supply. Finally, the NBS is impacting on a range of inter-bank interest rates on one side and banks' retail and corporate lending interest rates on the other. The NBS was efficient in controlling these interest rates and the key policy rate was somewhat a hurdle rate for commercial banking investments.

Besides the key policy rate, domestic monetary authorities used required reserves to a great deal as one of the key instruments in conducting monetary policy. The reserve requirements used to be and still are at a quite significant level. Such a high level of reserve requirements additionally cuts commercial banks' liquidity reserves short.

Owing to the simultaneous use of the repo rate and reserve requirements, monetary supply was kept tight and the RSD floatation and the level of inflation were under the NBS's control. The instruments were efficiently combined but in a visible strong monetary concept, which resulted in high commercial banks' lending rates, a slowdown in banks' lending activity and recession consequences. It is worth pointing out that the discount rate was not used as one of the key instruments, as it was the case in the past. The discount rate existed nominally within the NBS interest rate range, but was completely passive. The banking system was liquid enough in both RSD and foreign currency, and there was no need for creating primary credits through the discount windows procedure based on the discount rate. On the other hand, there has been a noticeable fear of potential inflation, fuelled by this type of credits in recent years. The NBS's move can be judged as right as Mengle (1993:22) contends that the discount window

concept started disappearing during the '80s. The authors' standpoint is that the discount rate and the discount window procedure, as a concept of creating extra banking liquidity, will not be used in the near future, which is a proper decision. The reasons for activating this kind of the key policy rate and primary credits again could be rooted in insufficient liquidity of the domestic banking system. Lesser liquidity could be a result of a significant outflow of liquidity reserves of foreign bank subsidiaries in Serbia. The potential outflow would be provoked by a potential RSD collapse, uncontrolled inflation, absence of carry trade profitable investments based on an effectively positive repo rate, and alarmingly high credit risk.

The choice of the two-week repo rate as the key monetary policy instrument is acceptable but *magnum crimen* is its level – in the period from the third quarter 2008 to the second quarter of 2009. Despite sharp declines in key policy rates in the above European central banks in November 2008, the NBS unexpectedly raised its rate to the highest level (17.75% per annum). Such a high key monetary policy rate was even more questionable bearing in mind that the RSD volatility and current inflation sequences were insignificant and completely under the NBS's control.

Table 1: The NBS key policy rate – 2-week repo (timeline Graph)

Date of change	Key policy rate (REPO, %)
03 November 2008	17,75
22 January 2009	16,50
06 April 2009	15,00
22 April 2009	14,00
8 June 2009	13,00
10 July 2009	12,00
08 October 2009	11,00
05 November 2009	10,00
29 December 2009	9,50
23 March 2010	9,00
08 April 2010	8,50
11 May 2010	8,00
05 August 2010	8,50
07 September 2010	9,00
14 October 2010	9,50

Source: NBS repo platform.

Strictly oriented monetary policy with a 2-week repo rate as the main pillar caused a range of serious consequences.

Firstly, commercial banks rechanneled significant amounts of their liquidity into NBS repo securities, as presented in Table 2.

Table 2: Auction trade of NBS 2-week repo securities 2009/2010

Year	Month	Outstanding of securities/maximum monthly amount	The highest accepted interest rate on auction (p.a.)	Year	Month	Outstanding of securities/maximum monthly amount	The highest accepted interest rate on auction (p.a.)
2009	jan	118 220 968 346	17,75%	2010	jan	169 975 000 000	10,00%
	feb	78 531 297 729	16,50%		feb	152 770 000 000	9,50%
	mar	98 436 971 479	16,50%		mar	155 310 000 000	9,50%
	apr	98 236 971 479	16,50%		apr	140 330 000 000	9,00%
	may	108 228 481 642	14,00%		may	140 240 000 000	8,00%
	jun	119 007 025 477	16,00%		jun	121 695 000 000	8,00%
	jul	146 035 000 000	12,00%		jul	89 950 000 000	8,00%
	aug	157 500 000 000	12,00%		aug	70 330 000 000	8,50%
	sep	160 015 000 000	12,00%		sep	71 420 000 000	9,00%
	oct	169 165 000 000	11,00%		oct	56 040 000 000	9,00%
	nov	185 373 000 000	10,00%		nov	-	-
	dec	178 675 000 000	10,00%		dec	-	-

Source: NBS repo platform.

From the banks' point of view, the repo channel was a "safe haven" for their investment and key players in the domestic foreign exchange market were cashing in on confusion by using the carry trade strategy. The interest expenses arising from REPO transactions with domestic banks in 2008 equaled RSD 29.660.673.000, while in 2009 due to their lower yields, interest expenses reported significant declines amounting to RSD 15.373.259.000. However, the outstanding NBS repo securities were a frozen part of banking liquidity completely out of circulation in the economic sector (consumption and production). Repo transactions rose from the level of RSD 118.2 bln to the level of RSD 185 bln in the period from January 2009 to November 2009, when the peak was reached. A significantly high level of outstanding NBS repo securities were kept until May 2010, when it dropped to RSD 140.2 bln – despite continual cuts in the key policy rate.

Secondly, the high key policy rate has led to a crowding-out effect, resulting in a slower lending rate to the economic sector, as presented in Table 3. Outstanding loans to corporate and retail enterprises increased by 18.71 percentage points (p.p.) from the beginning of 2009 until the end of the year. Loans to households reported a negligible increase of 4.78 p.p. On the contrary, outstanding NBS repo securities have risen by a significant rate of over 50 p.p. since the beginning of 2009 despite a sharp fall in the key policy rate from the 17.75 percent at the beginning of the year to 10 percent at the end of the year.

Table 3: Bank loans and investments in 2009 (in RSD mln)

RSD loans disbursed to:		
2009	Corporate&retail enterprises	Households
January	660364	399240
February	676618	396436
March	701804	396051
April	712549	398038
May	713059	396628
June	709675	392749
July	723842	394154
August	729521	396246
September	735958	398535
October	749334	403445
November	764570	410397
December	783959	418363

Source: National Bank of Serbia.

With a sharp drop in the key policy rate, commercial banks channeled more of their liquid reserves into the economic sector (Table 4), while on the other hand outstanding NBS repo securities reported significant declines due to their current unattractiveness and inability to earn high profits in a short period of time.

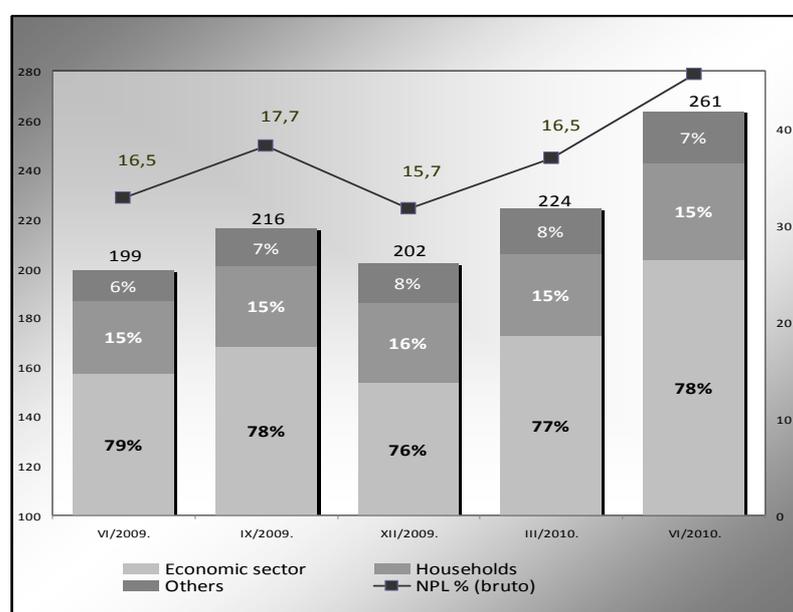
Table 4: Bank loans and investments in 2010 (in RSD mln)

RSD loans disbursed to:		
2009	Corporate&retail enterprises	Households
January	801586	428471
February	816702	434300
March	830343	442599
April	841934	446417
May	876548	467168
June	904139	489890
July	926830	500991

Source: National Bank of Serbia.

The biggest damages of strict monetary policy were reflected in the rising amount of non-performing loans (NPLs) as a result of serious economic and household sector illiquidity. According to commercial banks' appraisal, at the end of August over 69.000 firms were blocked, in the amount of RSD 540 bln and over 100.000 people employed. As illustrated in Graph 5, at the end of the second quarter NPLs amounted to RSD 261 bln.

Graph 5: Non-performing loans



Source: National Bank of Serbia.

Thirdly, despite the high level of the key policy rate which was effectively positive during the whole observed period (2008/2010) and accompanied by a large amount of NBS interventions in the domestic foreign exchange market (Table 5), the national currency depreciated noticeably. The NBS intervened on the selling side in 2009 with € 706.6 mln while that amount doubled in 2010 in just eight months' period equaling € 1.840 mln.

Table 5: Annual interventions by NBS, 2009-Q3/2010

Year	Month	in € mln	Year	Month	in € mln
2009	jan	442,85	2010	jan	245,5
	feb	219,75		feb	196,0
	mar	0		mar	190,0
	apr	0		apr	5,0
	may	1		may	359,0
	jun	1		jun	421,0
	jul	0		jul	231,0
	aug	0		aug	192,5
	sep	0		sep	-
	oct	0		oct	-
	nov	0		nov	-
	dec	42		dec	-
Total	706,6		Total	1840	

Source: National Bank of Serbia.

Despite temporary interventions in 2009 and more frequent and aggressive interventions in 2010, the RSD depreciated by 8.23 percent (2009) and 10.45 percent (2010), respectively (Table 6).

Table 6: RSD depreciation (2006 – 2010)

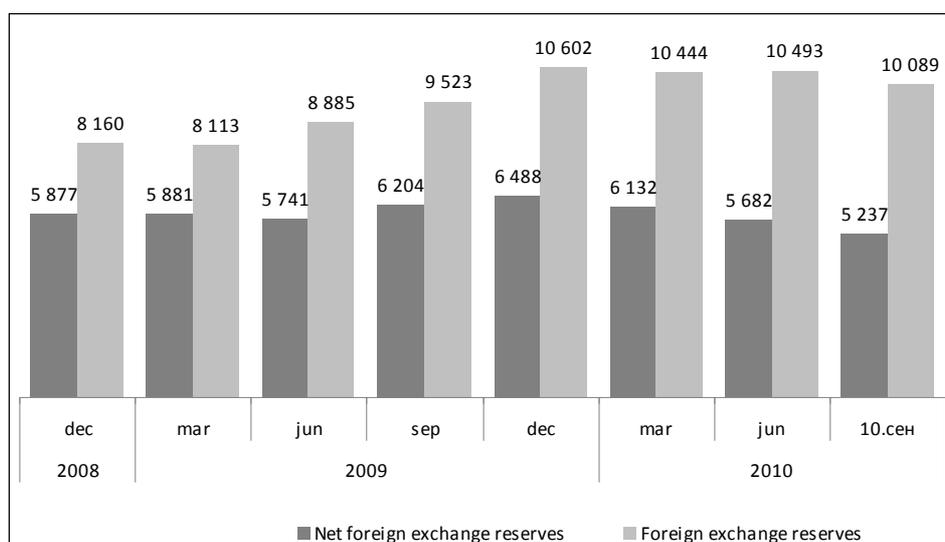
Date	Middle exchange rate of RSD	Depreciation of RSD (%)	
31.12.2006.	79,0000	- 7,60	appreciation
31.12.2007.	79,2362	0,30	depreciation
31.12.2008.	88,6010	11,82	depreciation
31.12.2009.	95,8888	8,23	depreciation
08.10.2010.	105,9064	10,45	depreciation

Source: National Bank of Serbia.

The Serbian economy remains in the doldrums and even started to take another turn to the worse. In addition, the apparent signs of a double dip caused by

restrictive monetary policy with such a high key policy rate during 2009 were a high level of unemployment and negative GDP growth rate⁴ of 3 percent. The given indicators are disappointingly feeble, especially the level of unemployment that rose from 14 percent in April 2008 to 20.1 percent in April 2010. The domestic labor market seems to continue to deteriorate.

Graph 6: NBS's foreign exchange reserves, Q4-2008/Q3-2010 (in € mln)



Source: National Bank of Serbia.

The long, downward spiral of negative effects is not complete without mentioning foreign exchange reserves and net foreign assets. The most valuable amount, i.e. net foreign exchange reserves, defined as foreign exchange reserves less banks' foreign exchange balances on accounts with the NBS and drawings from the International Monetary Fund (IMF), dropped significantly from the level of € 6.488 mln at the end of December in 2009 to the level of € 5.237 mln in September 2010. The remaining amount is the result of withdrawal of loan tranches under the IMF's Stand-by Arrangement, in the amount of € 1.2 bln, and banking reserves currently standing at € 3,1 bln. Foreign reserves have been on a decline as a result of periodical aggressive NBS interventions. But the source of their permanent renewal are foreign borrowing and banking reserves (Zivanovic, Kovacevic, Sakotic 2010:367-368). Provided that such a pace of decline is to continue in the following period, it unquestionably threatens to "jeopardize" the

⁴ www.rzs.rs, Statistical Office of the Republic of Serbia.

agreement with the IMF if net foreign exchange reserves were to fall below the level of € 4.600 mln, unless agreed otherwise.

CONCLUSION

During the time of the global economic crisis, the National Bank of Serbia kept the key policy rate at an unacceptably high level, in the period of 2008-2009 to be precise. The aims were to control the RSD fluctuations and the current inflation within the planned targets as well as to sterilize the capital outflow due to possible repatriation of liquid reserves of foreign commercial banks (i.e. the hot money effect).

The strict NBS monetary oriented policy conducted in this period partially fulfilled the aims by focusing on a significantly high policy rate. This particular policy caused a slight increase in already high commercial banks' interest rates, which provoked a steep decline in commercial and retail lending, and streamlined a major part of liquid reserves to the NBS through repo channel. The anti-cyclical monetary policy was one of the main reasons of the recession with the following consequences: considerable illiquidity, a fall in the GDP growth rate and employment level. Furthermore, the NBS policy with a significantly high 2-week repo as the main pillar did not prevent a decrease in the national currency value – RSD depreciated significantly, and melting of national foreign exchange reserves, i.e. net foreign assets.

The predictions for the coming period are that the long and downward spiral of negative effects will continue to develop. Especially endangered will be liquidity of the economic sector and the employment level. It is expected for the RSD stability and level of net foreign assets, as the key part of national FX reserves, to be under great pressure in the last quarter of the current year and during 2011. The author's standpoint is that the NBS should have decreased the key policy rate much earlier, at the very beginning of the global economic and financial crisis.

The NBS will continue to conduct monetary policy with an effectively positive key policy rate slightly over the current level of inflation. The monetary authorities will look for a kind of natural monetary policy rate (theoretically speaking) which borders in the triangle given by the IMF's technical suggestions – level of net foreign assets at the end of the year (EUR 4 billion), budget deficit (4%) and targeted inflation (6-8%). Suggestions are the IMF's ultimate conditions for continuing the current stand-by arrangement.

List of Abbreviations

2-w repo rate – two-week repurchase rate
CPI – Consumer Price Index
ECB – European Central Banks
GDP – Gross national product
HICP – Harmonized Index of Consumer Prices
IMF – International Monetary Fund
NBS – National Bank of Serbia
NPL – Non-Performing Loan
Repo rate – repurchase rate
RSD – dinar exchange rate

References

- [1] Amato, D., 2005, The Role of the Natural Rate of Interest in Monetary Policy, CESifo Economic Studies, Vol. 51, 729-755.
- [2] Cecchetti, S., G., 2006, Money, Banking and Financial Markets, McGraw Hill, NY
- [3] Cassel, G., 1927-28, The Rate of Interest, The Bank Rate and The Stabilization of Prices, The Quarterly Journal of Economics, 42, 511-29. Reprinted by the courtesy of the publisher without change from the original text. 1969, 319-333. Readings in Monetary Theory, Allen and Unwin Ltd., London.
- [4] Fisher, I., 1930, The Theory of Interest, Porcupine Press, INC., Philadelphia. Reprinted 1977.
- [5] Ford, R., and Laxton, D., 1999, World Public Debt and Real Interest Rates, Oxford Review of Economic Policy, Vol.15, No.2.
- [6] Lumkin, A., 1993, Repurchase and Reverse Repurchase Agreements, Instruments of The Money Market, Federal Reserve Bank of Richmond, 59-74.
- [7] Mengle, L., 1993, The Discount Window, Instruments of The Money Market, Federal Reserve Bank of Richmond, 22-34.
- [8] Meulendyke, A., 1989, US Monetary Policy and Financial Markets, Federal Reserve Bank of New York.
- [9] Olsen, K., Qvigstad, J., F., and Roisland, O., Monetary Policy in Real Time: The Role of Simple Rules, Central Bank of Norway, BIS Papers No 19.
- [10] Zivanovic, B., Kovacevic, M., and Sakotic, M., 2010, Dinar's FX rate paradigm, Economic Growth and Development of Serbia New Model, Belgrade Banking Academy – Faculty for Banking, Insurance and Finance and Institute of Economic Sciences, Belgrade, 359-375
- [11] Weber, A., Lemke, W. and Worms, A. 2007, How Useful is the Concept of the Natural Real Rate of Interest for Monetary Policy, Cambridge Journal of Economics 32, 49-63
- [12] www.ecb.int
- [13] www.bankofengland.co.uk
- [14] www.nbp.pl
- [15] www.mnb.hu

PART II.
REGIONAL POLICY,
AGRICULTURE AND EU
ACCESSION

CHAPTER 11.

INEQUALITY AND GROWTH: RELEVANT LINKS FOR THE PORTUGUESE ECONOMY

Adelaide P. S. Duarte¹

Marta C. N. Simões²

Abstract

During the 1980's, Portugal experienced a decrease in income inequality but this decrease was not uniform across the income distribution and, in recent years, income inequality seems to be following the opposite path. From around the year 2000, the Portuguese economy has become almost stagnant, with real GDP per capita still only around 60% of the EU-27 average in 2007. Portugal has also become one of the most unequal EU member states in terms of income distribution in the meantime. If inequality is negatively associated with economic growth and positively associated with poverty, this implies a reduction in the well-being of the Portuguese citizens. The aim of this paper is to review the theoretical and empirical literature on the relationship between inequality and economic growth from the perspective of the Portuguese economy. The correct identification of the (predicted) sign of the relationship for this particular country and of the underlying mechanisms that explain it is crucial to derive more accurate redistributive policy recommendations that enhance growth. The same exercise can be replicated for future EU member states in order to avoid unnecessary losses in terms of its growth potential and poverty alleviation.

Key words: *inequality, growth, transmission mechanisms, Portugal*

INTRODUCTION

Why should we care about inequality in the Portuguese economy? Since the 1980's, Portugal has experienced a decrease in income inequality but this

¹ Adelaide P. S. Duarte GEMF; Faculdade de Economia da Universidade de Coimbra; Portugal.

² Marta C. N. Simões GEMF; Faculdade de Economia da Universidade de Coimbra; Portugal.

decrease has not been uniform across the income distribution, especially towards the end of the 20th century and the beginning of the 21st. According to recent European Commission reports on the social situation in the EU, Portugal was the EU_25 member state that presented the most unequal income distribution in 2001 and again in 2004, with a Gini coefficient of 41% and a rate of population at risk of poverty of 20.3% in the last year under analysis. If inequality in the Portuguese economy is negatively associated to economic growth and positively associated to poverty this implies a reduction in the well-being of the Portuguese citizens. Furthermore, an economy experiencing high levels of income (and capital) inequality at medium levels of poverty will probably become more vulnerable to adverse shocks on economic growth, which in turn can lead to more poverty in the present, and most certainly in the future too if intergenerational mechanisms perpetuating poverty are in action.

The aim of this paper is to selectively review the theoretical and empirical literature on the relationship between inequality and economic growth from the perspective of the Portuguese economy in order to identify the correct (predicted) sign for the relationship in this particular country and the underlying mechanisms that explain that sign. Different mechanisms relating inequality and economic growth can be at stake explaining why different countries can experience different outcomes in the same period of time or why the same country experiences different outcomes in different periods of time. It is thus fundamental to correctly identify the channels of transmission of inequality to growth in the Portuguese economy. Ideally, all the mechanisms selected as crucial for the Portuguese economy should be tested, provided data is available, but even if this is the case some prior judgments should lead us to a ranking of the mechanisms according to its relevance for the economy under research. This correct identification and ranking will enable more accurate policy recommendations as far as redistributive policies for the Portuguese economy are concerned. The same exercise can be replicated for future EU member states in order to avoid unnecessary losses in terms of its growth potential and poverty alleviation.

The paper is organized as follows. In section 2 we provide a brief description of the Portuguese economy in terms of inequality and poverty in order to identify the most likely mechanisms relating inequality to economic growth relevant for this particular country. In section 3, we analyze how these mechanisms work based on a survey of the theoretical literature. Section 4 is devoted to a systematization of the empirical evidence. Finally, in section 5 we conclude.

A BRIEF CHARACTERIZATION OF INEQUALITY AND POVERTY IN THE PORTUGUESE ECONOMY

Over the period 1989-2000, the Portuguese economy grew faster than its partner countries, with growth accelerating in the last five years³. [41] characterizes thoroughly inequality and poverty in the Portuguese economy during the 1990's, concluding that, during this period, real income increased and this increase occurred at all levels of income, translating into a decrease in absolute poverty. But the increase in income was uneven across the income distribution, with inequality rising strongly in the first half of the period. This trend was reversed in the second half of the period, 1995-2000, however it was not strong enough to determine a trend for the whole period similar to the one that characterized the 1980's, when changes in income and inequality benefitted most the individuals at the bottom of the income distribution.

More recently and following the concerns of the Lisbon Agenda, a renewed interest on the social situation and respective policies by the European authorities has taken place, resulting in important reports on the social situation in the European Union with twenty five member states (EU_25) (see [25]; [26-28]). The data used in the reports refers to the years 2001 and 2004 and the analysis is conducted at country level as well as for the average EU_25 economy⁴.

According to the above mentioned reports, the Portuguese economy was the most unequal economy in 2001 and maintained the same place in 2004, with a Gini coefficient equal to 41% and a rate of population at risk of poverty of 20.3%, against, for instance, 20.6% for Lithuania and Poland and 9.2% for Sweden, and exhibiting the highest value in the group of Mediterranean Countries. This aggregate poverty rate corresponds to 19% of children, 57% of people at working age and 24% of elderly people.

The characterization of the Portuguese population at risk of poverty according to household type and work intensity shows that the values registered are higher for households with couples with 1 or 2 children with work intensity less than unity and at least equal to 0.5 (18%), followed by households with couples without children with 65 years of age or more (14%), and households with couples with 1 or 2 children with work intensity of unity (12%).

³ Real GDP per capita grew on average 2.8% over the whole period, 2.6% in 1989-1995 and 3.7% in 1995-2000.

⁴ Data for the year 2001 is from the European Community Household Panel Survey (ECHP) and for the year 2004 from the Statistics on Income and Living Conditions (EU-SILC).

The age composition of the Portuguese population classified as poor shows that a huge percentage are at working age, implying that in most cases their work is not productive enough to ensure decent living standards, due most certainly to their low levels of educational attainment and/or training. Additionally, this situation has strong negative consequences upon children that live in households whose parents are at working age since it makes them more exposed to the risk of poverty. Since 30% of the Portuguese considered poor live in households with couples with 1 or 2 children and work intensity between 0.5 and 1, and since a large number of poor children are raised in these households, these are confronted with a situation where their parents' work is not productive enough to enable them to overcome the poverty line. This is reflected in the fact that in Portugal the rate of poverty of children is above (or equal to) the EU average and the national rate of children at risk of poverty is higher than the national rate of risk of poverty for the overall population, respectively, 24% and 19%.

The former characterization thus lead us to the question of how is inequality related to age, education and employment status? According to the static decomposition of the Mean Log Deviation (MLD) index carried out by the EC, in 2004 the major factor explaining the observed inequality in the Portuguese economy was education (see [25], pp. 19 -27 and pp.34-42.).

Returning to the characterization of households according to work intensity, in Portugal there are 21% of children at risk of poverty in households with work intensity higher or equal to 0.5 (the EU-25 average is 13%), and 14% in households with parents working full time (the EU-25 average is 7%). As for households with couples with 1 or more children, the rate of children at risk of poverty differs according to the respective work intensities: except for the jobless, the rates are higher for Portugal than for the EU_25; and, the rates for Portugal in the cases of one full time worker and one full time worker plus one part-time worker and for two full time workers are the highest among the EU_25. Since low levels of education are associated with lower labor productivity and lower wages, it is possible to conclude that educational levels of the Portuguese working population are an important factor in explaining child poverty (see [26], pp.34-35; 165 and 169).

As predicted by human capital theories (see e.g. [43]), employment rates are positively associated with educational attainment for individuals aged 15-64(see [27], pp. 152-153). Portugal has the highest employment rate for individuals with low educational attainment, 66%, similar to the employment rate for individuals with medium educational attainment, while the employment rate for individuals with high educational attainment is approximately 85%. These figures are not surprising since the educational levels of the Portuguese population aged 15-64

are lower than the EU-27 values. The percentage of the population with low, medium and high educational attainment in the EU-27 for the year 2007 was, respectively, 32,7%, 46,7% and 20,6%, against 71,3%, 16,7% and 12% for the Portuguese economy (see [27], p.218).

Analyzing the educational outcomes of children it is also possible to get an idea of whether the intergenerational mechanism of transmission of disadvantages/inequality acts through the influence of the parents' educational background upon the children educational attainment. According to the educational level of the father, the probability of attaining high school for persons aged 25-65 in the EU_25 and Portugal is, respectively, 0.18 and 0.11, when the father has a low level of education; 0.33 and 0.58, when the father has a medium level of education, and 0.63 and 0.65, when the father has a high level of education. The probability of attaining higher education by age interval, 25-34, 35-44 and 45-54, when the father's level of education is low is: for the EU_25, 0.25, 0.19 and 0.15, respectively, and for Portugal 0.17, 0.09 and 0.09. These figures seem to confirm that the intergenerational mechanism of transmission of disadvantages/inequality acts primarily through the influence of the parents' educational background upon the educational attainment of children in the whole EU_25 and especially in Portugal, with the inherent detrimental effects upon the current and future well being of children (see also [16]).

The previous picture on inequality and poverty for the Portuguese households suggests that the uneven distribution of education/human capital is a decisive factor in explaining income inequality in the Portuguese economy. This uneven distribution is in turn the result of past investment decisions in human capital. A number of endogenous growth models argues that inequality is harmful for growth due to credit market imperfections that lead to borrowing constraints in investments in human capital that prevent poorer but apt individuals from fulfilling their potential. This is thus a possible important explanation for the relationship between inequality and economic growth in the Portuguese economy.

Additionally, evidence from [15] suggests that we must also consider seriously what is known in the literature as the fiscal policy mechanism of transmission from inequality to growth as a possible candidate to the explanation of the relationship in the Portuguese economy. [15] uses data from the ECHP to study economic inequality in Portugal for the period 1994-2001. He is the first to study the wealth distribution for the Portuguese households, namely its capital income distribution, characterizing it for the period under analysis as well as describing its evolution over time. The author shows that the distribution of capital is very uneven and that this situation increased over the whole period, contrary to income and earnings inequality, that registered a decrease. In fact, the behavior of the

distribution of capital suggests the existence of a political mechanism. The median voter prefers more redistribution than the average owner of capital, which in turn entails a tax policy that benefits the median voter and decreases the after-tax marginal product of capital of the average owner of capital, hindering private investment and thus economic growth. However, we have to carefully consider possible obstacles to the application of this approach to the Portuguese economy on the tax policy side, since in Portugal capital income of the top 1% -5% of the distribution is not heavily taxed.

CHANNELS OF TRANSMISSION OF INEQUALITY TO GROWTH: THE THEORETICAL LITERATURE

There is by now an extensive and rich literature on the relationship between inequality and economic growth that has been carefully and thoroughly surveyed by [2], among others. Our main purpose in this section is to briefly survey the theoretical literature that highlights the mechanisms relating inequality to economic growth that we have considered relevant for the Portuguese economy in the previous section.

The borrowing constraints to human capital investments approach

The main prediction derived from the borrowing constraints to investments in human capital approach is that a higher initial income (wealth) distribution implies higher economic growth through higher investment in human capital. This also applies to a growth model with different regimes of economic development if human capital accumulation is the main engine of growth.

In a seminal paper, [32] analyzed the link between income distribution and economic growth through human capital investments based on an overlapping generations, with individuals living for two periods and with intergenerational altruism. The economy produces a single good using skilled or unskilled labor. Individuals have identical potential skills and preferences, the only difference concerns their inherited wealth. In the first period individuals work as unskilled or invest in human capital. In the second period, individuals work as unskilled or skilled workers depending on their level of education, consume and leave bequests to the younger generation. The initial wealth distribution determines the short run equilibrium due to the existence of capital market imperfections to the borrowers and it also will determine the long-run equilibrium due to indivisibilities in individual investments in human capital. The level of income and wealth is positively related to the number of individuals that invest more than the critical point below which a skilled dynasty cannot be sustained (see [32], p.

42). The long-run equilibrium is path dependent: multiple equilibriums exist and the economy will approach one of the possible equilibriums depending on the initial wealth distribution. The main prediction of the model is that the larger a country's middle class, the better growth prospects it has.

The main purpose of [31] is to reconcile the classical view of a positive influence of inequality on growth that predicts with the modern view, based on a growth model with different accumulation regimes. At earlier stages of capitalism, the engine of growth physical capital accumulation and a more unequal wealth distribution enhances growth because the owners of capital have a higher propensity to save. At later stages of capitalism, the engine of growth is human capital accumulation and there are borrowing constraints on individual's human capital investment due to capital market imperfections. Thus, at later stages of capitalism, a more equal wealth distribution enhances economic growth because it enables individuals to invest more in human capital.

The model developed by [19] is also an overlapping-generations model with income and talent heterogeneity and intergenerational altruism. Individuals face liquidity constraints but, contrary to [32], they cannot save nor borrow against future income. Individuals live for two periods and, in the first period, they receive a bequest from their parents and decide whether to work or attend school. In the second period, individuals work and receive an income that is proportional to their investment in human capital. Individuals with above average talent will receive only in accordance to that rule if they have invested in human capital. The main predictions of the model are: (i) the higher the initial income equality for one generation, the higher the aggregate human capital accumulated by that generation; and (ii) the higher will be equality in initial income distribution of future generations. The steady state growth rate is independent from initial conditions, namely, from initial income distribution: it depends on the aggregate level of human capital.

The fiscal policy approach

The fiscal policy approach is anchored on two recent strands of literature, political economy and endogenous growth models, and is based on the interplay of two mechanisms, the political mechanism and the economic mechanism. The former determines income redistribution and government's expenditures and taxes, while the latter determines the influence of taxation on economic growth. The median voter's (the agent with the median level of income) preference for income distribution determines income redistribution through voting, which translates into government expenditures and taxation. The higher is the preference of the median voter for income redistribution, the higher the level of taxation he will

vote for. This will in turn discourage private investment, hindering in this way economic growth. The fiscal approach thus predicts a negative relationship between inequality and economic growth, no matter the specific redistribution mechanisms that might be used to achieve that redistribution.

Seminal references on the fiscal approach are [5], [11] and [39]. These contributions consider different types of government expenditures in order to achieve the desired income redistribution: public investment in [5], redistribution from capital to labor in [11] and pure redistribution transfers in [5] and [39]. Nonetheless, they all share the conclusion that, no matter the type of government expenditures, these imply a higher level of capital taxation that decreases the after-tax marginal revenue to capital, thus harming private investment and consequently economic growth.

In 1994, [5] develop two endogenous growth models with wealth distribution effects. The first model considers the distribution conflict between two classes, workers and capitalists, that derive their revenues from different sources, labor and capital, respectively. The government's budget constraint indicates that redistribution of income to workers comes exclusively from capital income taxes and there are intertemporal utility functions for each class and the government, with the associated budget constraints. The consumption growth rate of capitalists is maximized if the share of government revenues transferred to workers is zero and the capital tax is associated with the growth maximizing level. The problem faced by the government is thus to choose taxes in order to maximize its utility function. The main prediction is that if the government attributes importance to workers' consumption through income redistribution, the chosen capital tax level will be higher than the growth maximizing level and thus growth will not be maximized. If the time preference parameter is the same for both classes, the solutions are time invariant. Income transfers to the workers depend on the value of the parameter that measures the weight of the workers' welfare function in the social welfare function, which is inversely related to growth. If workers have a time preference higher than the capitalists time preference, the solutions to the government's dynamic problem are no longer time invariant, which leads to a problem of time inconsistency. The optimal policy solution leads to a growth rate that increases over time. Correcting for the problem of time inconsistency, optimal policies make workers better off at the beginning and worse off later compared with the time consistent solution. The main predictions of this two-class model are reinforced in a second model where individuals are not split into workers and capitalists but instead differ according to their initial relative capital endowment.

The work of [11] is based on an optimal one sector AK growth model with distributional effects resulting from individuals' heterogeneity due to differences in initial endowment shares of accumulated to non-accumulated factors (capital to labor, respectively). According to the political mechanism of redistribution of income from capital to labor, a median voter will vote for a tax on capital that is inversely related to its capital-labor ratio. The economic mechanism will act through a lower after tax capital income appropriated by the private investor, which discourages private investment, jeopardizing economic growth.

Considering also an overlapping-generations framework, [39] build a model with non altruistic individuals living for two periods and constant population. Individual preferences are the same and the income of the young generation depends on an average endowment of basic skills and an endowment of individual-specific basic skills, as well as on the capital stock accumulated by the older generation. A pure redistributive income policy takes the form of taxes on profits: profit income from those individuals that invested above the average are transferred to those that have invested below the average through lump-sum transfers, while intergenerational redistribution is excluded. The redistributive income policy is politically determined by the median voter. If the individual skills of the median voter are lower (higher) he will prefer a tax (subsidy) on investment if he is poorer (richer) than the average investor. Two main predictions can be derived from the model: a more equal distribution of income as well as a higher level of basic skills are growth enhancing.

In a 1991 paper, [40] discuss more complex dynamics for the growth rate and inequality that can be path dependent and allow to reconcile, under certain conditions, their findings with the Kuznets curve. The same is true for [37] that analyzes the relationship between income distribution and growth in a political model where individuals vote for income redistribution and invest in human capital. Multiple equilibriums are allowed, where initial income distribution, along with the political equilibrium determine the growth rate. One of the main predictions of the model is the existence of an inverted U-shaped relationship between inequality and income levels in cross-section analyses, but that does not necessarily stand for time series analyses. One of the main predictions in [1] is also the existence of an inverted U-shaped relationship, similar to the Kuznets curve, although based on a different framework of analysis. The authors consider an overlapping-generations model with capital market imperfections due to moral hazard, and analyze the relationship between wealth distribution and growth in an economy where individuals invest in physical capital.

EMPIRICAL STUDIES ON INEQUALITY AND GROWTH

The aim of this section is to offer a summary and a critical discussion of the empirical studies on the impact of inequality on economic growth with a focus on the evidence concerning the mechanisms identified as potentially more important for the Portuguese economy.

Empirical modelling and evidence

The two main empirical modelling approaches that have been followed to assess the importance of inequality for growth are the reduced-form equation aimed at identifying the sign of the relationship, and the transmission mechanisms specifications that try to clarify the channels that explain that sign.

The reduced-form equation studies share a common regression specification of the general form:

$$GR_{it} = f(INEQ_{it}) + \beta_i X_{it} + \mu_{it} \quad (1)$$

where a measure of output growth, GR_{it} , is regressed on a measure of (initial) inequality/equality, $INEQ_{it}$, where the function f might be non-linear; and a set of other explanatory variables, X , that include initial output, some measure of human capital, physical capital investment ratio, and regional dummies, among others. Until the late 1990's the identification of the sign of this relationship was based on the exploitation of cross-country information, but recent studies have used pooled cross-country time series data.

Despite the differences between the cross-country studies (see e.g. [39], [3], [4], [20], [38], [13], [22], [17], [18], [7], [14]) the broad picture conveyed is that: (i) there is a significant negative correlation between inequality and growth; (ii) this relationship remains significant and of the same sign when using different inequality measures, samples, data, sets of regressors and estimators; and, (iii) the growth impact of inequality is low. Following the release of the Deininger and Squire inequality dataset (see [21]), that collected data with time series information for a significant number of countries, empirical studies estimated the inequality and growth relationship using panel data techniques (see e.g. [35], [23], [9], [30], [10], [34], [8], [45]) but, contrary to the previous common message, the panel data evidence is quite diverse, finding either a positive, negative or non-existent relation between inequality and growth.

For instance, among the panel studies that consider wider samples of countries with both developing and developed countries, [23] find that the sign of the relationship is ambiguous and even positive in some cases; [30] detects a positive relationship that persists across different samples, variables definitions, and model specifications but not the length of period under consideration; [10] uncovers a negative relationship for poor countries, a positive relationship for rich countries, and an insignificant one for the whole sample; and [8] present evidence that it is a change in any direction, not the initial level of inequality that leads to slower future growth. [30] argues that the panel results do not contradict the ones from cross-country studies since the former identify the sign of the relationship between changes in inequality and changes in growth performance, while the latter explore between-countries information variation in a longer period of time between the initial level of inequality and the growth rate.

Considering a more restricted sample that includes only U.S. states, [35], [36] and [34] also explore the panel structure of the data. The first studies find a positive correlation between the Gini coefficient of income and growth, but also a positive correlation between the income share of the middle quintile and growth. The third study concludes that the sign and significance of the estimated relationship changes when different measures of inequality are used and that controlling for outliers, serial correlation and structural breaks substantially changes the results. [6], [29] and [42] investigate the link between inequality and regional growth from the perspective of the EU. While [6] and [42] arrive at a positive relationship between a region's income dispersion and growth, [29] finds that inequality is detrimental to regional growth.

In face of the mixed evidence on the inequality-growth relationship provided by empirical studies, [24] apply meta-analysis to survey the literature, combining the results of several empirical studies on inequality and growth to give a quantitative summary of the main findings. The analysis is based on 22 studies that give a total of 254 estimates for the coefficient of the Gini coefficient of income distribution. The results show that the variation in the estimates are systematically associated with differences in estimation methods, sample coverage and data quality – fixed effects and GMM estimates are usually higher, the negative impact is stronger in poorer countries and when the growth period analyzed is longer, and poorer data quality leads to lower coefficient estimates.

Since the reduced form analysis is not very informative regarding the different channels through which inequality might affect growth, a number of empirical studies tried to examine in more detail the importance of specific mechanisms in the explanation of the inequality-growth relationship.

The most often analysed mechanism of transmission is the fiscal policy channel. [38] considers cross-section information from developed and developing countries during the period 1960-85 and uses the average marginal tax rate (MTAX) as the reference fiscal policy variable, obtaining a negative impact of MTAX in growth, while income distribution plays no role in determining MTAX, except in the sample of democratic countries. These results apply to different fiscal policy variables. [35] regresses growth on inequality and equality measures and government intervention variables, obtaining positive estimated coefficients for both income distribution variables and negative but usually insignificant ones for the government intervention variables. There is also weak evidence that the income distribution variables have an impact on the different government intervention variables. [44] analyzes the fiscal channel in a sample of developed and developing countries between 1970 and 1985 concentrating on the influence of public expenditures on education. The author concludes that the influence of contemporaneous expenditures on growth is negative, probably due to the necessity to increase distortionary taxation to finance these expenditures, but that past education expenditures have a positive impact because of the associated rise in human capital. Additionally, the influence of public education expenditures on growth renders the independent impact of income inequality insignificant. And its influence upon growth is quantitatively more important than that of other government policy variables.

[38] and [22] test the validity of the credit market imperfections that lead to borrowing constraints channel. In [38] the mechanism is tested considering only its action through investments in education and associated endogenous fertility decisions. Using data on female and male secondary schooling and fertility rates, the author concludes that there is evidence supporting that borrowing constraints limit investments in education by poor people. However, more direct tests of this approach using measures of the degree of credit market imperfections interacted with the income distribution variable in the equation where education is the dependent variable lead to inconclusive results. [22], on the other hand, test the impact of this channel through both physical and human capital investment under the assumption that the effects over human capital investment will be greater due to the greater reluctance of lenders to accept the future higher stream of earnings as collateral. After estimating a reduced-form equation for high and low-income countries separately and confirming that inequality is only relevant in poor countries, the authors then regress proxies of human and physical capital investment on inequality and confirm that this is a relevant variable in explaining the first but not the latter investments, concluding that the main channel through which inequality affects growth is schooling.

The picture conveyed by the studies that explore some mechanism through which the effect of initial inequality may be transmitted is thus also somewhat blurred. The results from the studies that explore the fiscal policy channel depend to a great extent on the fiscal variable used and the credit markets imperfection mechanism demands data more detailed to be properly tested. Additionally, most of these transmission mechanisms studies do not explore the panel structure of the data.

Methodological issues

In this section we pay particular attention to some of the most important empirical difficulties surrounding the estimation of the inequality-growth relationship in order to try to understand some of the possible causes for the lack of consensus on the empirical assessment of the relationship.

A first methodological concern relates to the measurement of inequality. Most theoretical studies explain the relationship between inequality and growth based on the distribution of wealth. However, few empirical studies use wealth inequality as an explanatory variable due to data constraints. Exceptions include [5], [3] and [22] that use the Gini coefficient of land distribution as a proxy for wealth inequality and present better results with this measure than with the income distribution measure. Human capital inequality measures have also been shown to provide more robust results (see [17]), a result attributed to the importance of human capital in the explanation of the distribution of wealth. The analysis of the impact of inequality on growth also implies the availability of comparable inequality measures for a relatively large cross section of countries, which is usually hindered by differences in construction methods, data coverage, and income definitions. [21] collected data from primary survey data, official statistical publications and research papers, and overcame to some extent the previous problems, constructing a new data set of higher quality data. A final problem is associated with the use of aggregate measures of distribution, such as the Gini coefficient, which might not be appropriate to test the importance of inequality for economic growth if the relationship depends on the whole shape of the distribution. This issue has been addressed in empirical studies by using alternative measures of inequality, e.g. the share or ratios of certain quintiles or percentiles, and comparing the results with the ones from the estimations that consider the aggregate measure, arriving at some important differences in some cases (see [10], [34], [45]). For instance, [45] using comparable cross-country time series data on inequality for twenty-one industrialized countries surveyed by the Luxembourg Income Study (LIS) between 1975 and the year 2000, concludes that top end inequality positively influences growth while the influence of bottom end inequality is negative.

A second methodological concern relates to the specification of the relationship. Most of the evidence comes from the estimation of reduced-form equations that add inequality variables to a standard growth regression with a set of other control variables identified in empirical growth studies as relevant growth determinants. For instance, [38] considers a relatively parsimonious number of control variables, four, while [10] introduces around ten control variables. However, different specifications have been shown to lead to different conclusions concerning the significance of the different independent variables. Another problem is that most studies do not consider whether entering the proxy for inequality in the empirical model in a linear or non-linear way has an impact on the estimated inequality coefficient. For instance, [8] show that the growth rate is an inverted-U function of net changes in inequality, and [18], based on cross-section estimation of reduced-form equations, also finds evidence that there is an inverted-U relationship between initial income inequality and long-run economic growth.

A final methodological concern results from the constraints imposed by data availability that restrict the information that can be explored and the estimation procedures used. The results from cross-section studies should be interpreted as the long-run impact of inequality on economic growth across countries but can not explain how a change in a given country inequality level may affect growth within that country (see [30]). The interpretation of the coefficient estimates from panel data studies is different: they represent the impact of inequality on growth within a country over the short to medium term and not over the long-run across countries. It is thus not surprising that some panel data studies show that the sign and significance of the relationship changes as the length of the period under analysis changes (e.g. from 5-year to 10-year periods; see [30]). Additionally, the possibility of a two-way relation between inequality and growth (see [33]) means that the inequality variables in the growth regressions are correlated with the error term, with this correlation due to reverse causation (growth determines the evolution of inequality) or to the omission of variables that jointly determine both growth and inequality. One way to overcome this problem is to use initial values of the inequality proxies in the regressions but this might not be sufficient especially in panel data studies that analyse growth over short periods of time and since there might be other factors that jointly determine growth and initial inequality. A second solution is to use instrumental variables estimators. Panel studies can use of GMM techniques that have the advantage of using lagged values of the endogenous variables as instruments. Finally, empirical studies are usually based on information from countries at very different stages of development and often constrain the impact of inequality to be the same across countries. This raises another important empirical problem, that of parameter heterogeneity: if the latter applies then policy implications derived from empirical

models that impose equality of parameters are invalid. In fact, splitting the sample according to the level of development, [38] concludes that higher equality leads to faster future growth in rich countries but not in poor countries. A similar conclusion is reached by [10]: the effect is negative for low levels of development and becomes positive for higher levels. [14], on the other hand, find no significant differences between rich and poor countries.

CONCLUSIONS

Since the 1980s a renewed interest on the relationship between economic growth and inequality has occurred, due probably to the increase in within income inequality in advanced economies, such as the USA and the UK. Additionally, the persistent worldwide cross-country income differences lead to a deeper scientific curiosity for inequality and poverty and their links to economic growth. In the 1970s and 1980s important economic literature strands emerged as suitable to be used, later on, as a solid anchorage to new avenues of research on the relationship between income (wealth) distribution and economic growth. Microeconomics of information, the economics of inequality and poverty; economics of income distribution; endogenous growth theories; theories of political economy, are important examples of the literature mentioned above. The growing importance of this avenue of research is well documented by [12] textbook on the subject.

This paper surveyed the literature produced on the theme within the boundaries of endogenous growth models, from the perspective of the Portuguese economy, based on the characterization of this particular country in terms of inequality and poverty, which points to education and fiscal choices as main determinants of inequality in Portugal. The correct identification of the (predicted) sign for the relationship in a particular country and of the underlying mechanisms that explain it is crucial to derive more accurate redistributive policy recommendations. The same exercise can and should be replicated for future EU member states in order to avoid unnecessary losses in terms of its growth potential and poverty alleviation.

We reviewed some theoretical models that aim at explaining the link between either education or fiscal choices and income distribution and between this and the rate of economic growth, the borrowing constraints on human capital and the fiscal policy approaches, with both predicting a negative relationship between inequality and growth. The two main empirical approaches that have been followed to assess the importance of inequality for growth are the reduced-form equation, with the main objective of identifying the sign of the relationship, and the transmission mechanisms specifications, with the main objective of clarifying

the channels of influence that explain that sign. The evidence shows that the sign of the relationship is sensitive to a number of criteria, while the empirical relevance of the fiscal channel and the borrowing constraints on investments in human capital channel remains the subject of further research. In face of these results we identified some methodological issues that confront the empirical studies on inequality and growth that may be useful for future research.

Despite the considerable theoretical and empirical literature that has already been produced on this subject, there is thus still a great potential for research on this theme based on country studies, focusing on Portugal or other present or future EU member countries such as Serbia. As [24], p. 22, put it: “The analysis of the growth-inequality linkage on a regional basis may, however, be much more informative than the analysis based on worldwide cross-country datasets, as we have seen that some of the variation observed in cross-section of countries studies vanishes after allowing for regional effects.”

References

- [1] Aghion, P. and P. Bolton (1997), A theory of Trickle-Down Growth and development. *Review of Economic Studies*. **64**: p. 151-172.
- [2] Aghion, P., E. Caroli, and C. García-Penalosa (1999), Inequality and economic growth: the perspective of the new growth theories. *Journal of Economic Literature*. **37**(4): p. 1615-1660.
- [3] Alesina, A. and R. Perotti (1994), The Political Economy of Growth: A Critical Survey of the Recent Literature. *The World Economic Review*. **8**(3): p. 351-371.
- [4] Alesina, A. and R. Perotti (1996), Income distribution, political instability, and investment. *European Economic Review*. **40**(6): p. 1203-1228.
- [5] Alesina, A. and D. Rodrik (1994), Distributive Politics and Economic Growth. *Quarterly Journal of Economics* **109**(2): p. 465-490.
- [6] Arbia, G., L.d. Dominicus, and G. Piras (2005), Regional Growth and Regional Inequality in EU and Transition Countries: a Spatial Econometric Approach. *ERSA Conference Papers No. ersa05p168*.
- [7] Balisacan, A.M. and N. Fuwa (2003), Growth, inequality and politics revisited: a developing-country case. *Economics Letters*. **79**: p. 53-58.
- [8] Banerjee, A., M. Marcellino, and C. Osbat (2004), Some cautions on the use of panel methods for integrated series of macroeconomic data. *Econometrics Journal*. **7**(2): p. 322-340.
- [9] Barrio-Castro, T.d., E. López-Bazo, and G. Serrano-Domingo (2002), New evidence on international R&D spillovers, human capital and productivity in the OECD. *Economics Letters*. **77**(1): p. 41-45.
- [10] Barro, R.J. (2000), Inequality and growth in a panel of countries. *Journal of Economic Growth*. **5**(1): p. 87-120.
- [11] Bertola, G. (1993), Factor Shares and Savings in Endogenous Growth. *American Economic Review* **83**(5): p. 1184-1198.

-
- [12] Bertola, G., R. Foellmi, and J. Zweimuller (2006), *Income distribution in macroeconomic models*. Princeton: Princeton University Press.
- [13] Birdsall, N. and J.L. Londono (1997), Asset inequality matters: An assessment of the World Bank's approach to poverty reduction⁸⁷. *American Economic Review*. **87**(2): p. 32-37.
- [14] Bleaney, M. and A. Nishiyama (2004), Income Inequality and Growth: Does the Relationship Vary with the Income Level? *Economics Letters*. **84**(3): p. 349-55.
- [15] Budria, S. (2007), *Economic Inequality in Portugal: A Picture in the Beginnings of the 21st century*. Centro de Estudos de Economia Aplicada do Atlântico Working Paper.
- [16] Carneiro, P. (2008), Equality of Opportunity and Educational Achievement in Portugal. *Portuguese Economic Journal*. **7**(1): p. 17-41.
- [17] Castelló-Climent, A. and R. Doménech (2002), Human Capital Inequality and Economic Growth: Some New Evidence. *The Economic Journal*. **112**: p. 187-200.
- [18] Chen, B.L. (2003), An Inverted-U Relationship between Inequality and Long-Run Growth. *Economics Letters*. **78**(2): p. 205-12.
- [19] Chiu, W. (1998), Income inequality, human capital accumulation and economic performance. *Economic Journal*. **108**: p. 44-59.
- [20] Clarke, G.R.G. (1995), More evidence on income distribution and growth. *Journal of Development Economics*. **47**: p. 403-427.
- [21] Deininger, K. and L. Squire (1996), A new data set measuring income inequality. *World Bank Economic Review*. **10**(3): p. 565-91.
- [22] Deininger, K. and L. Squire (1998), New ways of looking at old issues: inequality and growth. *Journal of Development Economics*. **57**(2): p. 259-287.
- [23] Dinopoulos, E. and P. Thompson (1998), Schumpeterian Growth without Scale Effects. *Journal of Economic Growth*. **3**(4): p. 313-335.
- [24] Dominicus, L.d., H.L.F.d. Groot, and R.J.G.M. Florax (2006), *Growth and Inequality: A Meta-Analysis* Tinbergen Institute Discussion Paper No. **TI 2006-064/3**.
- [25] EC (2007), *Social Inclusion and Income Distribution in the EU*. Brussels: European Commission.
- [26] EC (2008), *Child Poverty and Well-Being in the EU, Current Status and Way Forward*. Brussels: European Commission
- [27] EC (2008), *Progress Towards the Lisbon Objectives in Education and Training: Indicators and Benchmarks*. Brussels: European Commission
- [28] EC (2008), *The Social Situation in the European Union 2007*. Brussels: European Commission
- [29] Ezcurra, R. (2007), Is Income Inequality Harmful for Regional Growth? Evidence from the European Union. *Urban Studies* **44**(10): p. 1953–1971.
- [30] Forbes, K. (2000), A reassessment of the relationship between inequality and growth. *American Economic Review*. **90**(4): p. 869-887.
- [31] Galor, O. and O. Moav (2004), From Physical to Human Capital Accumulation: Inequality and the Process of Development. *Review of Economic Studies*. **71**(4): p. 1001-26.
- [32] Galor, O. and J. Zeira (1993), Income distribution and macroeconomics. *Review of Economic Studies*. **60**: p. 35-52.

- [33] Kuznets, S. (1955), Economic growth and income inequality. *American Economic Review*. **45**: p. 1–28.
- [34] Panizza, U. (2002), Income Inequality and Economic Growth: Evidence from American Data. *Journal of Economic Growth*. **7**(1): p. 25-41.
- [35] Partridge, M. (1997), Is inequality harmful for growth? Comment. *American Economic Review*. **87**(5): p. 1019-1032.
- [36] Partridge, M. (2005), Does income distribution affect U.S. state economic growth? *Journal of Regional Science*. **45**(2): p. 363–394.
- [37] Perotti, R. (1993), Political Equilibrium, Income Distribution, and Growth *Review of Economic Studies*. **60**(4): p. 755-776.
- [38] Perotti, R. (1996), Democracy, income distribution and growth: What the data say. *Journal of Economic Growth*. **1**: p. 149-187.
- [39] Persson, T. and Guido Tabellini (1994), Is Inequality Harmful to Growth? . *American Economic Review*. **84**(3): p. 600-621.
- [40] Persson, T. and G. Tabellini (1991), Is inequality harmful for growth? Theory and evidence. CEPR, Discussion Papers n°581.
- [41] Rodrigues, C.F. (2007), *Distribuição do Rendimento, Desigualdade e Pobreza: Portugal nos Anos 90*. Coimbra: Almedina.
- [42] Rodríguez-Pose, A. and V. Tselios (2010), Inequalities in income and education and regional economic growth in western Europe. *Annals of Regional Science*. **44**: p. 349-375.
- [43] Simões, M. (2009), Levels of Education, technology and growth: the OECD evidence from a country and industry-level perspective. *Investigação/Research*. Coimbra: Imprensa da Universidade de Coimbra. 199.
- [44] Sylwester, K. (2000), Income inequality, education expenditures, and growth. *Journal of Development Economics*. **63**(2): p. 379-398.
- [45] Voitchovsky, S. (2005), Does the profile of income inequality matter for economic growth? Distinguishing between the effects of inequality in different parts of the income distribution. *Journal of Economic Growth*. **10**: p. 273-296.

CHAPTER 12.

FINANCIAL CONSTRAINTS: LESSONS FROM THE PORTUGUESE MONETARY INTEGRATION

Filipe Silva¹

Carlos Carreira²

Abstract

Financial constraints are a determinant factor that hinders firms' ability to carry out their investment growth. This chapter aims at analysing the impact of financial constraints upon Portuguese firms over the period 1996-2004, which covers the implementation and convergence towards the common currency. It is well known that firms in economies with less developed financial markets suffer from more severe financial constraints. This is particularly true for the Portuguese economy, as well as transition economies such as Serbia. Several lessons may be learned from the Portuguese case and its past experience of Monetary integration. Our main results indicate that Monetary integration seems to have generally helped reducing the degree of financial constraints faced by Portuguese firms, even though firms were affected differently, depending on their degree of openness to foreign markets.

Key words: *financial constraints, European financial integration, firm-level studies, Portugal.*

INTRODUCTION

After their accession to the European Economic Communities (now the European Union, EU), in 1986, Portugal experienced not only the creation of the Common Market in 1992, but most of all the introduction of the Common Currency in 2001. The monetary integration that culminated in the Euro brought several changes of which we should point the reduction of interest rates (annualised benchmark

¹ Filipe Silva, Faculdade de Economia/GEMF, Universidade de Coimbra, Coimbra, Portugal

² Carlos Carreira, Faculdade de Economia/GEMF, Universidade de Coimbra, Coimbra, Portugal

interest rate fell from 7.2% in 1996 to 2.1% in 2004³) and the promotion of deeper integration of financial markets within the Euro area. Not only could economic agents obtain finance in the Euro area cheaper and in an easier manner, but also the leap to a stronger currency, has eased the access of Portuguese firms to foreign finance.

This chapter aims at exploring how firms' financial constraints were influenced by the monetary and financial integration processes. Additionally, it analyses how different degrees of openness of firms to foreign markets have an effect on firms' constraints as well as how this level of constraints changed with integration.⁴ We expect to draw some lessons for the Serbian economy on the possible benefits that may accrue from the integration of financial markets and introduction of a common currency. In fact, for the last decade, Serbia has engaged in serious transition and financial integration efforts (e.g. Redžepagić et al. [16]).

The originality of this paper stems from the fact that the relatively large time span of the our original dataset—albeit for our previous works, has never been used to investigate financial constraints—allows us to compare two distinct periods, before and after monetary integration, which, as far as we know, is novel in the analysis of financial constraints at the firm level. Additionally, the studies on the relationship between openness to foreign markets and firms' constraints, the first for Portugal, are rather scarce in the literature.

The chapter is organized as follows. Section 2 will make a brief incursion on the literature on financial constraints, integration and openness. In Section 3 we will discuss the dataset and variables used. Section 4 describes the empirical methodology followed, while Section 5 presents the main results. Finally, Section 6 pulls the pieces together and concludes.

FINANCIAL CONSTRAINTS, INTEGRATION AND OPENNESS

Financial constraints is a rather abstract concept since it cannot be directly observable. In fact, it is quite difficult to come up with a clear-cut definition. If on one hand, we can broadly say that financial constraints exist whenever there is a wedge between the costs of obtaining internal and external funds—following Kaplan and Zingales's [12] definition that virtually covers every firm—, on the other, we prefer to define financial constraints as the inability of a firm to raise the necessary amounts (usually due to external finance shortage) to finance their

³ Statistics from Banco de Portugal and Eurostat. See appendix for further detail.

⁴ The degree of openness to foreign markets is defined as the sum of export and import intensity (normalized by sales).

investment and growth. Perhaps due to this abstract nature of the concept, there is no clear methodology to determine financial constraints (see Hubbard [9] or Carreira and Silva [4] for a discussion).

Recently, within a perspective of demand for cash, Almeida et al. [1] suggested that financial constraints might be measured through the sensitivity of cash to cash-flows (CCFS), since only financially constrained firms will need to optimize their cash stocks over time in order to maximize their profits and hedge future shocks by holding cash. In fact, Hahn [7] supports that holding liquid assets may work as a good hedging policy for firms, when there are imperfections in financial markets. To our knowledge, only a few works have used this approach so far (see Silva and Carreira [4] for details).

When it comes to financial development and integration, while previous empirical literature, in general, found a positive impact upon firms' financial constraints (see Carreira and Silva [4] for a survey), recent studies analysing the impacts of the financial crises put these results into perspective. As an example, Popov and Ongena [15], comparing both Western and Central with Eastern European countries, find that interbank market integration has reduced the level of constraints, especially in highly competitive banking sector markets, notwithstanding the risks of overleveraging in cases where integration took place at an accelerated pace.

For the European case, we should also stress that monetary integration came along, among others, with the loss monetary policy instruments. Furthermore, in the event of financial crisis overseas, integration might have a perverse effect through larger constraints on domestic firms (see Ivanović and Balaban [10] or Bonetto and Syssoyeva-Masson [3] for the negative effects of integration and crisis in Western Balkan countries). In this case, a need for intervention in the form of favourable and backed loans or subsidised interest rates to prevent liquidity crisis might be necessary (Erić et al. [5]).

Still, the levels of financial constraints seem to be lower in bank-based systems (see Carreira and Silva [4] for a survey or Hernández-Cánovas and Martínez-Solano [8] for an example) especially for short-term finance (Kunt and Maksimovic [13]). Gorg and Spaliara [6] comparing firms operating in the UK and France, find that firm failure is more sensible to financial variables for firms in the "market-oriented system" of the UK. Additionally, they find that continuous export behaviour increases firm survival.

The causality flow between financial constraints and degree of openness to foreign markets is rather unclear. On one hand, open firms may have access to

foreign finance and, especially if they are strong exporters, see their domestic credit conditions improve. On the other hand, these firms may only be open because they were able to overcome the financial constraints barrier. In other words, there are additional costs to explore foreign markets and the necessary investment may be financially constrained, as a result, only firms that are not financially constrained are able to export. In fact, Bellone et al. [2] find that indeed financial constraints work as an *ex-ante* barrier to export since less constrained firms self-select into exporting behaviour. This self-selection effect is also found by Javorcik and Spatareanu [11] for the case of Czech firms' that have supplier relationships with multinationals

The real benefits of the European monetary integration process are still nowadays rather unclear and very debatable. Specifically, despite the extensive literature on firm's financial constraints, the consequences of such process upon the ability of firms to raise the necessary amounts to invest and grow are still to be fully explored. Keeping in mind that no consistent measure of financial constraints has yet been developed, we attempt to clarify the financing problems of Portuguese firms during a period of integration. Inferences using this sample, representative of Portuguese firms, may be made with respect to, at least, the bank-based Serbia economy.

DATA

The dataset used in this work was constructed from the combination of *Inquérito às Empresas Harmonizado* (IEH), an annual business survey, and *Ficheiro de Unidades Estatísticas* (FUE), both collected by the Portuguese Statistical Office (INE). The former dataset comprises information on firms' balance sheets, while resorting to the latter, that contains information about firm's generic characteristics—including size, age and main sector of activity—, allows to track firms through time, thus constructing a large unbalanced panel of firms.⁵

For the purpose of this paper the following cleaning procedures were made. First, we eliminated firms with less than 20 employees due to the lack of quality of information reported by such firms. Second, we focus only on the industry and part of the services sector, thus eliminating the agricultural and financial sectors (the latter would bias the estimation favouring unconstrained firms). Observations that were reported either missing or with unreasonable values were dropped. In some specific circumstances, unreasonable values suffered a treatment in order to

⁵ These two data sources were matched using a code number, also provided by INE that uniquely identifies each firm for different surveys along the successive years.

achieve coherent values. As a result we have a large unbalanced panel of 22.651 firms for the period 1996-2004 resulting in 86.455 observations. Further details on the construction and description of the variables used are available in the Appendix.

The advantage of using this dataset is that it comprises information from firm's balance sheets of the universe of firms operating in Portugal with more than 100 employees and a large representative sample of Portuguese firms with more than 20 employees. Furthermore, the dataset comprises the broad range of economic activity sectors, including both manufacturing and services at desirable levels of disaggregation. Finally, the large sample period (1996-2004) is sufficient to take into account macroeconomic cyclical variations as well as it covers the monetary integration process.

However, a major pitfall of this dataset is the inexistence of market information about firms. Since we only have access to a code number of each firm, we are not able to match the dataset with information from, for example, stock markets. Still, only a few firms in Portugal are publicly traded and so the benefits of such extension of the dataset would be negligible. Additionally, information on firms is limited to a relatively low level of disaggregation of balance sheets. Finally, by dropping from the database all firms with less than 20 employees, we are cutting off a significant number of observations, even though they would lack in quality and would further increase the unbalancedness of the panel.⁶

METHODOLOGY

Almeida et al. [1] construct an alternative model of liquidity demand and derive an empirical equation to estimate CCFS. The financial nature of the cash stock variable is a shield against missmeasurements in Q (sales growth in our case) and investment opportunities hidden in cash-flow because it is not expected that firms will increase their cash stocks if cash-flow signals a new\better investment opportunity, unless they are financially constrained. In the spirit of Lin [14], we use the sum of net debt and equity issuances ($ISS_{i,t}$) and interest rate variation ($\Delta INT_{i,t}$) instead of the variation of short term-debt. The former modification is due to the fact that debt and equity issuances, while being a signal of easier access to external funds, might have a significant impact upon cash stocks (by accounting procedures), so we control for such effect. With respect to the latter,

⁶ Note that smaller firms would, *a priori*, be more financially constrained, thus our results might be slightly downward biased when it comes to the level of firms' financial distress.

firms may decide to reduce their borrowings or pay back debt according to expected interest expenses. However, instead of benchmark interest rates variations (homogeneous across firms), we use variations of interest paid, which allows for firm variation and thus can also be seen as a form of credit rating. In both specifications, all variables are scaled by total assets. As a result, we have the following empirical specification:

$$\Delta CS_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 \Delta y_{i,t} + \beta_3 S_{i,t} + \beta_4 I_{i,t} + \beta_5 \Delta NWC_{i,t} + \beta_6 ISS_{i,t} + \beta_7 \Delta INT_{i,t} + \varepsilon_{i,t} \quad (1)$$

where $\Delta CS_{i,t}$ is the variation in cash stocks, $S_{i,t}$ is a control for firm size (log of total assets), $\Delta NWC_{i,t}$ is the variation of noncash net working capital and $\varepsilon_{i,t}$ the error term. We shall use sales growth ($\Delta y_{i,t}$) instead of Q as a proxy for investment opportunities (see the Appendix for further explanation).

The financial and investment covariates are endogenous, so there is a need to estimate the model using instrumental variables (IV\GMM) along with fixed effects to take account of unobserved firm-level heterogeneity and panel-robust standard errors. The set of instruments includes twice lagged cash flow, twice lagged sales growth, lagged investment, lagged variation of noncash net working capital, two-digit industry indicators, size, lagged bond issuance and lagged variation in interest payments.

In an attempt to capture the effects of monetary and financial integration, we split our sample into two major periods, before and after integration (i.e. up to 2000 and from 2001 onwards). Even though the integration processes is continuous, we pick a breakpoint (2000) for two main reasons. First, we only have access to the period 1996-2004, consequently, to guarantee a consistent estimation that takes advantage of lagged variables, we must guarantee that the subpanels have at least a 3 year depth (optimally 4 year to have a larger number of observations for a more efficient estimation).⁷ Accordingly, our breakpoint should be either on 1999 or 2000. Second, since the Euro was introduced on the 1st January 2001, a landmark for the monetary integration process, we expect that the effective possible benefits would be observed from 2001 onwards. Additionally, it is reasonable to expect that the real effects of the potential benefits from the ongoing integration process before 2001 would be subject to a "policy lag", therefore only having a significant impact on firms during the subsequent period. As a result, we expect that the bulk impact of the integration process would be felt during the period 2001-2004.⁸

⁷ The limitation of the period of analysis (1996-2004) is due to methodological changes on the collection of data by INE.

⁸ Note that this second period not only captures a downward economic cycle, but it also corresponds to higher bilateral exchange rates (convergence was before 2001 but effects

In order to capture the effects of integration upon financial constraints by different classes of firms according to their degree of openness to foreign markets, we construct a score that identifies firms as closed, open and, within open firms, those with low and high levels of openness (see Appendix for further detail). Accordingly, we obtain different subsamples of firms depending on their exposure to European markets. Over the period, the EU, on average, accounts for 75% of the total exports and 89% of imports. As a result, we focus mainly on the degree of openness towards the EU. In fact the estimated CCFS using a broader definition that accounts for total exports and imports, the results remain unchanged.⁹

EMPIRICAL RESULTS

Summary statistics

Table 1 allows us to compare mean values, before and after monetary integration as well as by degree of openness, of the main variables used in the estimation. It is clear that after monetary integration mean variation of cash stocks and size (total assets) increased during the period, while mean cash-flow, sales growth, investment, debt and equity issuances, benchmark interest rate and degree of openness decreased.¹⁰ Additionally, firms faced a mean decrease in interest paid as well as the variation in non cash net working capital increased. If instead we compare different levels of openness, it is possible to see that, for the whole period, differences between less open firms and highly open firms are, in general, larger than differences between closed and slightly open firms. This indicates that firms with no or a low level of openness appear to be quite similar. The most notorious changes in correlation variables between the two periods occur in firm size, changes in non cash net working capital, interest payments variation, benchmark interest rate and degree of openness (correlation matrix available from authors upon request).

might be time lagged) which affects the capacity of firms to export and import (although very debatable, degree of openness should account for this inverse sign effects). Conversely, the previous period, not only captures an economic expansion period, but also carries the effects of the implementation of the Common market in 1992. This latter effect is, however, expected to be transversal to the whole period.

⁹ Statistics not reported but available from authors upon request.

¹⁰ We should note that the economic downturn that came after 2001 may be affecting, to a larger extent some of these variables (e.g. exports or sales growth).

Table 1: Summary Statistics

Variables	Period			Degree of Openness		
	1996-2004	1996-2000	2001-2004	NO	LOW	HIGH
$\square CS_{i,t}$	0.002 (0.062)	0.001 (0.064)	0.003 (0.061)	0.003 (0.070)	0.003 (0.055)	0.001 (0.059)
$CF_{i,t}$	0.085 (0.089)	0.091 (0.089)	0.081 (0.088)	0.083 (0.098)	0.082 (0.085)	0.089 (0.083)
$\square y_{i,t}$	0.037 (0.288)	0.073 (0.280)	0.015 (0.290)	0.040 (0.326)	0.041 (0.269)	0.030 (0.264)
$S_{i,t}$	15.539 (1.448)	15.441 (1.508)	15.599 (1.406)	15.074 (1.508)	15.698 (1.476)	15.840 (1.237)
$I_{i,t}$	0.063 (0.081)	0.077 (0.091)	0.054 (0.074)	0.068 (0.090)	0.061 (0.077)	0.060 (0.076)
$\square NWC_{i,t}$	-0.048 (0.166)	-0.060 (0.179)	-0.040 (0.157)	-0.051 (0.189)	-0.046 (0.155)	-0.047 (0.152)
$ISS_{i,t}$	0.035 (0.209)	0.058 (0.218)	0.021 (0.203)	0.036 (0.227)	0.037 (0.201)	0.032 (0.198)
$\square INT_{i,t}$	-0.001 (0.007)	0.000 (0.008)	-0.001 (0.007)	-0.000 (0.008)	-0.000 (0.007)	-0.001 (0.007)
R	0.030 (0.008)	0.037 (0.007)	0.026 (0.005)			
$OPEN$	0.125 (0.175)	0.134 (0.180)	0.119 (0.171)			
Observations	17,283	6,600	10,683	5,757	5,444	6,066
No. of firms	4,771	2,606	3,333	1,537	1,462	1,632

Notes: Firms' openness score definition in Appendix. Mean values and standard deviations, given in parentheses.

Monetary integration

Portuguese firms, during the period 1996-2004 were, on average, financially constrained. Table 2 shows that before monetary integration firms saved, on average, 23 cents out of each euro of cash flow meanwhile after integration the CCFS was reduced to 0.185.¹¹ Noteworthy differences are also found with respect to the impact of sales growth, size (total assets), debt and equity issuances and interest payments variations in the cash policy of firms. The Euro landmark is further emphasized if year dummies are introduced. Even though a comparison between the two periods with year dummies is not econometrically feasible, in a regression over the whole period 1996-2004, only the dummy corresponding to

¹¹ If we abstain from controlling for the money market, the difference in CCFS is also large.

2000 is statistically significant.¹² This may indicate that in this particular year, there were changes that significantly affected firms' cash policy. Alternatively, if we control for the evolution of the benchmark interest rate, it is possible to observe that not only the CCFS difference between periods is much lower, but also that there is a huge difference in the impact of the benchmark interest rate between periods.

Degree of openness to foreign markets

As expected, Table 3 shows that there might be an inverse relationship between the degree of openness and financial constraints since, for the whole period, the higher the degree of openness, the lower is the CCFS. This result may arise either because more open firms may have better access to foreign finance, only unconstrained firms are able to exploit foreign markets, or even both.

When we split the sample by the two major periods, we find a reduction in constraints for open firms, while the level of financial distress of closed firms remains mostly unchanged. However, depending on the degree of openness, firms' financial constraints were either reduced or amplified. This is a puzzling result since we would expect, *a priori*, that even though the reduction in constraints should be larger for highly open firms, firms with lower levels of openness should also exhibit a reduction in constraints, since monetary integration should benefit mostly those firms that also have businesses overseas (through exchange rates stability and access to foreign banks and financial markets). Additional differences arise between firms with low and high levels of openness, with respect to the impacts of sales growth, investment and variation of interest paid.¹³

¹² The use of lagged variables both as independent\endogenous variables and instruments imposes that a number of year dummies must be dropped due to collinearity. However, we tested simpler regressions and results do not differ substantially. Namely, either d5 (2000) is the only significant dummy (always at 1% level) or dummies corresponding to previous years are slightly significant (at either 5% or 10% levels), while 2000 remains the most significant.

¹³ We also tested the inclusion of real GDP growth or unemployment, in order to capture possible influences of the economic cycle, nevertheless the results remain very similar. Results remain unchanged if we additionally control for the benchmark interest rate, firm size or age or even if instead of degree of openness-EU we use total degree of openness, export or import intensity. Statistics not reported but available from authors upon request.

Table 2: CCFS estimation with different controls for money market

Variables	Baseline estimation			Year dummies
	1996-2004	1996-2000	2001-2004	1996-2004
$CF_{i,t}$	0.182***(0.017)	0.230***(0.038)	0.185***(0.027)	0.187***(0.017)
$\square y_{i,t}$	0.014***(0.003)	0.021***(0.007)	0.012***(0.004)	0.016***(0.003)
$S_{i,t}$	0.013***(0.004)	0.024* (0.013)	0.034***(0.008)	0.012***(0.004)
$I_{i,t}$	-0.216***(0.012)	-0.228***(0.022)	-0.228***(0.016)	-0.212***(0.012)
$\square NWC_{i,t}$	-0.148***(0.006)	-0.148***(0.012)	-0.157***(0.009)	-0.148***(0.006)
$ISS_{i,t}$	0.078***(0.004)	0.100***(0.009)	0.070***(0.006)	0.079***(0.004)
$\square INT_{i,t}$	-0.332***(0.088)	-0.234 (0.157)	-0.377***(0.144)	-0.204** (0.095)
1999				-0.001 (0.002)
2000				-0.008***(0.002)
2002				-0.000 (.002)
2003				0.001 (0.002)
Observations	15,277	5,212	8,756	15,277
No. of firms	4,771	2,606	3,333	4,771
R-squared	0.176	0.202	0.188	0.178
Hansen p-val.	0.435	0.528	0.338	0.552
Benchmark interest rate (R)				
	1996-2004	1996-2000	2001-2004	
$CF_{i,t}$	0.192***(0.017)	0.208***(0.038)	0.191***(0.027)	
$\square y_{i,t}$	0.014***(0.003)	0.023***(0.007)	0.011***(0.004)	
$S_{i,t}$	0.010***(0.004)	0.042***(0.013)	0.033***(0.008)	
$I_{i,t}$	-0.213***(0.012)	-0.234***(0.022)	-0.228***(0.017)	
$\square NWC_{i,t}$	-0.148***(0.006)	-0.144***(0.012)	-0.157***(0.009)	
$ISS_{i,t}$	0.079***(0.004)	0.093***(0.009)	0.070***(0.006)	
R	-0.389***(0.067)	-0.793***(0.134)	-0.041 (0.129)	
Observations	15,277	5,212	8,756	
No. of firms	4,771	2,606	3,333	
R-squared	0.177	0.214	0.187	
Hansen p-val.	0.489	0.680	0.253	
No controls for money market				
	1996-2004	1996-2000	2001-2004	
$CF_{i,t}$	0.187***(0.017)	0.232***(0.038)	0.190***(0.027)	
$\square y_{i,t}$	0.013***(0.003)	0.020***(0.007)	0.011***(0.004)	
$S_{i,t}$	0.012***(0.004)	0.022* (0.012)	0.033***(0.008)	
$I_{i,t}$	-0.217***(0.012)	-0.227***(0.022)	-0.229***(0.017)	
$\square NWC_{i,t}$	-0.148***(0.006)	-0.147***(0.012)	-0.157***(0.009)	
$ISS_{i,t}$	0.078***(0.004)	0.100***(0.009)	0.070***(0.006)	
Observations	15,277	5,212	8,756	
No. of firms	4,771	2,606	3,333	
R-squared	0.174	0.201	0.187	
Hansen p-val.	0.226	0.563	0.249	

Notes: Regression of equation (1). Robust standard errors are given in parentheses. ***, **, and * denote statistical significance at the .01, .05, and .10 levels, respectively. Further test statistics available from the authors upon request.

Table 3: CCFS estimation by openness degree to foreign markets

Openness	NO		HIGH	
Variables	1996-04	1996-04	1996-04	
$CF_{i,t}$	0.268***(0.036)	0.176***(0.030)	0.107***(0.027)	
$\Delta y_{i,t}$	0.018***(0.005)	0.012** (0.005)	0.015***(0.005)	
$S_{i,t}$	0.011 (0.008)	0.013** (0.006)	0.020***(0.007)	
$I_{i,t}$	-0.241***(0.023)	-0.196***(0.021)	-0.212***(0.020)	
$\Delta NWC_{i,t}$	-0.162***(0.012)	-0.135***(0.011)	-0.159***(0.011)	
$ISS_{i,t}$	0.081***(0.008)	0.078***(0.008)	0.076***(0.008)	
$\Delta INT_{i,t}$	-0.498***(0.178)	-0.075(0.145)	-0.528***(0.168)	
Observations	4,299	4,163	5,173	
No. of firms	1,537	1,462	1,632	
R-squared	0.210	0.173	0.177	
Hansen p-val.	0.598	0.336	0.462	
	NO		YES	
	1996-00	2001-04	1996-00	2001-04
$CF_{i,t}$	0.265***(0.063)	0.265***(0.056)	0.183***(0.049)	0.152***(0.032)
$\Delta y_{i,t}$	0.031** (0.013)	0.015** (0.007)	0.017** (0.008)	0.009* (0.005)
$S_{i,t}$	0.014 (0.023)	0.027** (0.013)	0.021 (0.016)	0.047***(0.009)
$I_{i,t}$	-0.239***(0.041)	-0.260***(0.032)	-0.210***(0.028)	-0.224***(0.020)
$\Delta NWC_{i,t}$	-0.160***(0.024)	-0.171***(0.017)	-0.139***(0.014)	-0.160*** (0.011)
$ISS_{i,t}$	0.105***(0.018)	0.068***(0.011)	0.094***(0.011)	0.075*** (0.008)
$\Delta INT_{i,t}$	-0.107 (0.302)	-0.724** (0.285)	-0.327 (0.204)	-0.195 (0.158)
Observations	1,274	2,497	3,400	5,502
No. of firms	637	1,008	1,700	2,160
R-squared	0.242	0.222	0.179	0.196
Hansen p-val.	0.362	0.384	0.584	0.648
	LOW		HIGH	
	1996-00	2001-04	1996-00	2001-04
$CF_{i,t}$	0.160** (0.068)	0.223***(0.049)	0.199***(0.068)	0.112** (0.043)
$\Delta y_{i,t}$	0.025** (0.012)	0.005 (0.008)	0.010 (0.011)	0.015** (0.007)
$S_{i,t}$	-0.016 (0.022)	0.040***(0.015)	0.044* (0.023)	0.058***(0.013)
$I_{i,t}$	-0.154***(0.043)	-0.218***(0.034)	-0.227***(0.039)	-0.241***(0.027)
$\Delta NWC_{i,t}$	-0.134***(0.021)	-0.148***(0.017)	-0.148***(0.020)	-0.180*** (0.016)
$ISS_{i,t}$	0.107***(0.015)	0.075***(0.012)	0.084***(0.016)	0.069***(0.011)
$\Delta INT_{i,t}$	0.159 (0.260)	0.071 (0.219)	-0.707** (0.315)	-0.477** (0.235)
Observations	1,282	2,340	1,802	2,789
No. of firms	641	960	901	1,093
R-squared	0.191	0.188	0.182	0.224
Hansen p-val.	0.955	0.698	0.457	0.712

Notes: Regression of equation (1). Firms' openness score definition in Appendix. Robust standard errors are given in parentheses. ***, **, and * denote statistical significance at the .01, .05, and .10 levels, respectively. Further test statistics available from the authors upon request.

These results indicate that while highly open firms benefited the most with the integration, closed firms experienced no changes with respect to constraints and, most interestingly, slightly open firms faced higher constraints in the second period. This odd result arises for firms that have very small degrees of openness (smaller than 5%, while for firms between 5% and 1% the results are as previously hypothesised).¹⁴ This might, however, be associated with larger competition for funds in the integrated markets, since firms with low degrees of openness might not be as visible abroad as they would be in the domestic market, while at the same time, losing their advantage on the domestic market, where lenders will then opt to finance domestic or even foreign firms with better prospects. In fact, if we compare the level of constraints of these firms with those of closed firms, the difference in CCFS estimates is much larger for the initial period, than for the second period. One could argue that lenders would no longer distinguish between slightly open and closed firms.

CONCLUSION

In this chapter we investigate the extent to which the monetary integration phenomena has influenced firms' financial distress. Our main findings suggest that financial and monetary integration has, in general, helped in reducing firms' financial constraints. However, the integration process, while benefiting mostly firms that are highly open, it harms firms that have a lower degree of openness and has no substantial effect upon firms that rely solely on their domestic market. These results show that, although the integration process might have a positive impact by easing firms access to finance abroad and reducing the price of money in domestic markets, therefore reducing constraints (for the Portuguese case and eventually for Serbia), policymakers should be cautious and devise strategies to take into account a possible perverse effects on firms with lower degrees of openness. Serbia, with a comparatively less developed financial system, might accrue larger benefits from the integration, since not only would it foster the development of domestic financial markets and banking system, but would also ease the access of Serbian firms to overseas finance.

References

- [1] Almeida, H., Campello, M. and Weisbach, M.S. (2004) 'The cash flow sensitivity of cash.' *Journal of Finance* 59(4): 1777-1804.
- [2] Bellon, F., Musso, P. and Nesta, L. (2009) 'Financial Constraints and Firm Export Behavior' *The World Economy* 33(3): 347-373

¹⁴ Statistics not reported but available from authors upon request.

-
- [3] Bonetto, F. and Syssoyeva-Masson, I. (2009) 'Financial integration of Western Balkan countries: Do foreign capitals matter?' in *Financial Systems integration of Balkan countries in the European financial system: Impact of global crisis*, Berthomieu, C., Guichard, J., Erić, D. and Redžepagić, S. (eds), University of Nice - Sophia Antipolis (France) and Institute of Economic Sciences (Serbia), 59-67
- [4] Carreira, C. and Silva, F. (2010) 'No Deep Pockets: Some stylized results on firms' financial constraints.' *Journal of Economic Surveys* 24(4): 731–753.
- [5] Erić, D., Zdravković A., and Nikolić, D. (2009) 'Influence of world crisis on Western Balkan countries: Undertaken measures and expected effects.' in *Financial Systems integration of Balkan countries in the European financial system: Impact of global crisis*, Berthomieu, C., Guichard, J., Erić, D. and Redžepagić, S. (eds), University of Nice-Sophia Antipolis (France) and Institute of Economic Sciences (Serbia), 59-67
- [6] Gorg and Spaliara (2009) 'Financial health, exports, and firm survival: A comparison of British and French firms' Working Paper 7532, CEPR.
- [7] Hahn, F. (2010) 'Corporate Reserves - Do They Hurt Economic Growth? Some Empirical Evidence from OECD Countries' *Economics Letters* (forthcoming) doi: 10.1016/j.econlet.2010.08.011
- [8] Hernández-Cánovas, G. and Martínez-Solano, P. (2010) 'Relationship lending and SME financing in the continental European bank-based system.' *Small Business Economics* 34(4):465–482
- [9] Hubbard R.G. (1998) 'Capital-Market Imperfections and Investment.' *Journal of Economic Literature* 36(1): 193-225.
- [10] Ivanović, P. and Balaban, M. (2009) 'The impact of global financial crisis on Serbian banking sector: The NBS response.' in *Financial Systems integration of Balkan countries in the European financial system: Impact of global crisis*, Berthomieu, C., Guichard, J., Erić, D. and Redžepagić, S. (eds), University of Nice - Sophia Antipolis (France) and Institute of Economic Sciences (Serbia), 59-67
- [11] Javorcik, B. and Spatareanu, M. (2008) 'Liquidity Constraints and Linkages with Multinationals' LICOS Discussion Papers no. 225, K.U. Leuven
- [12] Kaplan, S.N. and Zingales, L. (1997) 'Do investment-cash flow sensitivities provide useful measures of financing constraints.' *Quarterly Journal of Economics* 112(1): 169-215.
- [13] Kunt, A. and Maksimović, V. (2002) 'Funding growth in bank-based and market-based financial systems: evidence from firm-level data' *Journal of Financial Economics* 65(3): 337-363
- [14] Lin, Y. (2007) 'The cash flow sensitivity of cash: evidence from Taiwan.', *Applied Financial Economics* 17(12): 1013-1024.
- [15] Popov, A. and Ongena, S. (2010) 'Interbank market integration, loan rates, and firm leverage' *Journal of Banking and Finance* (forthcoming) doi: 10.1016/j.jbankfin.2010.08.011
- [16] Redžepagić, S., Zafiroski, J. and Đurić, D. (2009) 'European financial system and integration of Serbian and Macedonian banking sector in it.' in *Financial Systems integration of Balkan countries in the European financial system: Impact of global crisis*, Berthomieu, C., Guichard, J., Erić, D. and Redžepagić, S. (eds), University of

Nice - Sophia Antipolis (France) and Institute of Economic Sciences (Serbia), 119-127

- [17] Silva, F. and Carreira, C. (2010) 'Measuring firms' financial constraints: Evidence for Portugal through different approaches.' Estudos do GEMF 15/2010. Coimbra: GEMF, University of Coimbra.

APPENDIX

Construction and description of variables:

Size (S): Computed as log inflation-adjusted assets (deflation through the GDP deflator)

Investment (I | invest): Measured as additions to plant, property and equipment- gross investment

Output (Y | y): Measured as total sales and services

Cash-flow (CF | cf): Computed as net income before taxes plus depreciation

Cash stock (CS | cs): Measured as total cash holdings

Investment Opportunities (DY | dy): We use the first differences of sales to proxy for investment opportunities. This measure is often used in empirical work on countries with less developed financial markets where information on firm's market value is scarcer (see Silva and Carreira [17] for a discussion).

Debt and equity issuances (Issuances): Sum of debt and equity issuances. For the year 2001 equity issuances are reported as missing. The reason lies in legal changes that took place with the introduction of Euros (most firms adjusted their equity not necessarily meaning issuing equity).

Non-cash net working capital (NWK | nwk): Difference between non-cash current assets and current liabilities.

Benchmark interest rate (R): Annualised Euribor and Lisbor at 3 months with adjusted Lisbor by the mean difference in common years. We needed to compute our own series by joining two series made available by Banco de Portugal (Euribor for the period after the introduction of the Euro and Lisbor for the period before). The same change in monetary policy decision making, that accompanied the introduction of the Euro led to significant difficulties in finding comparable benchmark interest rates for the periods before and after 2000. Accordingly we focus on the interbank interest rate. Additionally we focus on the 3 months rate in order to avoid capturing the expectations incorporated in longer period rates, such as 1 year.

Degree of openness to foreign markets (OPEN): Score that captures the degree of openness of firms to foreign markets that in its turn is obtained by the sum of export and import intensity (normalized by sales) divided by 2. A firm scores 1 (no) if it is closed and 4 (yes) if open. Scores 2 (low) and 3 (high) are obtained by dividing open firms (score 4) at the mean degree of openness. Initially we divided firms into terciles by their degree of openness, however the use of terciles implies that a significant number of non

exporting/importing firms are included in the second tercile (about 40% of firms rely solely on the domestic market).

All variables of interest were winsorized at 1% level in order to avoid problems with outliers in the estimation procedures. Deflators used include the Industrial Production Price Index and Labour Cost Index, both drawn from INE, and the GDP deflator, drawn from the Portuguese Central Bank (BdP). Nevertheless, no deflators were used when a variable was constructed as a ratio of two nominal values (normalized). In such cases we assume that the price growth rates are homogeneous. All variables in low caps result from a normalization procedure (the variable of interest is divided by total assets). Real GDP growth (Euro 16 area) as well as unemployment rates were obtained from Eurostat. Finally, prefixes D_(d_) are added for first difference of variables (normalised variables) of interest.

CHAPTER 13.

BANKING REFORM IN SLOVAKIA: CASE OF COMMERCIAL BANKS AND CENTRAL BANK

Marianna Siničáková¹

Abstract

Slovakia has realised several reforms after year 2000. One of the first reforms was restructuring of banking sector at the level of commercial banks and central bank, too. General conditions were harmonised with European standards. Stabilised and sound bank sector enabled application of other reforms, facilitated integration into the European Union and into the Euro area. Consequently, banks in Slovakia could face a very demanding year 2009 rather successfully. For Slovakia the year 2009 was specific also due to euro adoption and consequent increased cost especially in banking sector. However, despite a certain drop of profits, positions of the banks were not shattered. The role of the central bank within Slovak integration was significant and with positive impact on other sectors. The paper provides analysis of implemented measurements in banking reform, their confrontations with other countries in transitions.

Key words: *banking sector, central bank, Slovakia, financial and economic crisis*

BEGINNINGS OF BANKING SECTOR IN SLOVAKIA

First banks appeared at the Slovak territory in 1830's. In 1845 was founded first self-supporting credit cooperative in Europe. The cooperative accepted deposits from its members and in case of need the members were provided credits.

An important development occurred after creation of the Czechoslovak Republic in 1918. Banks formatted two-rang bank system (central bank and commercial banks). In 1925, central bank itself was created [17]. In 1948 existing commercial banks were fused into the only bank for short-term credits and the only bank for long-term credits. Consequently, any kind of competition was eliminated; clients were provided the same types of services. The only bank was responsible for foreign payments [20].

¹ Marianna Siničáková, Faculty of Economics, Technical University of Košice, Slovakia

BANKING SECTOR EVOLUTION IN SLOVAKIA AND MARKET ECONOMY

In 1990 many important changes were adopted not only in banking sector in the Slovak Republic (SR) but in the economy as a whole. Banking sector evolution after 1990 can be divided into several phases [20]:

1. Formation of two rank banking sector (1990 - 1993):

Private commercial banks appeared in Slovak banking sector. The most important changes concerned ownership, position of banks in the economy, bank entrepreneurship objectives, new forms of bank entrepreneurship, new bank products, etc. Transformation process was based especially on liberalisation of economic life, privatisation of state property, price liberalisation, liberalisation of foreign trade, etc. Banking sector changed from the quantitative as well as qualitative point of view. This bank restructuring meant that banks became universal, they could accept deposits, provide loans, realise foreign payments and investments at the same time. Banks did not focus just on one kind of activity.

2. Increasing number of banks and financial institutions (1994 - 1996):

Since 1994 we could observe expansion of banks and different financial institutions. Number of institutions was rapidly increasing as well as volume of assets and liabilities, number of bank employees and especially volume of loans. In 1996, 34 financial institutions owned universal bank licence.

3. Decreasing number of banks and financial institutions (1997 - 1999):

During 1997 - 1999, several important state interventions were realised with objective to maintain and stabilise bank sector. Number of banks decreased to 26. In those years there was a risk of collapse in the Slovak financial market. Banks had problems with low liquidity, high ratio of dangerous credits and they were deeply undercapitalized.

4. Restructuring of banking sector (2000 – 2002):

The NBS started to implement more cautiously financial market supervision and particular financial institutions started to recover gradually. Banking sector developed in a positive way and Slovakia became an attractive country for foreign investors. In 2001 bank restructuring and privatisation process was realised. The first positive effects of the restructuring appeared already in 2002. Productivity of assets rose, income structure changed positively and other financial indicators reached favourable results.

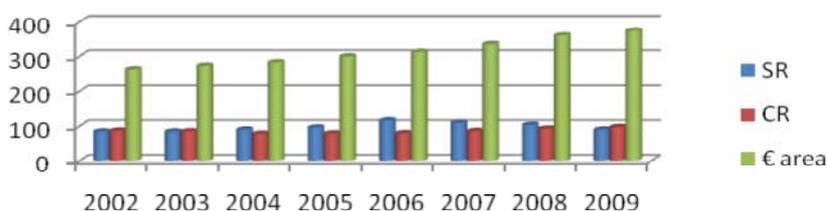
5. Stabilisation and consolidation of banking sector (2003-2008):

Year 2003 was year of stabilisation and consolidation of bank sector thanks to positive results achieved in the previous year. During 2004 – 2008, strong and sound bank sector created positive conditions for favourable development of

Slovak economy as a whole and vice versa. Expansion of economy had favourable impact on bank sector in Slovakia.

At present no bank is owned by state and ratio of Slovak capital is relatively low. According to the NBS data in December 2009 ratio of Slovak capital within overall bank sector capital in the Slovak Republic was 9,15%. The biggest proportion has Austria – 29,51%, then Luxemburg – 20,11%, the Czech Republic – 18,23% and Belgium – 8% [13]. Since 1993, size of the banking sector in Slovakia has had increasing tendency. E.g. in 2002 it represented approximately 85% (banking assets to national GDP), in 2006 it was already 117% with gradual reduction up to 90% in 2009. Nevertheless, according to these numbers Slovak banking sector is still relatively underdeveloped compared to EU countries in terms of total banking assets as % of GDP. In 2002, banking sector in the Euro area had almost 250% and maintained this level also during following years. While most of EU countries have a banking assets/GDP ratio over 150%, the Czech and Slovak banking sector was just around 85% in 2002 and 2003 with quite slow increasing tendency in the following years. However, thanks to the fact, Slovak and Czech banking sector were less influenced by the last financial crisis as it is explained later in the paper.

Graph 1: Size of the banking sector in the Slovak Republic (SR), the Czech Republic (CR) and in the Euro area, 2002 - 2009



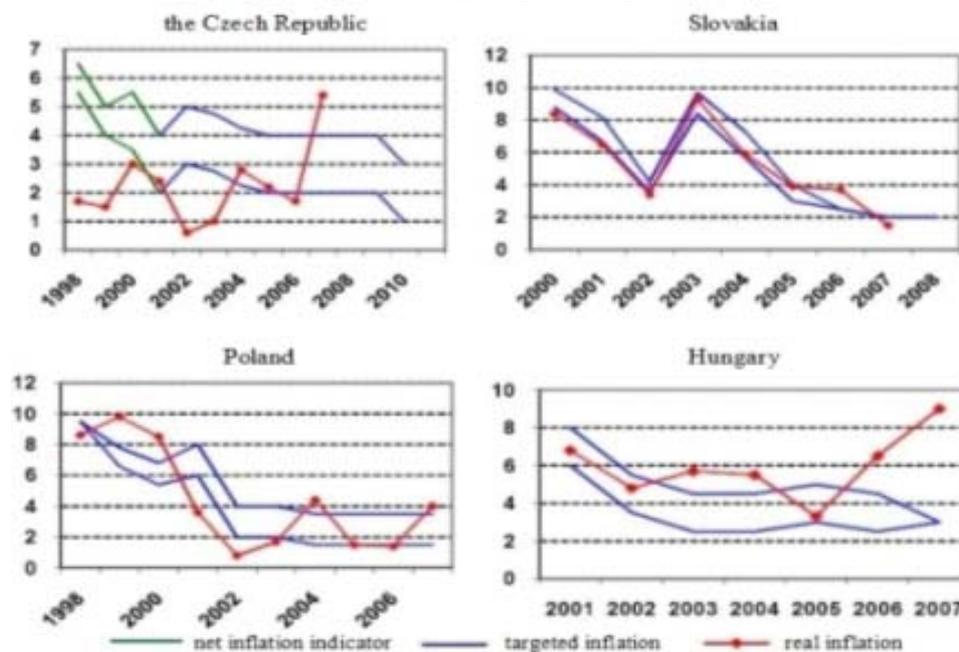
Source: own calculations according to [16]

THE NATIONAL BANK OF SLOVAKIA ROLE IN CONSOLIDATION

The National Bank of Slovakia (NBS) was established in January 1993 as the independent central bank of the Slovak Republic. After euro introduction, i.e. since 1 January 2009, Slovakia has been the part of the Eurosystem. The primary objectives of the NBS have been developing, too. Up to 1998 the main goal was exchange rate stability. After managed floating implementation, the NBS applied inflation targeting. Since 2002, the NBS had applied implicit inflation targeting, i.e. targeting under restricted conditions, or “light inflation targeting”. Main

reason for implication of implicit inflation targeting instead of explicit one is partial or complete absence of necessary conditions for monetary strategy in the form of inflation strategy. Central bank has for instance insufficient knowledge about transmission channels, thus it applies several instruments and goals. Implicit inflation targeting should be just temporary strategy before implementation of proper explicit inflation targeting. Since 2005, the NBS had applied explicit inflation targeting, i.e. “full-fledged inflation targeting”. If inflation targeting is applied when an economy is ready to meet required criteria, it can lead to positive effects [6]. However, declared targeting sometimes differs from real inflation rate. It seems, that inflation targeting in Slovakia was quite successful as announced inflation rate did not differ much from the real one. In the graph 2 we can compare success in inflation targeting in the Czech and Slovak Republic, Hungary and Poland.

Graph 2: Inflation targeting in Visegrad countries



Source: [2]

There is the smallest difference between targeted and real inflation in the case of Slovakia. In the Czech Republic, real inflation was lower than targeted one at the beginning of inflation targeting, respectively, real inflation was situated in the lower part of targeted zone. Opposite evolution was in Hungary where real inflation was in the upper part of the targeted zone or above it. Polish central bank

managed to fulfil its goal only twice during nine year targeting. Since November 2005, after the ERM II introduction, the NBS had to follow not only price stability objective but exchange rate stability, too. From 2009, the primary objective of the NBS is to maintain the price stability. Up to 2008, the NBS applied financial market supervision and monetary policy with the same stress. After euro introduction, it applies above all financial market supervision. Application of monetary policy is realised from the centralised level in the European Central Bank. However, evolution within the NBS was very important as for its monetary policy, possibilities of financial market supervision, central bank independence, legislation etc. Numerous measurements in these fields enabled and simplified integration process of the Slovak Republic.

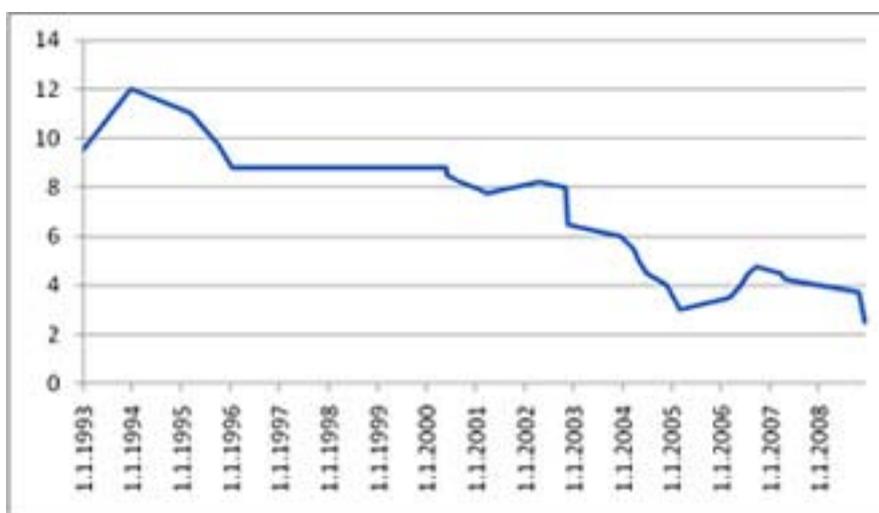
EVALUATION OF THE NBS MONETARY POLICY

From the very beginning, the NBS applied not only indirect monetary policy instruments but also direct measurements. Indirect monetary instruments are considered to be more efficient for the economy as they respect market principals, are valid for all economic agents equally and create natural conditions for economic development. However, some countries can have difficulties to apply from the very beginning only indirect instruments. In case of monetary and political crises, countries in transition, etc., it is acceptable to apply also direct monetary instruments but only for short period. Anyway, indirect instruments could not function properly because of missing financial market background. Among direct instruments we can mention e.g. liquidity rules of regulated banks, credit limitations (debt ceiling, quota), interest rate limitations, obligatory deposits, recommendations, calls, and agreements.

During 1993 - 1995, the NBS applied several times direct instruments – credit limitations (debt ceiling). However, application of these instruments was neither successful nor efficient as the limitations were not respected. As soon as it was possible, the NBS stopped their implementation and applied only indirect instruments (open market operations, central bank base rate, minimal reserve setting, foreign exchange market interventions). Since 1995, conditions for change of monetary policy application have been created. Quantitative direction of monetary policy could be gradually replaced by qualitative direction of monetary policy. However, just in 2000 quantitative monetary policy direction (based on control of monetary base with objective of stabilized money supply and interest rate is just adjusting to the situation, central bank through its interventions influences volume of money in circulation) was fully replaced by qualitative direction.

During following period, the NBS started to harmonise its instruments with the European Central Bank in line with planned integration process. Except **base rate**, the NBS started to set sterilization and refinancing interest rate. Thanks to these official rates, interbank interest rates were more stabilised and dropped down. During previous years officially declared base rate was not used (from 13 January 1996 to 28 May 2000) or it was applied only seldom, as it is obvious from the graph 3.

Graph 3: Base rate evolution, in %, 1993-2008\



Source: own representation according to [12]

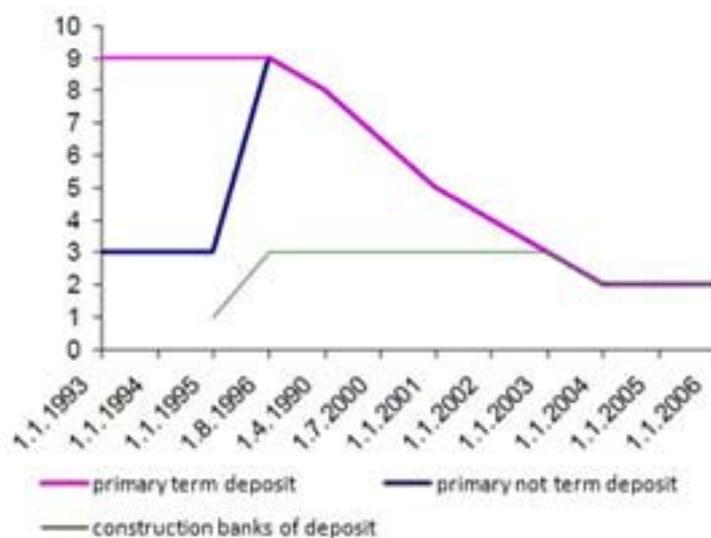
Active application of base rate enabled to the NBS to express its anticipations on inflation evolution. For commercial banks it was important indicator of future market interest rates, consequently they could adjust their own interest rates. Relatively strong correlation of market interest rates with base rate is another effect of standardization and nominal convergence of macroeconomic environment in the SR. Since January 2009, base rate for the SR has been identical with the euro area base rate.

From 1993, the NBS applied different **minimal reserve rates** for three categories of deposits: primary term deposits, primary not term deposits and deposits with construction banks savings. Despite the fact that through the differentiation, the NBS took into account different level of risk, this was not standard in the developed countries. Different rates discriminated certain bank products. Gradually, the NBS unified the rates. In addition, relatively high minimal reserve for banks in Slovakia weakened their competitiveness in comparison with banks

in abroad. Gradually, the NBS harmonised their minimal reserve rate with the ECB from 9% to 2% as it is obvious from graph 4.

Foreign exchange market interventions realised by the NBS developed too. After division of Czechoslovakia, new currency – Slovak koruna – was implemented in Slovakia. Determination of the new currency exchange rate was based on the currency basket consisting of five later on two foreign currencies (USD - US dollar and DEM - German mark).

Graph 4: Minimal Reserve Evolution



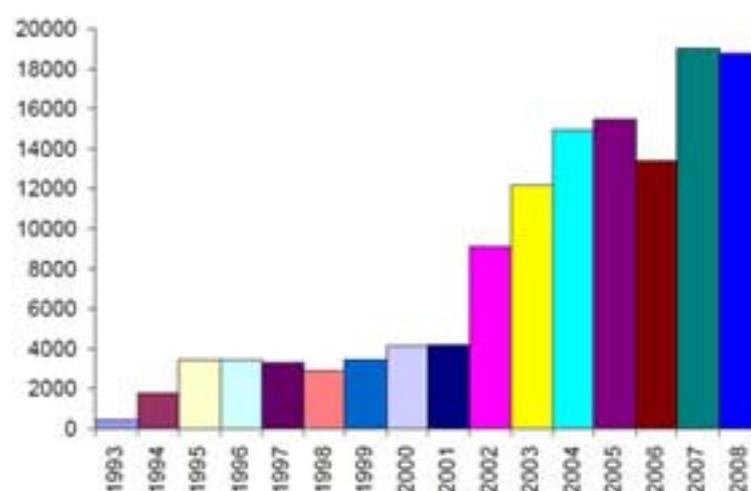
Source: [8]

From 1993, the NBS applied fixed exchange rate with comparatively narrow fluctuation bands, i.e. $\pm 1,5\%$, respectively $\pm 7\%$ later on [12]. From October 1998, the NBS did not guarantee fixed exchange rate within fluctuation bands. Value of the Slovak koruna depended on evolution of referential currency, i.e. DEM; on Slovak koruna demand and supply on foreign exchange market and on central bank interventions. From 2001, inflow of foreign investments created pressures on appreciation of the Slovak koruna. From the beginning, the NBS slowed down the appreciation process, in order to increase competitiveness of Slovak producers on external markets. Since 2002, several rating agencies have been regularly increasing rating evaluation of Slovakia, appreciation pressures were rising. However, appreciation was not still fully justified by real economic fundamentals, consequently the NBS intervened against appreciation e.g. through base rate cut down. In 2005, interest in Slovak koruna was enormous because of Slovak

economic expansion, successful nominal convergence, perspective of future euro adoption, etc. Many trades had speculative background. The NBS had to realise numerous interventions against quick appreciation.

In November 2005, Slovak koruna entered to the Exchange Rate Mechanism II (ERM II). Thanks to further economic expansion and positive evolution of macroeconomic fundamentals, there were important appreciation pressures. The ECB accepted revaluation of the central parity twice, in March 2007 and in May 2008. These revaluations were unprecedented in the history of the Euro area. However, they did not discriminate Slovakia from the Euro area accession process, as revaluation can be accepted if it is confirmed by macroeconomic fundamental evolution.

Graph 5: Foreign Exchange Reserves, in mil. USD



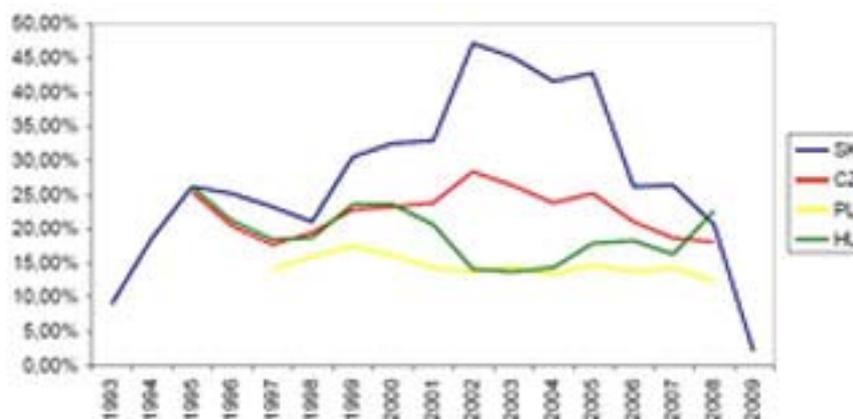
Source: [12]

Intervention potential of the NBS increased thanks to foreign reserves rise as it is obvious from the Graph 5 (volume is determined by the end of each year). However, increase of **foreign exchange reserves** can have positive impact on several other macroeconomic indicators as it was already studied by Polterovich and Popov [14]. They examined favourable impact of foreign exchange reserves rise on GDP growth. They analysed period from 1960 to 1999 in case of several countries. Polterovich and Popov claim, that foreign reserves rise contribute to economic growth of developing countries due to growth of investments and capital productivity. This causality can be interpreted as:

- Foreign reserves accumulation causes undervaluation of real exchange rate. This fact makes expansive tendencies in short term. It can be true also in long term, if devaluation is regular and unexpected.
- Real exchange rate undervaluation enables to profit from exporting advantages and this triggers economic growth through exportation rise.
- Foreign reserves increase attractiveness of foreign direct investments as they increase reliability of a particular country.

Consequently, Polterovich and Popov have proved that foreign reserves rise can fasten economic growth and even increase welfare. Besides, foreign reserves rise is an obvious signal to investors that a central bank has economic situation in a country fully under control. We have tried to analyse impact of foreign reserves on GDP in V4 countries with Hanasová [8] since year 1993. In the first step we have analysed ratio of foreign reserves to GDP. Throughout almost whole observed period, the SR has the highest ratio of foreign reserves to GDP.

Graph 6: Evolution of foreign reserves to GDP ratio in V4 countries



Source: author, [8]

At the end of the period the ratio dropped down significantly due to euro adoption. However, in case of the V4 countries, positive impact of foreign reserves on GDP is not statistically significant. We have proved the positive impact just during certain shorter periods but not generally as it was in the analysis of Polterovich and Popov [14].

Correlation coefficient between foreign reserves and GDP in Slovakia is 0,511, i.e. positive correlation is not too strong. Even determination index is just 0,261. Consequently, only 26,1% of changes in GDP can be explained by foreign

reserves level. We have gained similar results for the Czech Republic, Poland and Hungary. Assumptions of Polterovich and Popov were not confirmed because of shorter data series, impacts of transition process, reforms, integration aspects and crisis in observed countries.

IMPORTANCE OF THE NBS INDEPENDENCE

Positive impact of central bank independence is obvious from several studies, e.g. Blinder [3]; Cukierman [5]; Grilli, Masciandaro, Tabellini [7]; Baldwin [1]; and the others. They observed positive relationship between central bank independence and low inflation. Similar favourable impact but little bit weaker was observed in the case of employment and economic growth. Consequently, a central bank should strain after its autonomy from central government and its policy that would like to push each central bank to adopt its measurements to election cycles often at the expense of price stability.

We have analysed with Rozmanová [15] the NBS independence in comparing with similar attributes and with other central banks in Visegrad (V4) countries. Central bank independence rate in V4 countries is quite similar. However, the CNB obtained the best evaluation, i.e. 81,5% as for average overall independence, if we take weights of mentioned criteria as equal. The CNB just after division of the Czechoslovakia has implemented legislation required by the future European System of Central Banks [9]. The CNB was among the first European central banks that manage to implement the legislation. However, fulfilment of all Maastricht criteria has not been yet priority in the Czech Republic as there is no political will to join the Euro area during nearest years. The NBS had been delayed in comparing with the CNB especially during 1990s. Finally, the NBS managed to forbid direct loans to the government and that meant important step forward independence. Other necessary measurements were adopted in the beginning of 2000s. The Slovak Republic managed to join the Euro area as the first country among V4 countries.

Legal or official independence does not mean automatically high real independence. This is true especially in the case of the HNB. It reached the highest level of legal independence among compared countries; on the other hand its real autonomy is the lowest one. The situation would be much better, if the HNB could determinate independently its own incomes and expenditures. The PNB has the lowest average level of overall independence, i.e. 70,9%. The PNB should adopt some changes to its legislation prior to its euro introduction. Sufficient rate of central bank independence enable smoother and successful integration into monetary union lead by common independent central bank.

Table 1: Central bank independence comparison within V4 countries

Analysed indexes		CNB	HNB	PNB	NBS	max. ind.
GMT	<i>Political independence</i>	8	6	4	4	8
	<i>Economic independence</i>	5	7	5	7	8
Legal ind.	<i>LVAU</i>	0,849	0,911	0,849	0,88	1
	<i>LVAW</i>	0,892	0,929	0,904	0,929	1
Real ind.	<i>QVAU</i>	0,89	0,67	0,83	0,83	1
	<i>QVAW</i>	0,925	0,825	0,875	0,875	1
Rate of governor's turnover (1/period of governor's mandate)		0,17	0,17	0,17	0,2	0,1*
Central Bank Responsibility		3	3	2	3	4
AVERAGE OVERALL INDEPENDENCE (in%)		81,5	78,7	70,9	76,7	100

Source: own calculations according to [15]

N.B.: CNB, HNB, PNB, NBS – Czech, Hungarian, Polish and Slovak National Bank

GMT - Grilli, Masciandaro, Tabellini criteria,

LVAU, LVAW, QVAU, QVAW – Legal/ Questionnaire Variable Average Weighted /Unweighted,

* 0,1 can be considered as maximal value of independence in this criteriom, as 10 years for central bank governor mandate can be considered as adequate, longest periods are seldom and extreme the best value among V4 countries within particular criterium

BANKING SECTOR IN SLOVAKIA VERSUS FINANCIAL AND ECONOMIC CRISIS 2008-2010

During several months economic results of banking sector changed significantly. Remarking record profits in 2008 changed into significant reduction of profits or even to losses in 2009 [10]. Profits dropped down in overall by almost one half [4]. Four banks from all 26 banks in Slovakia marked losses [18]. This drop down was influenced by:

- loss from exchange rate conversion of Slovak koruna due to euro adoption,
- increasing number of unpaid credits,
- low interest rates and accumulation of bank fees.

Consequence of the problems was reduction of employees in banking sector at about 1000 persons. On the other hand, Internet banks profit from the situation and other new banks based on electronic communication with their clients; plan to

join the Slovak market. During 2009, volume of failed credits slightly increased to the level of approximately 5% [19]. Crisis has stopped almost automatic providing of credits. Few months ago, one could be provided a 100% credit for 40 years and with zero advance payment. But it is almost certain that such extreme conditions will never come back. However, shareholders of Slovak banks do not have to face such difficulties in their credit portfolios as it is in case of the Eastern Europe or in Hungary [10]. The NBS appreciates that almost all banks have increased their own resources from profit created in previous year [19]. During crisis, commercial banks in Slovakia preferred to realise less risky operations, i.e. they provided loans to households rather than to enterprises and they invested into state securities almost one quarter of their assets. According to the National Bank of Slovakia analysis on financial sector for year 2009, Slovak banks are stabilised and they are ready to face eventual second wave of crisis. Commercial bank could face even worse situation and generate a profit at the same time [19]. The most important reason for drop down in profits was euro adoption and consequent costs, effects of crisis were just secondary. The NBS stress test confirmed that Slovak bank sector is stabilised. Banks were in strong position before crisis; consequently they could face difficulties easily. Year 2010 will be partly problematic, especially for smaller banks that will have to be more precocious and more conservative.

CONCLUSION

Period of world financial and economic crisis has demonstrated that central and eastern European region is not as homogenous as it was perceived before. Poland was the least touched by the crisis. Economy as a whole as well as banking sector was in good situation even without important foreign investments. In Polish banking sector, volume of credits equalled to deposits, and this ratio (100%) appeared to be adequate especially during crisis.

Slovak banks were more influenced by crisis than Polish ones, however less than it was supposed. Effects of crisis were comparatively weak, e.g. thanks to small ratio of credits to deposits (only 80%). In the past this small ratio was criticized as limited profit making potential. However, finally it helped to avoid serious impacts of the crisis. In 2009, Slovak banks were affected especially by euro adoption, consequent loss of exchange rate commissions and other fees. Czech banks were in better condition than Slovak banks during 2009, while during previous years situation was approximately the same in both countries. Small ratio of credits to deposits (less than 70%) helped to avoid most of the difficulties also in the Czech Republic.

Situation in Hungary was more complicated. Hungary had suffered from recession already two years before crisis demonstrated in the central European region. The crisis has just prolonged and deepened negative effects in macroeconomics and banking sector, too. Ratio of credits to deposits was already 140%. The situation has worsened because of significant depreciation of Hungarian currency. As the most of loans were denominated in foreign currencies, their volume has increased. Hungary was the first country in the European Union that needed financial help from the International Monetary Fund. In Ukraine, significant proportion of bank sector is owned by state Ukrainian and domestic investors. And especially, these banks dealt with crisis less successfully than banks with foreign capital majority. Clients withdrew their deposits in panics, and several banks had to face bankruptcy. Ukrainian government even had to indirectly forbid premature withdrawal of deposits, therefore Ukrainian currency depreciated. Volume of credits increased even more as in Hungary, as the most of credits were denominated in the foreign currencies. Ratio of credits to deposits was dangerously at the level of 220%. Finally, volume of failed credits reached up to 20% [11]. Ukrainian banking sector stability had to be fortified through the World Bank and the IMF financial support.

Central European region is not as consistent as one could consider. Differences are more obvious in times of economic and financial crises. How each country is able to weather hard times depends on previous successful implementation in banking sector and consequently in other sphere of economy.

References

- [1] Baldwin, R. 2008. Central bank independence under threat. In: Economist [online], available at http://http://www.economist.com/blogs/freeexchange/2008/06/central_bank_independence_unde>
- [2] Bartóková, E. 2008. Inflačné ciele v krajinách V4, Herľany, Košice, In: Národná a regionálna ekonomika 7 : Zborník príspevkov z konferencie : 1. - 3. október 2008, Herľany. Košice : TU, EkF, p. 65-73. ISBN 978-80-553-0084-9.
- [3] Blinder, A. S. 2000. Central Banking in Theory and Practice. The MIT Press Cambridge, Massachusetts. 4. vydanie. ISBN 0-262-02439-X
- [4] Bognárová, B. 2010. Banky sa prepadli o desať rokov: [online]. available at: <http://hnonline.sk/c1-42106360-banky-sa-prepadli-o-desat-rokov>
- [5] Cukierman, A. 1992. Central bank strategy, credibility and independence: Theory and evidence. Massachusetts Institute of technology, 1992, 349 - 429, ISBN 0-262-03198-1
- [6] Ďurčová, J. 2008. Režim inflačného ciele a konvergenčná stratégia. In: Biatic : Odborný bankový časopis. roč. 16, č. 5, p. 26-29.

-
- [7] Grilli, V., MASCIANDARO, D., TABELLINI, G.: Political and Monetary Institutions and Public Financial Policies in the Industrial Countries. *Economic Policy*, 1991, vol. 13, 341 – 392
- [8] Hanasová, I. 2010. Využitie monetárnych nástrojov krajín V4. Diplomová práca. Košice: Technická univerzita v Košiciach, Ekonomická fakulta. 101 s.
- [9] Martinčík, D. 2006. Míra nezávislosti ČNB - minulý vývoj a vstup do EMU. In: *Firma a konkurenční prostředí. Sekce I: Makroekonomická výkonnost a konkurenceschopnost české ekonomiky jako součásti ekonomiky EU : Mezinárodní vědecká konference*, p. 106–118. ISBN 80 7302 120 X.
- [10] Mravcová, J. 2009. Vytriezvenie v bankovom sektore. Časy stopercentných úverov a nulových akontácií sú za nami a zrejme sa už nevrátia. In *Slovensko a svet v roku 2010*. Trend 50-51. ISSN 1335-0684
- [11] Mravcová, J. 2010. Bankové skupiny na východe doryžovali. Na čas. In *Trend*, No. 15/2010, p. 50-53. ISSN 1335-0684
- [12] NBS. 1993-2008. Výročná správa NBS 1993-2008. Bratislava. [online] available at: <http://www.nbs.sk>
- [13] NBS. 2010. Podiel zahraničného kapitálu na upísanom základnom imaní bánk v SR v rokoch 2009 až 2011. [online], available at: <http://www.nbs.sk/sk/statisticke-udaje/prehľad-o-rozvoji-penazneho-sektora/podiel-zahranicneho-kapitalu-na-zakladnom-imani-bank-v-sr/podiel-zahra-nicneho-kapitalu-na-upisanom-zakladnom-imani-bank-v-sr-v-rokoch-2009-az-2011>.
- [14] Polterovich, V. - POPOV, V. 2006. Accumulation of foreign exchange reserves and long term growth. [online], available at: <http://www.nes.ru/~vpopov/documents/Exchange%20rate-Growth-2006.pdf>
- [15] Rozmarová, S. 2010. Analýza nezávislosti centrálnych bánk krajín V4 a jej význam, Diplomová práca Košice: Technická univerzita v Košiciach, Ekonomická fakulta, 89 p.
- [16] Sladkovský, J. 2004. Dynamics of Banking Sector. Prague, April 19, CSOB.
- [17] Tkáč, M. 2006. Počiatky slovenského bankovníctva [online], available at: http://www.tkac.sk/texty/poc_slov_bankovnictva_2006.doc
- [18] Trend. 2010. Ďalšie banky v strate. In: *Trend*, No. 14/2010, Vol. 20, p. 44. ISSN 1335-0684
- [19] Trend. 2010. Zlým scenárom stres testu by neprešli dve banky. In: *Trend*, No. 15/2010, Vol. 20, p. 44. ISSN 1335-0684
- [20] Vokorokosová, R. 2008. Komerčné bankovníctvo, Košice, Elfa, p. 17 -74 ISBN 978-80-8086-094-3

CHAPTER 14.

HOW STRONG IS SERBIAN AGRICULTURE - COMPARATIVE ANALYSIS OF SEVERAL AGRICULTURAL INDICATORS OF SERBIA AND ROMANIA

Marko Jeločnik¹

Lana Ivanović²

Jonel Subić³

Abstract

Proportionally large share in gross domestic product, long-standing tradition and favorable climate conditions for organization of great deal of production lines in agriculture, have contributed to a fact that Serbian agriculture was awarded a status of development priority, and agriculture itself was recognized as one of potentially competitive advantages of domestic economy. It seems more certain that in near future Republic of Serbia shall become candidate for new member of EU, therefore it was quite interesting to conduct comparative analysis of several selected agriculture indicators of domestic agriculture with those realized in one of the states that recently approached EU (Republic of Romania was singled out as a country which borders Serbia, and is also traditionally oriented toward agriculture production). Upon conducted analysis, current strength of national agriculture was estimated, followed by conclusions from a standpoint of possible expectations for approaching EU.

Key words: *agriculture, EU, Serbia, Romania, accession*

INTRODUCTION

Starting with the Paris Treaty⁴ in 1951, followed by the Rome⁵ and Maastricht Treaty⁶, and passing of the EU Constitution in 2004, and the last expansion in

¹ Marko Jeločnik, Institute of Agricultural Economics, Serbia,

² Lana Ivanović, Institute of Agricultural Economics, Serbia,

³ Jonel Subić, Institute of Agricultural Economics, Serbia,

early 2007 (EU-25 were joined Romania and Bulgaria), the European Union becomes an integrative form consisting of 27 countries from the European continent.

On total area of roughly 4,2 million km², where population of 499,7 million people live, in 2009 according to the International Monetary Fund (IMF) estimates, Gross domestic product (GDP) of nominal value of about 11.806 trillion EUR (more than 60% of GDP is generated in the sector of services) was created. GDP per capita in 2008 was around 25.100 EUR. Inflation rate in recent years varies in the range of 1% - 3,7%. EU's total foreign trade with non-member countries traditionally records deficit, which in 2008 amounted to 242 billion EUR. Foreign trade exchange of the EU agricultural products has also recorded constant deficit, which in 2008 amounted to 11,7 billion EUR (total import of agricultural and agro-industry products was around 80,1 billion EUR, while export reached 68,3 billion EUR). Within the total number of working population in EU, only 9,6% is unemployed.

Although the agriculture share in EU-27 gross domestic product is below 3%, this sector is the principal source of income for around 20% of total population, which lives in predominantly rural regions that would be devastated without its contribution. Moreover, agriculture and food sector are important part of EU economy, providing almost 15 million jobs (8,3% of total employment) and amounting to around 4,4% of GDP. Strong processing industry total production (EU is the world's largest producer of food and beverages) is estimated at 675 billion of EUR. Finally, self-sufficiency of the EU in basic agricultural products is vital, as from point of the wellbeing of its citizens, as well from the point of all member states political independence. Therefore, economic, social and political importance of agriculture is much greater than its share in GDP of the EU. Given the number of potential consumers, agricultural production and food processing industries have been since the establishment of the Union labeled '*of vital interest*'.

Rome Treaty also defines basic legislation guidelines in EU agriculture. As the basic principles of agricultural policy: *the integrity of the market* (free flow of

⁴Treaty signed among Belgium, France, West Germany, Italy, Luxemburg and Holland had established European Coal and Steel Community (ECSC). This key document of postwar Europe connected big coal and steel producers countries into one group with common authority over heavy industry management.

⁵Rome Treaty from 1957 established European Economic Community (EEC), customs union among Belgium, France, West Germany, Italy, Luxembourg and Holland, basis of common market and free flow of people, goods, services and capital.

⁶With this Treaty, which came into effect in November of 1993, EU was established, integration which from primarily economic developed into politic integration. It implies systems which regulate common foreign and internal affairs, security, justice and monetary unity of member states.

agricultural products within the EU territory); *priority of the EU products* (successful safeguard of the EU internal market is accomplished with the priority treatment of domestic products over imported); *financial solidarity* (Common Agricultural Policy (CAP) implementation costs are funded from the EU budget), were identified.

Romania and Bulgaria have entered the EU community on January 1st 2007 (on June 22nd, 1995 Romania has acquired the candidate country for EU membership status). On the other hand, Stabilization and Association Agreement (SAA) between the officials of Serbia and EU was initialed in November 2007, and signed in April 2008. Two most important obligations that Serbia undertook with Stabilization and Association Agreement signing are establishment of free trade zone and harmonization of national legislative with EU legislative. Free trade zone between Serbia and EU is created for six year transition period. Dead line for trade liberalization was set based on ability of Serbian industry and agriculture to adapt to free trade, and completion of undertaken reforms. Serbia committed to gradually abrogate in transitional period all import taxes on goods from EU. On the other hand, EU confirms in document free access of our products to its market. After minor issues of political nature, in late December 2009 the EU unfroze the trade agreement with Serbia and the countries of Schengen dropped the visa requirement for Serbian citizens.

It seems realistic to expect, based on past events and planned activities, to get candidate status for EU membership in near time, and to eventually join the European Union by 2014. Observing Serbia from this aspect, it can be assumed that last year represents the same time marker that Romania had in 1994. Guided by this logic it would be interesting to observe the selected parameters of Romania agriculture in the early nineties, and compare them with the same realized within the domestic agriculture in 2009, in order to evaluate by comparative analysis whether the national agriculture is ready to respond to any eventual request made by the EU⁷. The performances of Romania agriculture in 2009 are also presented, in order to perceive the extent of its progress in the past 15 years.

METHOD AND DATA SOURCES

In terms of the research objective and available data sources, during the analysis standard statistical and mathematical methods were used. Generally applied

⁷ Often, candidacy of some country for accession into EU community is politic decision, which agriculture and agro-complex observes as peripheral part of economic system of potential candidate.

method of study was "*desktop study*". Most important aspects were presented tabularly and graphically, and analyzed characteristics were presented in absolute and relative numbers. Methods used are in accordance with the research objective, so they provide a real image of the situation within the national agricultures.

During the paperwork writing all the available data sources were used, ranging from available statistical data of the Statistic offices of Republic of Serbia, Republic of Romania, EU and *Food and Agriculture Organization (FAO)*, current literature, papers, publications and electronic databases. It should be also noted that the statistical evidence offered by National Statistic Offices, FAO and EU publications, related to the elements performances in agriculture, are often not up to date, or methodologically and qualitatively consistent with data from other relevant sources. This is the main reason for the possible value deviation, particularly for data that are results of estimates.

RESULTS

1. Basic macroeconomic characteristics of the Republic of Serbia and the Republic of Romania

Serbia covers the territory of 88.361 km². According to the latest census it has 7.498.001 inhabitants. During the previous year, the GDP amounted to 31,511 billion EUR (4.304 EUR per capita). According to the estimates about 11,3% of GDP is created within the agriculture (almost 20% within the entire agro-complex). Despite the decrease in total GDP by 3,5%, compared to the year 2008, agriculture is the branch where the real growth in GDP is achieved. Share of agriculture in GDP and foreign trade exchange, and a large share of agriculture population in the total population, defines Serbia as a predominantly agrarian country, where over 75% of the territory is qualified as rural.

Budget funds assigned for agriculture, or to the relevant Ministry amounted to 25,616 billion RSD (3,42% of total budget expenditure), while according to the Budget Law for 2010 planned funds are 25,622 billion RSD (3,36% of total budget expenditure)⁸.

On the other hand, Serbian eastern neighbor, the Republic of Romania extends on 237.500 km². According to EUROSTAT, in the past 15 years the total population depopulated from about 23 million people in 1994 to 21,5 million in 2008.

⁸ Notable is the disproportionately small allocation of funds in agriculture, in compare with its impact in total GDP creation and socio-economic importance for complete economy.

Romania is also defined as a predominantly agrarian country, with a relatively large part of its territory qualified as rural. The value of total GDP (according to current prices) with slightly less than 40 billion EUR in the late nineties went up to 137 billion in 2008. The agriculture share in GDP in 2008 amounted to about 7,2%, while in 1998 it was around 16%⁹.

2. Available agricultural resources

Agricultural production is of strategic importance for Serbia, since it simultaneously provides for the population nutritional needs, and contributes to a large extent to the GDP, promotes foreign trade, solves the unemployment problem, initiates regional integration, improves the state image, etc. Serbia has a good geographic location, favorable climate, rich biodiversity and extremely fertile soil. Bearing this in mind, as well as centuries-old tradition of agricultural production, it is not by chance that it is one of the key sectors of the overall development. Unfortunately, constant depletion of production resources in terms of chronic shortage of investments has greatly influenced the obsolescence of the material base and the slowdown of the overall local agriculture development.

2.1. Land

Land as an objective production condition, along with the climate, is the most important physical-geographical component of agricultural development. According to the official statistics, Serbia has 5,06 million hectares of agricultural land. In the structure of agricultural land 3,3 million ha (65,2%) are occupied by the arable land and gardens, around 0,25 million ha (4,9%) by orchards, 0,06 million ha (1,1%) by vineyards, while the meadows occupy 0,62 million ha (12,2%) and pastures around 0,84 million ha (16,6%). Surfaces under these land categories haven't significantly oscillated in the previous period.

Inefficiency in the use of land is reflected in relatively large areas of agricultural land in a state of neglected land (estimated to remain around 600.000 ha of uncultivated land each year)¹⁰ and relatively small irrigated areas (irrigation systems cover about 190.000 ha, but are in function only on 75.000 ha, or on 1,8% of total agricultural land). European average is about 30% of arable surfaces under irrigation systems. Many countries that surround Serbia are in much better

⁹ Agriculture share in GDP has declined since 1990, stabilizing at about 11-13% after 1999.

¹⁰ The causes of this phenomenon are intensive depopulation of rural areas and weak economic effects of agricultural production. However, this way good natural conservation of mentioned land occurred, what qualifies it into the production potentials for organic agriculture.

position according to the observed parameter (in Bulgaria around 1,2 million ha is irrigated, in Greece 1 million ha, in Hungary 260.000 ha, etc.).

It has to be underlined also that according to the provisions of SSA, four years after its entry into force the competent republic authorities must enable EU citizens transfer of agricultural land under the same conditions as for the local population (potential consequences could be increased land price, as well as serious investments of multinational agro-food companies in the national agriculture).

According the data from Food and Agriculture Organization of United Nation (FAO) and national statistic, Romania in 1994 had in its disposal 14,8 million ha of agricultural land, with 9,34 million ha (63,1%) in the category of arable land. During the 15 year period there was a 9% reduction in total agricultural land (in 2008 Romania had 13,55 million hectares of agricultural land), with minimal structural changes (arable land and gardens 8,72 million ha, or 64% of total available agricultural land, orchards and vineyards 2,9%, meadows 22,7% and pastures 10,4% of the observed area). In 2007 out of 615.330 ha of irrigable area, irrigation was actively conducted on 173.450 ha.

Although in Serbia trend of slight decrease of agricultural surfaces per capita (around 0,68 ha per capita) is present, land still doesn't belong to a group of limiting factors of agricultural production. Similar situation is in Romania too, where this indicator is around 0,69 ha per capita. Main problem in Serbia could be unfavorable property structure and fragmented estates, as well as extensive land usage. In average a husbandry has about 3,7 ha of agricultural, or 2,46 ha of arable land (in EU-27 average is around 12 ha with notable variations between member states. This average is higher within E-15) what is insufficient for serious commodity production. In Romania, average husbandry has around 3,3 ha of agricultural land.

2.2. Forests

Forests are renewable natural resource of the economic and social importance. Serbia has 2.429.642 hectares of forest complexes¹¹. In relation to the total area, the percentage of area under forests is about 27,3%.

The total area under forests in Romania is about 6,5 million ha, and compared to the year 1994 was not significantly changed (6,37 ha). In relation to Serbia, the percentage of the areas under forests is almost identical, about 27,4%.

¹¹ Despite the fact that public and private ownership are almost equal, more than 90% of forest fund is under constant monitoring of public company *Srbija šume*.

2.3. Hydrological conditions

Hydrological conditions are an important element of natural resources. They define the water within the agricultural production as an essential element in the crops growing and livestock breeding process, and in the processing industry of primary agricultural products. Hydrological potential of Serbia and Romania is embodied in the great natural watercourses, artificial hydro-systems, ground water flows and aquifers, and constructed water accumulations. Water is in most cases of favorable quality for drinking, irrigation and industrial use, and is available in sufficient quantities.

2.4. Livestock

As in previous years, in 2009 in Serbia was evident the decreasing trend of almost all types of livestock heads. A mild increase in the head numbers has been recorded only in goats, poultry and bee hives, which is the factor of the specifics of these productions and the decline in real purchasing power of domestic consumers, who protein needs from the meat substitute by purchase of the cheapest substitutes.

Within this period Romania is characterized by the same trends. The main reasons for decline of live stock breeding sector in both countries are: former state enterprises were too big and inefficient; weak competitiveness/productivity in relation to the imported products; general lack of funds; aggressive policies toward state enterprises from the former managers, without concrete restructuring strategy; unclear state policy for this sector; etc. On other hand, in both countries process of racial composition intensive correction of all animal species is present, along with protection of autochthonous breeds.

Table 1: Number of livestock heads in Romania and Serbia, in observed years (in million)

No.	Type of livestock	Romania		Serbia – 2009.
		1994.	2009.	
1.	Pigs	9,26	6,17	3,63
2.	Poultry	76,53	84,80	22,40
3.	Cattle	3,96	2,68	1,00
4.	Goats	0,78	0,90	0,14
5.	Sheep	11,50	8,88	1,50
6.	Horses	0,75	0,82	0,014
7.	Bee hives	0,76	0,99	0,30

Source: <http://faostat.fao.org>

2.5. Agricultural population and number of agricultural husbandries

According to the estimation, rural parts of Serbia today inhabits around 3,3 million inhabitants. According to the *Census of population, households and housing* in 2002, total number of agricultural population is 817.052, or about 11% of the total population. Out of this number 529.236 inhabitants is economically active. Within the group of 287.816 supported persons, many of them take part in everyday activities within their family husbandries. Also, there is number of persons that found additional activity in agriculture in order to supplement the family budget.

Table 2: Number of agricultural holdings in Serbia and Romania according to the total area of agricultural land utilized

Farm category ¹²	Number of farms	% in total number of farms	Utilized agricultural land	Average per one holding
Serbia – census 2002				
Without land	6.288	0,8	0	0
Up to 2 ha	354.029	45,5	347.252	0,96
2 - 5 ha	244.064	31,3	854.367	30,5
5 - 10 ha	131.438	16,9	957.719	7,29
10 - 20 ha	36.772	4,7	503.358	13,69
Over 20 ha	6.300	0,8	206.305	32,75
Total	778.891	100,0	2.869.000	3,68
Romania - 2005				
Without land	13.4910	3,2	0	0
Up to 2 ha	2.721.710	63,9	1.941.250	0,71
2 - 5 ha	1.014.110	23,8	3.160.590	3,12
5 - 10 ha	289.580	6,8	1.966.390	6,65
10 - 20 ha	65.910	1,6	849.620	12,89
Over 20 ha	29.950	0,7	6.028.580	201,3
Total	4.256.170	100,0	13.906.700	3,27

Source: Ševarlić M., Nikolić Marija (2007): *Metodološka pitanja posedovne i socio-ekonomske strukture farmerskih domaćinstava u EU, Monograph - Međunarodna iskustva u tranziciji agrarnog sektora i ruralnih područja, DAES and Faculty of agriculture, Belgrade, Serbia.*

Contrary to the official census, it is roughly estimated that today there are around 750.000 agricultural households (about one third of total households), where only

¹² For easier comparison, farms are distributed in 6 interval groups.

around 418.000 households are with registered husbandry¹³. Among them in 2009, only about 80.000 husbandries have exercised the right to subsidies (for at least 1 member the required contributions were paid).

In 2004 in Romania 45,1% of total population lives in rural areas. 12% of total population (63% of rural population), or 29% of total employed population was involved in agriculture, hunting and forestry¹⁴. Total number of husbandries has decreased from 4,48 million in 2003 to 3,93 million in 2007.

Observing the structure of farms by total agricultural land use, in Romania one can notice significantly higher prevalence of farms with smaller estate (up to 2 ha), as well as smaller average household total land area use (3,27 ha).

Basic phenomena characteristic for the rural population in both countries are: notable migratory processes, superannuation, the white plague phenomenon, bad educational structure and insufficient level of professional competence of farmers, etc. Despite good production potential, domestic agriculture is still generally extensive, with frequent recessive trends, limited with odds and ends sale, small estates, small quantum and variable production quality, obsolete machines and technology, low productivity and bad production structure, poor organization of producers, poorly developed funding mechanisms, poor functioning of the purchase markets, small presence of domestic producers in the international market, etc. Most of the above relates also to agriculture in Romania.

3. Production indicators of agricultural production

From the standpoint of agriculture, which is significant segment of economy, available natural and social resources of Serbia should ensure to the agriculture epithet of the key factor of overall development. This will be achievable only in a case of more active government involvement in the process of creation of favorable conditions for its development.

Similar stance applies to the agriculture of Romania, where also strong influence of exogenous factors embodied in CAP exists, which may represent a limiting factor for overall development.

¹³ According the Organisation for Economic Co-operation and Development (OECD), in rural regions of Serbia there are 1.365.000 households (54% of total number of households) and about 583.000 of them (43%) have a farm holding.

¹⁴ During 2007 2,84 million of inhabitants (13,2% of total population) worked in agriculture.

Table 3: Certain agricultural production lines in 2009 in Serbia

Agricultural product		Harvested area (in ha)	Total production (in t)	Yield (t/ha)	
Cereals	Wheat	567.654	2.067.555	3,64	
	Barley	95.377	302.527	3,17	
	Maize	1.208.640	6.396.262	5,29	
	Oats	35.396	73.640	2,08	
	Ray	5.197	12.743	2,45	
Industry plants	Oilseed rape	18.091	44.300	2,45	
	Sugar beet	61.399	2.797.596	45,6	
	Sunflower	157.337	377.549	2,4	
	Ind. paprika *	1.500	3.500	2,33	
	Hop	67	110	1,64	
	Soybeans	144.386	349.193	2,42	
	Tobacco	6.103	9.847	1,61	
Vegetable	Potatoes	78.169	898.282	11,49	
	Beans dry*	21.366	42.183	1,97	
	Tomatoes	19.921	198.353	9,51	
	Cabbage and brassicas	20.810	326.162	15,67	
	Paprika	18.541	171.366	9,24	
Fodder crops	Alfalfa °	188.008	1.114.846	5,9	
	Clover °	116.953	543.813	4,5	
	Silage maize °	26.758	586.919	21,9	
	Meadow °	613.630	1.126.239	1,8	
	Pasture °	810.916	471.043	0,6	
Fruit	Apple	0,036	0,28	7,83	
	Plum	0,20	0,66	3,3	
	Sour cherry	0,038	0,10	2,8	
	Grape	0,060	0,43	7,2	
	Raspberry				
Live stock breeding products	Cow milk		1,51 million t		
	Eggs		1,03 million pcs		
	Wool		2.403 t		
	Honey		4.577 t		
	Meat	Beef		100.199 t	
		Sheep		24.517 t	
		Pork		528.000 t	
Poultry			80.204 t		

Source: <http://faostat.fao.org> * data for 2008. ° Institute for statistic of Republic Serbia, data for 2008.

Table 4: Certain agricultural production lines in 1994 and 2009 in Romania

Agricultural product		Harvested area (in million ha)		Total production (in million t)		Yield (t/ha)		
		1994.	2009.	1994.	2009.	1994.	2009.	
Cereals	Wheat	2,41	2,14	6,1	5,2	2,54	2,43	
	Barley	0,78	0,51	2,1	1,18	2,72	2,3	
	Maize	2,98	2,33	9,34	7,98	3,13	3,42	
	Oats	0,33	0,20	0,50	0,30	1,49	1,47	
	Ray	0,028	0,015	0,051	0,033	1,78	2,13	
Industry plants	Rapeseed	342 ha	0,41	322 t	0,57	0,94	1,37	
	Sugar beet	0,13	0,021	3,27	0,81	25,2	38,6	
	Sunflower	0,58	0,76	0,76	1,10	1,31	1,44	
	Ind. paprika	0,030	0,031*	0,027	0,033*	0,9	1,06*	
	Hops	2.189ha	456 ha	1.559 t	245 t	0,71	0,54	
	Soybeans	0,064	0,048	0,10	0,08	1,55	1,75	
	Tobacco	9.992ha	850 ha	0,012	1.566 t	1,3	1,84	
Vegetable	Potato	0,25	0,26	2,95	4,00	11,8	15,4	
	Beans	0,032	0,030	0,037	0,022	1,17	0,7	
	Tomato	0,044	0,049	0,72	0,75	16,1	15,4	
	Cabbage and brassicac	0,032	0,048	0,71	1,00	22,0	20,7	
	Paprika	0,017	0,020	0,16	0,24	9,7	12,3	
Fruit	Apple	0,070	0,053	0,36	0,52	5,2	9,83	
	Plum	0,080	0,075	0,38	0,53	4,8	7,1	
	Sour cherry	-	-	-	-	-	-	
	Grape	0,25	0,18	1,03	0,99	4,2	5,4	
	Raspberry	1.500ha	100 ha	2.300 t	2.200 t	1,5	22	
Year/product		Total production						
		1994.			2009.			
Live stock breeding products	Cow milk	4,29 million t			5,21 million t			
	Hen eggs	5,09 million pcs			5,95 million pcs			
	Wool	25.141 t			17.700 t*			
	Honey	9.820 t			19.937 t			
	Year/product		Total production (in t)					
			1994.			2009.		
	Meat	Beef	258.000			155.199		
Sheep		74.500			70.682			
Pork		775.300			470.567			
Poultry		260.000			371.383			

Source: <http://faostat.fao.org> * data for 2008

Observing presented production performances, it could be noticed that Serbia has achieved in a number of agricultural production lines, either better results or can quite successfully parry its eastern neighbor. Therefore derives the conclusion that accession into EU has not crucially affected improvement of existing technical and technological solutions of Romanian producers, from the aspect of produced volumes.

4. Foreign trade exchange of agriculture

For years, Serbian agriculture has realized foreign trade surplus, which was around 650 million USD in 2009. In comparison to 2008, foreign trade balance of agriculture has increased for almost 30%. The most significant foreign trade partners for products of primary agriculture and food industry Serbia found into EU countries (it has preferential status), Western Balkan Countries - WBC (signatories of multilateral free trade agreement - the *Central European Free Trade Agreement* - CEFTA)¹⁵, Russian Federation, etc. In 2009, within the sector of agriculture achieved export-import ratio of 148,7%.

Table 5: Foreign-trade exchange of agro-food products in Serbia in 2009 (in million USD)

Parameter	Export	Import	Balance
Foreign-trade exchange - total	8.344,9	15.581,9	-7.237,0
Foreign-trade exchange of agro-food products - total	1.945,3	1.308,4	636,9
Share of agro-food products in total Foreign-trade exchange (in %)	23,3	8,4	*
Food and live animals	1.509,8	951,0	558,8
Live animals	56,6	23,3	33,3
Meat and preparations	64,5	52,2	12,3
Dairy products and eggs	64,3	27,0	37,3
Fish and preparations	5,4	101,1	-95,7
Cereals and preparations	477,3	72,7	404,6
Vegetable and fruit	453,1	280,9	172,2
Sugar, honey and confectionery products	158,6	37,8	120,8
Coffee, tea, spices	83,7	180,3	-96,6
Animal feed	61,6	53,8	7,8
Other food products	84,4	121,9	-37,5
Beverages and tobacco	248,2	190,8	57,4
Beverages	192,8	81,2	111,6
Tobacco and products	55,4	109,6	-54,2
Raw leather and fur	13,7	7,8	5,9

15 In the structure of total export common share of EU and CEFTA countries is around 94%.

Oil seed	23,2	62,3	-39,1
Animal and plant raw materials	26,0	46,9	-20,9
Animal and plant oil and fat	124,4	49,6	74,8

Source: Serbian chamber of commerce

Products that dominated in total export of agriculture during 2009 were mercantile maize (1,6 million t), mercantile wheat (201.614 t), refined sugar (182.048 t), beef meat with bones, fresh and chilled (2.649 t), edible sunflower oil (43.225 t), frozen raspberries and sour cherries, fresh apples, dried plums, etc.

Table 6: Foreign-trade exchange of agro-food products in Romania in 1994 and 2007, top ten products (in million USD)

No.	1994 - export		2007 - export	
	Product	Value	Product	Value
1.	Pig meat	89,71	Cigarettes	181,53
2.	Sunflower oil	33,47	Sunflower seed	144,30
3.	Wine	18,69	Rapeseed	105,75
4.	Preparations of beef meat	11,71	Maize	102,75
5.	Soybean oil	10,90	Wheat	63,00
6.	Meat beef	7,39	Sunflower oil	47,80
7.	Maize	7,31	Pastry	42,20
8.	Cucumbers and gherkins	6,34	Beverage non-alcoholic	42,15
9.	Sunflower cake	6,34	Barley	36,47
10.	Mushrooms and truffles	6,32	Mushrooms and truffles	32,74
11.	Total export – top ten products	198,18	Total export – top ten products	798,69
No.	1994 - import		2007 - import	
	Product	Value	Product	Value
1.	Food prep nes	49,31	Pig meat	288,90
2.	Soybean cake	47,84	Food prep nes	259,09
3.	Cotton lint	45,45	Maize	170,88
4.	Sugar raw	43,10	Chicken meat	170,12
5.	Chicken meat	38,77	Pork	149,11
6.	Barley	35,76	Wheat	149,10
7.	Cigarettes	35,75	Tobacco	134,03
8.	Chocolate	27,28	Bananas	101,26
9.	Sugar refined	23,67	Sugar raw	97,03
10.	Soybeans	19,18	Pastry	92,27
11.	Total import – top ten products	366,11	Total import – top ten products	1.611,79

Source: <http://faostat.fao.org>

In the structure of import of agricultural products during 2009, dominant share had raw coffee (36.000 t) and tobacco and tobacco products (6.500 t).

In 2007, Romania recorded deficit in agro-food products foreign trade exchange in amount of 747 million EUR. Within total import agriculture contributed with 7,1%, and in total export with 4%. It could be noted in previous period that Romania has undergone the change from exporter of mentioned products to a net importer.

5. *Agricultural legislation, credits, Foreign Direct Investments (FDI), pre-accession funds and Common Agricultural Policy (CAP)*

Previous year was characterized by increased activities in the field of establishment of a new legislation related to agricultural production and areas that directly or indirectly rely on it. In an array of adopted laws and by-laws, by which national legislator expressed its readiness that management of the sustainable development of society, economy and environment is in compliance with all relevant international directives and standards, following documents stand out: *Law on agriculture and rural development, Law on amendments to the Law on agricultural land, Law on food safety, Law on livestock breeding, Law on genetically modified organisms, Law on plant protection, Law on protection and sustainable usage of fish stock, Law on animal welfare, Law on public warehouses for agricultural production, Green package - set of 16 laws from the area of environmental protection, Law on protection of competition, etc.*

Also, during 2009 Ministry of Agriculture, Forestry and Water Management established a number of regulations in regard to the subsidization of certain agricultural production lines, among which: *Regulation on conditions and ways of use of funds for production materials subsidizing for crop and vegetable production in 2009; Regulation of milk premium for 2009; Regulation on use of funds for support of rural development through the increase of competitiveness of agriculture; Regulation on usage of financial incentives for establishment of production and seedlings plantations of fruit, vine and hop in 2009; Regulation on conditions and ways of use of funds for insurance costs subsidizing for animals, crops and fruits in 2009; Regulation on conditions and ways of use of funds for mineral fertilizers subsidizing for fall sowing in 2009; etc.*, stand out.

In March 2009 the Government of Republic of Serbia established a program of measures for agricultural production support by credit in 2009. Regulation has enabled to all registered farms two models of crediting: a) subsidizing of interest at short-term loans given to agricultural husbandries (persons) b) Long-term loans for agricultural and food production (persons and legal entities). Loans are

granted in branch offices of all commercial banks that have signed contract with the Ministry of agriculture (21 banks).

In order to simplify outside assistance systems and maximize the impact of funds dedicated to candidate and future candidate counties, EU Commission made decision to replace all previous pre-accession funds (PHARE, ISPA, SAPARD, CARDS) by new instrument - Instrument for Pre-Accession Assistance (IPA). It defines amount and type of support intended for Western Balkan Countries in the period 2007-2013 (support consists of 5 components: transition assistance and institution establishing, cross border cooperation, regional and rural development, and human resources development).

Serbia may benefit especially from the first and second component in the period 2007-2010 (it may utilize around 584 million EUR). If Serbia becomes candidate country until 2012, it may utilize around 1 billion EUR of EU assistance. Although it represents non-refundable aid, beneficiary country has to contribute a certain share from its national budget for realization of each funded project.¹⁶

From 2004, the major foreign investors (mostly from EU) started investing more in South Eastern European Countries. About 12 billion USD were invested in 2005, and Romania got more than 51% of that sum. During the 2006, through FDI Romania recorded around 11,4 billion USD, and in 2008 around 9,3 billion EUR of investments. As there were no interests to invest in agriculture, tourism and construction industry, only 10% of the total FDI were directed to agro-food sector.

Table 7: The Romanian agro-food sector - attractiveness for foreign investors

Share of total FDI in period 1990-2005	Agriculture	Food industry
Number of investors (%)	3,6	5,3
Value of investments (%)	1,2	9,4

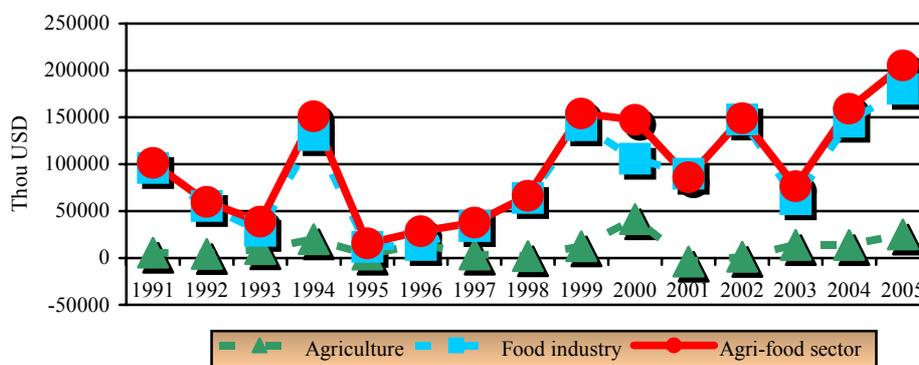
Source: NOTR Database

Total amount of FDI in Serbia has varied from year to year. Observing the last decade, the sum of FDI ranged from mere 50 million USD in 2000, up to maximal 4,4 billion USD in 2006¹⁷. As in Romania, rather small part of FDI is directed to agro-sector (0,6% to agriculture and about 14,1% to processing industry).

¹⁶ Aggravating circumstance for Serbian agriculture could represent time of possible candidacy into EU. Romania has gone through this process in years that preceded the global economic crisis, when the EU disposed with much larger funds for economic support to potential new member states.

¹⁷ In 2007 total sum of FDI was 2,2 billion USD.

Figure 1: The evolution of the FDI in Romanian agro-food sector (1991-2005)



Source: NOTR Database

According to official references, EU Common Agricultural Policy (CAP) overall spending are split between *Pillar 1* - market related (direct aids and market interventions) and *Pillar 2* - (rural development) expenses. Main priorities of CAP are to ensure: food quality and sufficiency; environment and animal welfare; competitiveness; and sustainable development of rural communities.

Above all, considering total EU budget (present financial framework 2007-2013), the total allocation for whole period was set to 864,2 billion EUR. Total EU budget for 2009 was 133,8 billion EUR.

Since the implementation of CAP in 1957, it had a significant influence on the EU budget revenues and expenditures. Although there has been constant decrease in CAP expenditures during the last three decades, CAP spending still represent considerable share in EU budget.¹⁸ In same period CAP has been reformed several times, with the aim of better targeting and control of needed expenditures.

As CAP is based in a set of strict parameters, budget limits were established to control expenditure in any year. The CAP limits for the 2007-2013 period do not allow any increase, so CAP expenditures are frozen until 2013. In 2009 total agricultural budget was 56,12 billion EUR (41,9% of total EU budget, or less than 0,5% of total EU GDP), of which 73,3% for market oriented expenditures and direct aid, 24,3% for rural development and 2,4% for other expenditures.

¹⁸ Share of CAP in EU budget was decreased from 75% in 1979, via 70% in 1985, 64% in 1990 and 46,2% in 2005, to 41,9% in 2009.

Financial support from CAP for the Romanian agriculture in three year period (2007-2009) was 4,04 billion EUR, according to the following proportion: 60% for rural development, 22% for direct payments and 18% for market support.

Focusing Serbia, potential question could be - is EU agricultural and rural development policy suitable for Western Balkan Countries, considering that within EU the agricultural sector is the cost part of the economy, while in WBC this sector generally represent revenue part of economy¹⁹.

Also, it would be interesting to note positive expectations and negative consequences which Serbian agriculture may incur with the nomination of candidacy for EU accession.

Among the negativities that would burden Serbian agro-sector following ones are emphasized: increase in import and total trade deficit growth (surplus neutralization in agricultural products trade); constant exhaustive negotiations with the European Commission on assigning of favorable quotas and better personal benefits within the CAP; reduction in customs revenues; notable costs of Serbian agriculture adjustment to the growing competition from the EU (costs of companies restructuring and liquidation, costs of environmental protection standards harmonization with the EU standards); growth of social expenses (growth of unemployment in initial stages of national market opening); etc. On the other hand, EU legislative body remains under constant pressure by questions: would the farms in candidate countries and new member states remain competitive; would the market in mentioned countries be over-flown by products from EU-27; would community financial support in these countries be sufficient²⁰.

Contrary to the above, Serbian agriculture can expect following benefits with the EU accession: increased inflow of FDI in agriculture and food industry; stable and transparent institutions; long-term, contractual preferential access to EU market (export growth, integration into the EU economy and better access to 500 million consumers market); restructuring and modernization of the agribusiness sector; increased levels of support to agricultural incomes creation; wider choice of goods and services for domestic producers; increase of national production competitiveness (improved quality of products); decrease in agricultural and

¹⁹ Although Serbia already has key documents harmonized with CAP, above all Strategy of rural development for 2010-2013, The national agricultural program of the Republic of Serbia 2009-2011, Law on agriculture and rural development, they are still waiting on adequate implementation.

²⁰ Desired entry of Serbia into EU, at best could occur during 2014, in line with the beginning of new CAP framework. One crucial question could be laid, what kind of assistance, or what limitations Serbian agriculture might expect.

increase in other aspects of employment in second phase of process of national market liberalization (strengthening of private sector and creation of new jobs openings due to growth of export and service sector); diversifying of the forms of agricultural activity in rural areas; agro-food products trade balance improvement; stability of agricultural policy and market (agricultural prices); concentration of agricultural production within large commercial farms; etc.

CONCLUSION

It is undisputed that according favorable climate conditions, natural capacities and long-standing tradition, Serbian agriculture was gaining for years proportionally large share in the structure of total GDP. That is mainly why it was awarded a status of development priority after recognizing in it one of potentially competitive advantages of national economy.

After comparison of production potentials and achieved results within agriculture of Republic of Romania and Republic of Serbia, it could be noticed that Romanian agriculture has accomplished during the last fifteen years, either similar parameters as Serbia has, or is by them still behind. But, having only agriculture in focus, it would be wrong to abruptly conclude that Serbia possesses all necessary attributes that could qualify it for obtaining candidate country status, and later full member of EU status. As mentioned before, nomination for EU community entry is usually delegated by political position that observes agriculture as secondary segment of potential candidate economic system.

References

- [1] Agricultural statistics (main results 2007/08), edition 2009, Eurostat, European Commission, Belgium. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-ED-09-001/EN/KS-ED-09-001-EN.PDF
- [2] Alexandri, C., Davidovici, J., Gavrilesu, D. (2004): *Tratat de economia agriculturii*, Academia Romana, IEA, Bucharest, Romania.
- [3] Analiza makroekonomskih i fiskalnih kretanja u 2009, www.mfin.sr.gov.yu
- [4] Bernardoni, P., Živkov, G. (2010): State support to agriculture producers in the WBC – a comparative analysis of CAP approaches, subsidies and programs, Presentation at summer school and workshop - Perspectives on the agro-food sector in Serbian and WBC, Belgrade, Serbia.
- [5] Bogdanov Natalija (2008): Small rural households in Serbia and rural non-farm economy, UNDP, DAES, Belgrade, Serbia.
- [6] Boussard, J., M. (2007): The future of the CAP pillar 1 – a new philosophy, http://www.ivry.inra.fr/mona/publications_chercheurs/Textes-Publis/JMB_Athens-12-2007.pdf

-
- [7] Cvijanović, D., Katić, B., Vuković, P. (2009): Serbia at the gates of the EU - comparative analysis, Monography - Certain aspects of structural change in rural areas – the experience of selected countries, IERIGZ, Warsaw, Poland.
- [8] Djuric, I. (2009): The EU's agricultural budget – development and future, Faculty of agricultural science Gottingen, Germany
- [9] Europe in figures – Eurostat yearbook 2010, EC, EU, Belgium. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/CH_01_2010/EN/CH_01_2010-EN.PDF
- [10] External and intra-EU trade - a statistic yearbook, 2009 edition, Eurostat, 2010. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CV-08-001/EN/KS-CV-08-001-EN.PDF
- [11] Gavrilesco, D., Voicilas, M. (2007): The Romanian agro-food sector – how well is it prepared to join EU, IAE, Bucharest, Romania.
- [12] Jeločnik, M. (2009): Karakteristike organizacionih oblika subjekata u poljoprivredi, Master thesis, Faculty of agriculture Novi Sad, Serbia.
- [13] Kapor, P. (2009): FDI in agriculture, Economics of agriculture no 2/2009, IAE, Belgrade, Serbia.
- [14] Moussis N. (2009): Access to European Union: law, economics, policies, European study service, Rixensart, Belgium.
- [15] Osnovni indikatori makroekonomskih kretanja, www.mfin.sr.gov.rs
- [16] Popis stanovništva, domaćinstava i stanova u 2002 godini, 2003, Statistical office of Republic of Serbia, Belgrade, Serbia.
- [17] Puškarić A., Jeločnik M., Subić, J. (2010): Obeležja trgovine agroindustrijskim proizvodima u EU, ICAEDAR, Bucharest, Romania.
- [18] *Official gazette of RS* no. 41/09, no. 36/09. and no. 51/09.
- [19] Spoljnotrgovinska razmena poljoprivredno-prehrambenih proizvoda u 2009, www.pks.rs
- [20] Statistički godišnjak Republike Srbije za 2010, Statistical office of Republic of Serbia, Belgrade, Serbia.
- [21] Subić, J., Simonović, Z., Mihailović, B. (2009): Comparative review of Romanian agriculture in pre-accessing period, Ekonomika, Niš, Serbia.
- [22] Ševarlić M., Nikolić Marija (2007): Metodološka pitanja posedovne i socio-ekonomske strukture farmerskih domaćinstava u EU, Monograph - međunarodna iskustva u tranziciji agrarnog sektora i ruralnih područja, DAES and Faculty of agriculture, Belgrade, Serbia.
- [23] The CAP explained, http://ec.europa.eu/agriculture/publi/capexplained/cap_en.pdf
- [24] Ulrich K., Vladić Z. (2009): Trgovina poljoprivredno-prehrambenim proizvodima - principi i politika, University in Belgrade, Faculty of agriculture, Serbia.
- [25] Zakon o budžetu Republike Srbije za 2010, Official gazette of RS no. 107/2010
- [26] Zakon o budžetu Republike Srbije za 2009, www.mfin.sr.gov.rs
- [27] <http://capreform.eu/new-cap-spending-figures-show-raw-deal-for-new-member-states/>
- [28] <http://ec.europa.eu/budget/index.htm>
- [29] <http://europa.eu>
- [30] <http://epp.eurostat.ec.europa.eu>
- [31] <http://faostat.fao.org>
- [32] <http://www.seio.gov.rs/code/navigate.asp?Id=409>

- [33] www.agropress.org.rs/tekstovi/10616.html
- [34] www.srbijasume.rs
- [35] webrzs.statserb.sr.gov.rs

CHAPTER 15.

REFORMS IN CHOSEN TRANSITION COUNTRIES WITH RECOMMENDATIONS FOR INCREASING COMPETITIVENESS¹

Vesna Paraušić²

Vladana Hamović³

Branko Mihailović⁴

Abstract

The authors put emphasis on 11 European countries (Serbia, Bosnia and Herzegovina, Albania, Macedonia, Croatia, Poland, Romania, Bulgaria, Hungary, Slovak Republic, Slovenia), for which a review was given on accomplished levels of transition reforms by European Bank for Reconstruction and Development, as well as latest evaluation of competitiveness in Competitiveness Report by World Economic Forum. These analyses endowed the authors to identify directions of competitiveness establishment and sustainable economic growth for chosen countries. In general, most of the countries are awaiting intense reforms in fields of: (1) reconstruction and enhancement of institutions and infrastructure; (2) securities market & non-bank financial institutions; (3) policy of competitiveness establishment and enhancement (4) promotion of efficiency in merchandise market and labor force; (5) further reconstruction and privatization of companies. In respect of competitiveness factors, as sophistication and innovation of business strategies, analyzed countries mostly fall behind the world, therefore these factors of competitiveness must receive particular attention in future.

Key words: *transition, economic reform, economic development, productivity, competitiveness*

¹ This article represents a part of the Project no. 149007 D research results – Multifunctional Agriculture and Rural Development Aimed at EU Integration of Serbia, financed by the Serbian Ministry of Science.

² Vesna Paraušić, Institute of Agricultural Economics, Belgrade, Serbia

³ Vladana Hamović, Institute of Agricultural Economics, Belgrade, Serbia

⁴ Branko Mihailović, Institute of Agricultural Economics, Belgrade, Serbia

INTRODUCTION

Countries in transition are today on the road of economic recovery and development where the foundation of competitiveness should be radically changed: competitiveness based on production factors is to be replaced with competitiveness based on high productiveness, application of knowledge, innovation, new technologies. Majority of 11 analyzed countries (7 of them are EU members) is only at the beginning of reconstructing their economic system, and a few of them managed to accomplish noticeable results. This report gives a review of achieved transitional reforms for analyzed countries, as well as the level of national competitiveness compared to World Economic Forum Report. Researches conducted by these international institutions (EBRD and WEF) were the base for future projections of directions of transitional reforms and structural adjustments of analyzed countries.

EVALUATION OF ACHIEVED LEVEL OF ECONOMIC REFORMS AND COMPETITIVENESS IN CHOSEN COUNTRIES ACCORDING TO EBRD AND WEF⁵

European Bank for Reconstruction and Development sums the development in structural and institutional reforms for 29 world countries on transitional indicators. With nine transitional indicators four main elements of world economy are included:

- **Enterprises** (3 indicators: large scale privatization; small scale privatization; enterprise restructuring);
- **Markets and trade** (3 indicators: price liberalisation; trade & forex system; competition policy);
- **Financial sector** (2 indicators: banking reform & interest rate liberalization; securities markets & non-bank financial institutions);
- **Infrastructure** (telecommunications; railways; electric power; roads; water and waste water).

The latest Transitional Report by EBRD in 2009 indicates that majority of transitional countries keeps the continuousness of economic progress [6]. Nevertheless, events that occurred outside the region (global financial crisis), combined with shortcomings in politics and institutions in transitional countries,

⁵ EBRD (European Bank for Reconstruction and Development). WEF (World Economic Forum) is non-profit international organization that is engaged with question of world economy progress and social development.

still represent significant factor of potential instability or recession in some countries.

According to mentioned ERDB report for 2009 eleven analyzed countries in transition (Serbia, Bosnia and Herzegovina, Albania, Macedonia, Croatia, Poland, Romania, Bulgaria, Hungary, Slovak Republic, Slovenia), realized following results of institutional and infrastructural reforms (Table 1):

- **Securities markets & non-bank financial institutions** are insufficiently developed in most of the transitional countries: two of the countries (Bosnia and Herzegovina and Albania) have no progress whatsoever (both countries marked with 1,67), whilst two other countries (Serbia and Macedonia) realized minimum up-growth in this direction (Serbia marked with 2,00 and Macedonia with 2,67); only Hungary stands out as with best performance in this regard (it's mark for particular indicator is 4,00);
- **Competition policy**; minimum progress in establishment of efficient competition policy is present in actual half of analyzed counties, and among the worst performances are Serbia, Bosnia and Herzegovina and Albania (all three countries are marked with 2,00); interestingly, Slovenia has very low grade in this indicator (2,67), though it's a member of EU and has the highest GDP per capita compared with analyzed countries; the highest grade out of all analyzed counties (grade 3,33) have only Poland, Hungary and Slovak Republic;
- **Enterprise restructuring**; dissatisfactory results regarding company restructuring indicate in 6 analyzed countries; the highest achieved grade of 3,67 have Poland, Hungary and Slovak Republic; the lowest rank holds Bosnia and Herzegovina (grade 2,00), closely followed by Serbia and Albania graded 2,33;
- **In infrastructure reform** most of the countries realize moderate progress (marked 3,00 to 3,67); countries with dissatisfactory results regarding establishment of infrastructure are: Serbia, Bosnia and Herzegovina, Albania and Macedonia; most favorable performance regarding this indicator and the highest grade has solely Hungary;
- In regard of two indicators **(1) privatization and (2) banking reform & interest rate liberalization** majority of the countries realized progress or is half-way in conducting these reforms; the worst graded is Serbia for progress in large scale privatization;
- Reforms regarding **(1) price liberalization and (2) trade and forex system** – are successfully conducted in all analyzed countries (grades 4,00 to 4,33).

Table 1: Transition indicators for chosen economies, year 2009

Country / GDP (PPP) per capita (US dollars) ⁶	Transition indicators ⁷								
	LSP	SSP	ER	PL	TFS	CP	BR	SM	IR
Countries Members of the EU									
Slovenia, 28,898	3,00	4,33	3,00	4,00	4,33	2,67	3,33	3,00	3,00
Slovak Rep., 21,771	4,00	4,33	3,67	4,33	4,33	3,33	3,67	3,00	3,00
Hungary, 19,044	4,00	4,33	3,67	4,33	4,33	3,33	4,00	4,00	3,67
Croatia, 18,057	3,33	4,33	3,00	4,00	4,33	3,00	4,00	3,00	3,00
Poland, 17,524	3,33	4,33	3,67	4,33	4,33	3,33	3,67	3,67	3,33
Bulgaria, 12,296	4,00	4,00	2,67	4,33	4,33	3,00	3,67	3,00	3,00
Romania, 12,214	3,67	3,67	2,67	4,33	4,33	2,67	3,33	3,00	3,33
Countries Non-Members of the EU									
Serbia, 10,679	2,67	3,67	2,33	4,00	4,00	2,00	3,00	2,00	2,33
Macedonia, 9,031	3,33	4,00	2,67	4,33	4,33	2,33	3,00	2,67	2,67
B&H, 7,434	3,00	3,00	2,00	4,00	4,00	2,00	3,00	1,67	2,33
Albania, 6,915	3,67	4,00	2,33	4,33	4,33	2,00	3,00	1,67	2,33

Source: [6, 7]

In general, major hold-backs in transition reform are in areas of: (1) competition policy; (2) securities markets and non bank financial institutions; (3) enterprise restructuring. In speed an rate of progress the best results are achieved by *countries* that are *members* of the *European Union*, where transition reforms are

⁶ Data on GDP (PPP) per capita (US dollars) are drawn from IMF (World Economic and Financial Surveys, Database, April 2009), <https://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>.

⁷ Legend: LSP (Large scale privatization); SSP (Small scale privatization); ER (Enterprise restructuring); PL (Price liberalisation); TFS (Trade and Forex system); CP (Competition Policy); BR (Banking reform and interest rate liberalization); SM (Securities markets and non bank financial institutions); IR (Infrastructure reform). The transition indicator scores reflect the judgment of the EBRD's Office of the Chief Economist about country-specific progress in transition. Progress is measured against the standards of industrialised market economies, while recognising that there is neither a "pure" market economy nor a unique end-point for transition. Transition indicators are ranged from 1 to 4,33. Grade 1 marks absence of changes in comparison with socialist system, and grade 4,33 marks performances similar to ones in developed economies.

followed by increase of life standard (increase of GDP per capita). Contrarily, the worst results in stepping forward to free and developed market economy have countries which are still out of EU membership and which indicate low rate of economic growth.

National competitiveness according to World Economic Forum is understood as a set of institutions, policies and factors that determine level of productivity of one country [2]. According to Professor Porter, prosperity (competitiveness) is determined by the productivity of an economy, which is measured by the value of goods and services produced per unit of the nation's human, capital, and natural resources [2]. Productivity depends both on the value of a nation's products and services, measured by the prices they can command in open markets, and the efficiency with which these products can be made. Productivity supports high wages, a strong currency, and attractive returns to capital—and with them a high standard of living. Therefore, competitive economy is an economy with high GDP per capita (at market exchange rates) and low interest of primary products export in overall export.

Table 2: Structure of Global Competitiveness Index (GCI)

12 Pillars of competitiveness	Correlation of competitiveness and extent of development
I Sub-index – BASIC REQUIREMENTS: (1) institutions, (2) infrastructure; (3) macroeconomic stability; (4) health and primary education;	Key for factor-driven economies
II Sub-index – EFFICIENCY ENHANCERS: (5) higher education and training; (6) goods market efficiency; (7) labor market efficiency; (8) financial market sophistication; (9) technological readiness; (10) market size;	Key for efficiency driven economies
III Sub-index – INNOVATION AND SOPHISTICATION FACTOR: (11) business sophistication; (12) innovation;	Key for innovation-driven economies

Source: [2].

Parameter that measures national competitiveness by WEF (from both, micro and macro aspect) is **Global Competitiveness Index – GCI** (Table 2). This Index is compounded of 115 variables, organized in three sub-indexes and 12 pillars of competitiveness, where each pillar represents one field as significant determiner of competitiveness. Authors of the Index point out that none of these factors alone

cannot benefit or assure competitiveness, as well as high degree of correlation between factors; therefore, improvement of competitiveness of a country is a matter of development of a interactive factors group and not in any way the effect of one or two isolated factors.

In comparison (Table 3), in process of ranking of countries with Global Competitiveness Index (GCI) 2009-2010, out of 11 analyzed countries, the **highest rank takes Slovenia and lowest – Bosnia and Herzegovina**. Rank lower than B&H have only countries of Africa, Asia and Central America.

Table 3: Chosen Countries Ranking according to GCI 2009-2010 rank in 2009-10, based on 133 included world economies –

Chosen countries	GCI 2009-10 Rank	GCI 2008-09 Rank	Sub-index GCI 2009-2010		
			Basic requirements Rank	Efficiency enhancers Rank	Innovation and sophist. factors Rank
Efficiency-driven economies (stage 2) GDP per capita (in US\$): 3,000–9,000					
1. Bosnia and Herz.	109	107	100	100	127
2. Albania	96	108	90	93	121
3. Serbia	93	85	97	86	94
4. Macedonia; FYR	84	89	73	85	93
5. Bulgaria	76	76	80	62	89
Transition from efficiency driven to innovation driven economies GDP per capita (in US\$): 9,000–17,000					
6. Croatia	72	61	52	67	72
7. Romania	64	68	86	49	75
8. Hungary	58	62	58	45	61
9. Poland	46	53	71	31	46
Innovation driven economies (stage 3) GDP per capita (in US\$): higher than 17,000					
10. Slovak Republic	47	46	54	34	57
11. Slovenia	37	42	29	37	30

Source: [2]; [4]

Reviewed by GCI sub-indexes:

- Slovenia has the most favorable rank regarding basic requirements, and least favorable one takes Bosnia and Herzegovina;
- According to second sub-index – efficiency enhancers, the highest rank takes Poland, and lowest Bosnia and Herzegovina;
- In country ranking according to third sub-index (innovation and sophistication factors) best results accomplishes Slovenia, and the worst Bosnia and Herzegovina, again.

Certain number of analyzed countries (Bosna and Hercegovina, Albania, Serbia, Macedonia) foundation its' competitiveness on natural resources exploitation and cheap work force, and this vantage cannot replace benefits of knowledge, information, sophisticated technologies, developed markets, institutions and infrastructure. Mainly, potential success that one country can be realized through export and economic expansion, thanks to comparative benefits (rich natural resources – raw materials, location, climate, fertile soil; government help or cheap work force) can be easily imitated – mastered (there's always an offer for same service for less), and therefore only sustainable in short-term prospective (in long-term, countries falling back on these competitiveness factors can only financially weaken). Numerous studies justify inverse relations between natural resources export and accumulation of wealth (economic growth) and prove exceptional advantages that developing countries or countries in transition have in production factors in overall outcome has only served sustainability of poverty, instead of enabling economy growth of these countries [3].

Authors Fairbanks and Lindsay [1] make clear distinction *between comparative advantage and competitive advantage* and imply that incomprehension of the difference is one of main cause of problems in economic prosperity for developing countries and countries in transition. Mentioned difference is picturesquely explained on example of Holland (Netherlands) and Columbian flower industry. Comparative advantages for flower production in Columbia are fertile soil, cheap labor force and cheap land. Nevertheless this country is second place exporter of flowers in the world. Number one exporter of flowers in world is Netherlands, which has very few comparative advantages (no cheap land, no cheap labor force and no favorable planting and growing conditions), but has very well explored research and development techniques, market segmentation, sophisticated technology of production and distribution, large local demand, high level of technological innovations and other hard-to-copy factors, and which altogether facilitate high quality flower production, which buyers are ready to pay quite a high price for. Exactly Holland flower industry represents competitive advantage of that country [1].

POSSIBLE DIRECTIONS OF ESTABLISHING COMPETITIVENESS IN ANALYZED COUNTRIES

EBRD grades in regard of accomplished reforms in economy system of transition countries, lead towards a clear prediction of necessary reforms for each country. Therefore, majority of transition countries are awaited by intensive reforms on fields of:

- Competition Policy; reform in this domain awaits even the most developed one of analyzed countries (Slovenia), which in this indicator is graded with very low mark, 2,67;
- Securities markets and non bank financial institutions;
- Enterprise restructuring and privatization;
- Infrastructure reform.

Key factor in all future transition reforms are *political reforms that are the first and necessary assumption of institutional reforms*: only strong political will can pass and conduct the law (to establish and enhance legislative and court power). Simultaneously, establishment and enhancement of public institutions is one of the prerogatives of rule of law (protects property, enforces contracts, resolve disputes), without which all the reforms are condemned to failure. Apart from this, these countries must work on selective engagement of industrial policy. So called, “allowed” and useful is surely horizontal industrial policy that implies state interventions in evolution process of environment where companies act (education and human capital, infrastructure, access to finances, innovation support). Vertical policy should be directed towards market capacities construction and market discipline (loosening of financial or infrastructural limitations of business, processes of allocation of finance should be based on market expectations and views).

As far as analysis of competitiveness by **World Economic Forum** is concerned, rank that a country occupies (in comparison to 133 world economies) on any variable (derivation, factor) of competitiveness determines it with opportunity of self-assessment of competitiveness factors that are in particular need for reconstruction and enhancement. Normally, the biggest lag of one country, behind other countries of the world is the biggest problem in achieving economic growth and competitiveness.

Here, it is significant to point out that the national economies and companies within their framework are not equal in accessibility to all competitiveness strategies. For formulation of national strategy of competitiveness is relevant *three phase classification in national economy development (factor-driven*

economy; efficiency –driven economy; innovation-driven economy), based on two indicators [2]: **GDP per capita rate and share of exports of primary goods in total exports goods and services** (WEF assume that countries that export more than 70 percent of primary products are to a large extent factor driven). Namely, degree of economic development of a country, can actually be reflected by countrys' level of national competitiveness, and also present on what grounds it is possible to find potential for competitiveness growth in future (Table 4).

Table 4: Significance of Global Competitiveness Index (GCI) for each phase of economic development of a country

Economic development stage/competitiveness origins	Basic requirement	Efficiency enhancers	Innovation and sophist. factors
Factor-driven economy (GDP per capita in US\$ less than 2.000)	60%	35%	5%
Efficiency-driven economy (GDP per capita in US\$ from 3.000 to 9.000)	40%	50%	10%
Innovation-driven economy (GDP per capita in US\$ higher than 17.000)	20%	50%	30%

Source: [2]

According to The Global Competitiveness Report 2009-2010, out of 11 analyzed countries:

- 5 countries (Albania, Bosnia and Herzegovina, Bulgaria, Macedonia and Serbia) are in the 2nd stage of economic development – efficiency driven economy;
- 4 countries are currently transitioning from the 2nd to the 3rd stage of economic development (Croatia, Hungary, Poland, Romania);
- only Slovenia and Slovak Republic are in the 3rd stage of economic development.

For all these countries, competitiveness sources should transition towards poles as high education, market efficiency (merchandise, services, labor, capital), technological readiness, that is, the emphasis should be moved to from physical resources to knowledge. In this developmental stage, economy should expand more efficient production processes and increase product quality, and country has to operate together with private sector, universities and other institutions, in order to help creation of cluster. For countries that are transitioning through innovation-

driven economy stage (Croatia, Hungary, Poland, Romania), and especially for Slovak Republic and Slovenia that are in phase 3 of economic development (more accurately, in innovation-driven economy stage) - competitiveness origins should move towards business sophistication enhancement and company's innovational activity.

Nevertheless, important is to say that, regardless the fact that stage of economic development suggests competitiveness evolution based on second and third GCI sub-indexes, in many countries (particularly in Serbia, Romania, Poland, Bulgaria, Bosnia and Herzegovina, Albania) so called **basic requirements** of national competitiveness are still problematical (insufficiently developed), especially **institutions and physical infrastructure, which approximates these countries to factor-driven economies**. Typical example is economy of Romania, which finds itself near transition phase to innovation-driven economy, according to accomplished level of economy development, though it essentially has undeveloped institutions and infrastructure and needs plenty of work to improve basic competitiveness requirements (Romania is ranked 84 at institutional development and 110 at infrastructural reforms).

Considering ranking of countries according to **first GCI sub-index**, majority of analyzed countries, except Slovenia, in future period should consider (Table 5):

- **Establishment and promotion of public institutions**, which strongly affect competitiveness and economic up-growth; **public institutions** include property rights, intellectual property protection, diversion of public funds, judicial independence, government inefficiency; in most countries efficiency in administrative procedures is a major problem, therefore in upcoming period noticeable attention and force should be invested in: rationalized and transparent government spending, decrease of burden of government regulation, improvement of efficiency of legal framework in settling disputes and in challenging regulations, enhancement of transparency of government policymaking;
- **Establishment and enhancement of private institutions** that include ethical behavior of firms, efficacy of corporate boards, protection of minority shareholders' interests; insufficiently developed private institutions is present in all analyzed countries, except Poland and Slovak Republic, and exceptionally behind on this matter is Bosnia and Herzegovina, that is the last on the list, following Serbia and Albania;
- **Infrastructure establishment**, which is the crucial factor for economic growth in almost all analyzed countries, except Slovenia, Slovak Republic, Croatia and Hungary, that achieved largely in this segment:
- **Enhancement of macroeconomic stability**, rated in variables as: government surplus/deficit, national savings rate, inflation, interest rate

- spread, government debt. Stronger government role in defining stimulating and stabilizing measures of macroeconomic policy in upcoming period of time awaits especially for Serbia (its' rank of 111 is far worst out of analyzed countries) and Albania (ranked 95); Hungary, Poland and Romania are relatively unsuccessful in macroeconomic stability, having in mind their approach towards developed economies;
- As far as the fourth variable of first competitiveness development pole (**health and elementary education**), all countries have relatively favorable performances (ranked in upper half countries), except Bosnia and Herzegovina, ranked with 75th place.

*Table 5: Country ranking according to first sub-index GCI 2009-2010
- rank in 2009-10, based on 133 included world economies -*

BASIC REQUIREMENTS				
	Institutions rank	Infrastructur, rank	Macroeconomic stability, rank	Health and elementary education, rank
Efficiency-driven economies (stage 2)				
1. Serbia	110	107	111	46
2. Bosnia and Herz.	128	128	69	75
3. Macedoni a FYR	83	90	49	60
4. Albania	87	104	95	66
5. Bulgaria	116	102	45	58
Transition from efficiency driven to innovation driven economies				
6. Croatia	85	49	50	44
7. Hungary	76	57	83	53
8. Poland	66	103	74	35
9. Romania	84	110	75	63
Innovation driven economies (stage 3)				
10. Slovak Republic	78	63	40	48
11. Slovenia	46	31	26	22

Source: [4]

From the **second sub-index's prospective**, the best performances are of Slovenia and Slovak Republic. Viewed by certain variables of the 2nd sub-index, we can come to following conclusions (Table 6):

Table 6. Country ranking according to the second sub-index rank in 2009-10, based on 133 included world economies –

EFFICIENCY ENHANCERS						
	Higher education and training	Good market efficiency	Labor market efficiency	Financial market sophistic.	Technological readiness	Market size
Efficiency-driven economies (stage 2)						
1. Serbia	76	112	85	92	78	67
2. B&H	86	125	94	104	95	90
3. Macedonia, FYR	70	76	86	75	52	103
4. Albania	90	97	65	90	89	106
5. Bulgaria	60	81	54	76	56	58
Transition from efficiency driven to innovation driven economies						
6. Croatia	56	94	92	77	43	65
7. Hungary	35	64	63	69	40	45
8. Poland	27	53	50	44	48	20
9. Romania	52	61	79	56	58	41
Innovation driven economies (stage 3)						
10. SlovakR	47	32	29	28	33	57
11. Slovenia	19	38	56	48	32	72

Source: [4]

- Significant investments in higher education and professional education is expecting Albania, Bosnia and Herzegovina, Macedonia and Serbia.
- Government measures in prospective of establishing and enhancing efficiency of merchandise market⁹ will be necessary in most of the countries, except Slovenia, Slovak Republic and Poland. **Domestic competition** in Albania, Bosnia and Herzegovina, Macedonia, Serbia and Croatia is especially threatened by insufficient intensity of local competition, extent of market dominance and ineffectiveness of anti monopoly policy. Bulgaria must pay special attention to anti monopoly policy evolution. In majority of analyzed countries (Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Poland, Romania, Serbia) domestic competition jeopardizes extent and effect of taxation. **Foreign**

⁹ Good market efficiency includes following variables of importance: intensity of local competition, extent of market dominance, effectiveness of antimonopoly policy, extent and effect of taxation.

competition¹⁰ is also threatened in most of analyzed countries, except in Slovak Republic. The highest degree of jeopardy in this particular competition is in Serbia, Albania, Bosnia and Herzegovina, Macedonia, whilst in Slovenia, Croatia and Bulgaria it is specifically endangered by two factors: prevalence of foreign ownership and business impact of rules on FDI.

- Efficiency at labor force market in the following period will have to be taken more seriously in process of establishment and reinforcement in Serbia, Bosnia and Herzegovina, Macedonia, Croatia, Romania.
- Larger investments in financial market development are needed in Bosnia and Herzegovina, Albania, Serbia, Macedonia and Croatia.
- Low technology problem is notably apparent in Bosnia and Herzegovina, Albania, Serbia and small size markets problem is actual in Albania, Macedonia and Bosnia and Herzegovina.

Table 7: Country ranking according to the third sub-index -rank in 2009-10, based on 133 included world economies

	Innovation and sophistication factors	
	Business sophistication	Innovation
Efficiency-driven economies (stage 2)		
1. Serbia	102	80
2. Bosna and Herzegovina	117	131
3. Macedonia, FYR	96	92
4. Albania	109	126
5. Bulgaria	89	91
Transition from efficiency driven to innovation driven economies		
6. Croatia	84	61
7. Hungary	76	45
8. Poland	44	52
9. Romania	83	70
Innovation driven economies (stage 3)		
10. Slovak Republic	51	68
11. Slovenia	33	29

Source: [4]

In prospective of **third GCI sub-index variable** (business sophistication and innovation factors) majority of analyzed countries does fall behind in comparison

¹⁰ Foreign competition is measured by several variables: prevalence of trade barriers; prevalence of foreign ownership, business impact of rules on FDI, burden of customs procedures.

to the world, particularly countries that find themselves in second stage of economy (efficiency driven). Even though economy growth in these countries (GDP level) does not favor larger economy investments in these competitiveness factors, full attention on these competitiveness resources must be paid by countries with greatest fall-behind, above all: Albania, Bosnia and Herzegovina, Macedonia, Serbia, Bulgaria (Table 7).

Future directions and trends of expansion of competitiveness of chosen countries in transition are clearly depicted by entrepreneurs statements (Table 8).

Table 8: First three factors that constrain business mostly in domestic conditions according to entrepreneurs assessment

Countries in 2nd phase of economic development (efficiency driven economy);
Albania: (1) Corruption; (2) Inefficient government bureaucracy; (3) Policy instability;
B&H: (1) Government instability/coups; (2) Policy instability; (3) Inefficient government bureaucracy;
Bulgaria: (1) Access to financing; (2) Corruption; (3) Inefficient government bureaucracy;
Macedonia: (1) Access to financing; (2) Inefficient government bureaucracy; (3) Policy instability;
Serbia: (1) Corruption; (2) Policy instability; (3) Access to financing;
Countries transitioning from efficiency-driven to innovation-driven economy;
Croatia: (1) Inefficient government bureaucracy; (2) Access to financing; (3) Corruption;
Hungary: (1) Tax regulations; (2) Access to financing; (3) Tax rates;
Poland: (1) Tax regulations; (2) Access to financing; (3) Inefficient government bureaucracy;
Romania: (1) Tax regulations; (2) Policy instability; (3) Access to financing;
Countries in innovation driven economy stage;
Slovak Republic: (1) Inefficient government bureaucracy; (2) Restrictive labor regulations; (3) Corruption
Slovenia: (1) Access to financing; (2) Restrictive labor regulations; (3) Inefficient government bureaucracy;

Source: [4]

Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country/economy and to rank them between 1 (most problematic) and 5.

Restrictions that entrepreneurs detect in doing business are very much alike among analyzed countries. In overall view, following factors are recognized as largest barriers in business activity:

- ***inefficient government bureaucracy and access to financing***, is specified in 8 out of 11 analyzed countries by entrepreneurs as most important limitation factor; it is interesting that these problems occur in two highly developed countries as well (Slovenia and Slovak Republic),
- ***policy instability and corruption*** – these business constrictions are specified in 5 countries (with Slovak Republic among them, although one of most developed countries, marked with very high corruption by its' entrepreneurs).

Noteworthy is to mention that only three European countries (ex-socialist ones) which reached stage 3 economic development (innovation driven economies): Slovenia, Slovak Republic and Czech Republic. In these countries as most restrictive factors of conducting business, specified by entrepreneurs are: inefficient government bureaucracy; restrictive labor regulations; corruption and access to financing.

CONCLUSIVE SPECULATIONS

Authors emphasized 11 European (former socialist) countries, out of which 7 are members of EU. For these countries we supplied with review of achieved level of economic reforms by European Bank for Reconstruction and Development and review of state of competitiveness by The Global Competitiveness Report 2009-2010. These analyses made possible for authors to identify trend and directions of establishing competitiveness and sustainable economic development in the future.

According to EBRD evaluations, most of countries in transition await for intense reforms in fields of: (1) competition policy (reforms in this domain await even highly developed country – Slovenia, that was graded with very low mark in this indicator, 2,67); (2) securities markets and non bank financial institutions; (3) enterprise restructuring and privatization; and (4) infrastructure reform. According to competitiveness analysis by World Economic Forum, most of the analyzed countries in transition, must supply vast attention to institution strengthening (within lawful and jurisdictional frame), infrastructure construction, macroeconomic stability enhancement, promotion in efficiency on goods market, work force, financial markets.

In general, government intervention should be directed to market capacities improvement and business environment where firms conduct their business

activity (investments in human capital, innovation and sophisticated technologies support, loosening financial or infrastructural restrictions to doing business and similar). On the other hand, companies must base their competitiveness not on factor advantages, but on establishing sophisticated advantage resources and business decisions based on detailed knowledge of buyers preferences, realistic awareness of it's own competitive position, with enhancement of cluster formation and progressive integration.

References

- [1] Fairbanks, M., Lindsay, S. (1997): *Plowing the Sea. Nurturing the Hidden sources of Growth in the Developing Word*. Harvard Business School Press, Boston, translation into Serbian language, publisher: "Stubovi Kulture" 2003.
- [2] Porter, M.E., Schwab, K. (2008): *The Global Competitiveness Report 2008-2009*, World Economic Forum, 2008.
- [3] Sachs, J.D., Warner, A.M. (1997): "Natural Resource Abundance and Economic Growth", Center for International Development and Harvard Institute for International Development, Harvard University, Cambridge MA, November, 1997. (http://www.cid.harvard.edu/ciddata/warner_files/natresf5.pdf).
- [4] Schwab, K. (2009): *The Global Competitiveness Report 2009-2010*, World Economic Forum, 2009.
- [5] *Transition Report 2008: Growth in Transition*, European Bank for Reconstruction and Development (EBRD), December 2008, <http://www.ebrd.com/country/sector/econo/stats/index.htm>
- [6] *Transition Report 2009: Transition in crisis?* European Bank for Reconstruction and Development, November 2009. <http://www.ebrd.com/pubs/econo/tr09.htm>
- [7] *World Economic and Financial Surveys, Database*, April 2009, IMF, <https://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>

CHAPTER 16.

PUBLIC ADMINISTRATION REFORM IN THE SLOVAK REPUBLIC AND OTHER RELATED REFORMS – TAKING LESSONS OF THE OTHER EU COUNTRIES

Lenka Horváthová¹

Abstract

The Slovak Republic as one of the transitive economics had implemented several reforms in the beginning of the 21st century. One of them, perhaps the widest, was the public administration reform, which includes also other partial reforms as public finance reform and tax reform. To complete all the reforming efforts the process of fiscal decentralization was realized in 2005. The fiscal decentralization touched the public budgets also on the revenue and expenditure part and directly referred to public administration reform realized in 2001 and tax reform realized in 2004. The aim of this paper is to describe the process of the reforms' system changes implementation and to evaluate their impact on public finance with the accent on lower government levels' financing and administration.

Ke ywords: *public sector, public finance, fiscal decentralization, local government, local budget, self-government region, municipality*

INTRODUCTION

The Slovak republic had gone through several important changes since 1989 (after overthrow the communism). During its short existence as an autonomy republic since 1993 there were several changes in field of policy as consolidation of democratic decision-making process, changes in horizontal and vertical decision-making division, in field of economy there were changes as introducing the market economics, private property and tax reform and in the field of administration there were changes in public administration system and provision of public goods.

¹ Lenka Horváthová, Technical University of Košice, Faculty of Economics, Slovakia

The municipalities in the Slovak Republic obtained legally self- government status in the 1990 by the Act on Municipalities, but in 1990s they had to face a very difficult situation linked with creating the autonomous republic.

Other important changes were associated with the beginning of the 21st century. There was implemented a wide public sector reform which included the reform of public finance and public administration.

Qualitatively the most important reform steps in public finance and public administration were set by the Act on Self – Government Regions (creation of regions on the NUTS 4 level with self government) and the Act on Competences (or the Act on Devolution – decentralization of competencies, meaning their division among state, regions and municipalities, represents the decentralization of their expenditure part of budget) approved in 2001. This legislative framework influenced the position of local and regional self-governments in the Slovak Republic's public sector.

One part of public finance reform was also the tax reform and fiscal decentralization. Fiscal decentralization was not implemented simultaneously with the decentralization of expenditure part of local budgets in 2001, but it was introduced in 2004 – 2005 by several acts as the Act on Personal Entity Income Tax (2004), the Act on Personal Entity Income Tax Revenues Division, the Act on Local Taxes (2004)).

THE PUBLIC ADMINISTRATION REFORM IN THE SLOVAK REPUBLIC

In the Slovak Republic the external pressure represented one of the most important factors, which determined the public administration reform. The pressure influenced all the countries from the former socialistic bloc and they had to introduce these reforms to accelerate their transition.

The first important step introducing some changes in public sector and public administration was realized after the overthrow of communist regime in 1989. The role of municipalities was reconstituted in 1990 by Act on Municipalities which established a municipality as a base of territorial self government. The municipality was regarded as public body which can economize with their own property, and it decides on its –own about all the affairs reflecting to its property and administration. The public administration was organized at two levels – the state level and the local level. Some competences were divided between them and it represents the shift to the further decentralization efforts.

By the division of Czechoslovak Federative Republic in 1993 the decentralization efforts were eliminated by the necessity of creating the state bodies and institutions at the state level.

The decentralization became again important in 2000, when “The Conception of Decentralization and Modernization of Public Administration” was introduced by the government. Its results were:

1. establishing the regional self governments,
2. consolidation of public finance by the tax reform and
3. process of fiscal decentralization.

By this conception the government decided to establish a regional self – government units. They hesitated between 8 and 12 units. Finally they established 8 regional self governments by the Act on Self-Government of the Superior Territorial Units in the 2001 and the regions in the Slovak Republic exist till the January 2002. Since then the Slovak public administration is organized in three levels: state level, regional level and local level without the relationship of superiority or inferiority between local and regional governments. Similar development was also in the other EU countries.

In general the tendency to regionalization in EU occurs in two ways: as a creation of a new level or a new body in the public administration system, or as extension of competencies of existing self government body on a certain level of public administration. For example in the past twenty years the regional level of government was established in Poland (1999) or United Kingdom (1999) as a result of historical evolution, and as a result of the EU regional policy pressure in Ireland (1994), Czech Republic (2000) and Slovakia (2002). [[5]] The Table 1 shows the number of lower levels of government in EU 27 countries.

The 1st tier represents the lowest level of self government meaning the cities, towns and villages that have their own decision - making representatives. In Portugal, there are at the 1st tier 308 local self governments which do not represent municipalities, but parish districts.

The 2nd tier represents the medium level of government including counties, departments and provincials in more decentralized countries (Greece – 54 nomoi, Germany - 301 Kreise, France - 100 Départements) and regions in less decentralized countries (Slovakia, Czech Republic, Hungary).

The 3rd tier represents generally regional levels of government (France, Italy and Poland), autonomous areas (Spain) or countries in federal states (Germany, Belgium and Austria).

Table 1: Number of lower levels of government in EU 27 countries

2008 - 2009	1. tier	2. tier	3. tier
Federal States			
Austria	2357		9
Belgium	589	10	6
Germany	12339	301	16
Unitary states			
Bulgaria	264		
Cyprus	524		
Czech Republic	6249	14	
Denmark	98	5	
Estonia	227		
Finland	348	2	
France	36682	100	26
Greece	1034	54	
Hungary	3175	19	
Ireland	114	8	
Italy	8101	110	20
Latvia	118		
Lithuania	60		
Luxembourg	116		
Malta	68		
Netherlands	441	12	
Poland	2478	379	16
Portugal	308	2	
Romania	3180	42	
Slovakia	2891	8	
Slovenia	210		
Spain	8115	50	17
Sweden	290	18	2
United Kingdom	406	28	3
Total EU 27	90782	1171	106

Source: EU sub – national governments, 2010 Edition, CEMR Dexia

THE TAX REFORM IN THE SLOVAK REPUBLIC

The tax reform and accounting system reform was one of the most important events in the Slovak economy transformation process. Since the autonomous Slovak Republic foundation in 1993 there were several tax reforms.

The first tax reform was implemented in 1993 and its main goals were “...to make the taxation system as compatible as possible with the developed economies, to support the motivation and the simulation of taxation by functions of fiscal taxation in the way of technological progress, to create equally competitive conditions, to unify taxation conditions for the different entrepreneurial subjects, etc...” [[6]]. The disadvantage of implemented taxation system was a high number of exemptions, regulations, tax allowances and also various tax rates.

The second tax reform was realized in 2004 and its main goals were “... to eliminate imperfections and inconsistencies of the previous taxation system, to cover the taxation of all kinds of income and all levels of income equally and to obtain a high level of taxation fairness as possible...” [[6]].

The main principle of this reform in the contrast of the previous reform was the implementation of equal income tax at an equal linear percentage tax rate at the level of 19%. Other differences due on the reduction of the exemptions and tax allowances and the transfer from the direct income taxation to the indirect consumption taxation. The positive effects on the entrepreneurial environment were anticipated from the second tax reform.

THE FISCAL DECENTRALIZATION IN THE SLOVAK REPUBLIC

The process of fiscal decentralization is generally understood as a process of targeted division and transfer of competences between state (central) and other lower levels of territorial administration in the field of public goods.

The aim of the process of fiscal decentralization in the Slovak Republic (Slovak Republic) was to advance a new financing system of local self-governments. The base of this system was to fortify financial autonomy of particular territorial self-governments in providing public goods respecting their local particularities and local demand.

In most of transitive countries the process of fiscal decentralization was divided into two phases. This was also the case of the Slovak Republic. At the beginning, only expenditures were decentralized (Act on Competences 416/2001). Later on, since January 2005 revenues of local self-governments have also been decentralized. [[1]]

First phase of fiscal decentralization started in 2001 as the consequence of approved Act on Competences. More than 400 competencies were stepwise transferred to lower levels of self-governments during period between 2001 and

2004. The transfer of these competences was not associated with adequate transfer of property and financial resources. The Act on Competences enabled the decentralization of expenditures but competencies were still financed through grants from the central level of government represented by state budget. [[3]]

Second phase of fiscal decentralization started in 2005. In this phase the budget revenues were decentralized. Local self-governments have received even competences in the field of creation of their financial resources. [[3]] Consequently, financial autonomy of villages, towns and regions was confirmed, because local self-governments could collect and determine level of taxes (or tax rates) where the tax base is fixed and revenue is sufficient as well as regular. Property taxes and income taxes are usually convenient type of the taxes for local taxation. [[1]]

The main goals of the fiscal decentralization in the Slovak Republic were:

- to increase the power to tax, tax assignment and financial autonomy of the municipalities in the Slovak Republic,
- to share the revenues from the income tax among government levels on the basis of objective criteria,
- to provide the public goods by the local governments themselves considering local particularities and inhabitants preferences and
- to increase local government authority and responsibility. [[2]]

Chosen problems of the process of fiscal decentralisation in some other EU countries

Many of the EU 27 countries implemented the public finance reform including the process of fiscal decentralization. The problems they had to face or solve were similar to the problems of the Slovak Republic. For the comparison, the realization of this process in some neighbour countries (Poland, Hungary and Czech Republic) and some countries from the western part of Europe (Italy and France) is characterized in the next text.

In Poland the base of the public administration system reform was decentralization of competences accompanied by decentralization of public finance. However, transfer of competences to lower levels of government was not automatically linked with transfer of financial resources. Thus, important part of functions was financed by state (central) budget grants. It was also the case of state administration functions and also the case of self-government functions or competences. Therefore, local (municipal and regional) self-governments had not any incentives to acquire or rise own financial resources and to use them

efficiently. This situation led to decreasing independence of lower government levels.

In Hungary, process of fiscal decentralization was confronted with several problems. Number of self-administration bodies grew and this situation started to be unbearable. More than 50% of self-administration bodies had less than 1000 inhabitants. 300 self-administrations had even less than 200 inhabitants. Fragmented residential structure was evident. The other problem was that local governments had large competences and they were identical for all municipalities – the small municipalities had the same competencies and responsibility as the capital city. In almost all of municipalities the financial resources were not sufficient to provide effectively public goods. [[4]]

In the Czech Republic, similarly as in other EU countries, local level of government is separated from central level of government. The only connection between them is grant system. Up to 2001 the municipal level was the only level of local government with self administration bodies. In 1999, there were 6 239 municipalities in the Czech Republic. 80% of them had less than 1000 inhabitants and 90% less than 2 000 inhabitants. That is one of the attributes of fragmented residential structure as it is in Hungary and in Slovakia. Since 2001 two-degree system of territorial self-administration (municipalities and regions) was implemented, but it does not have elements of subordination and dominance among its elements, as each territorial self-administration has defined its own competencies as it was in the Slovak Republic). [[4]]

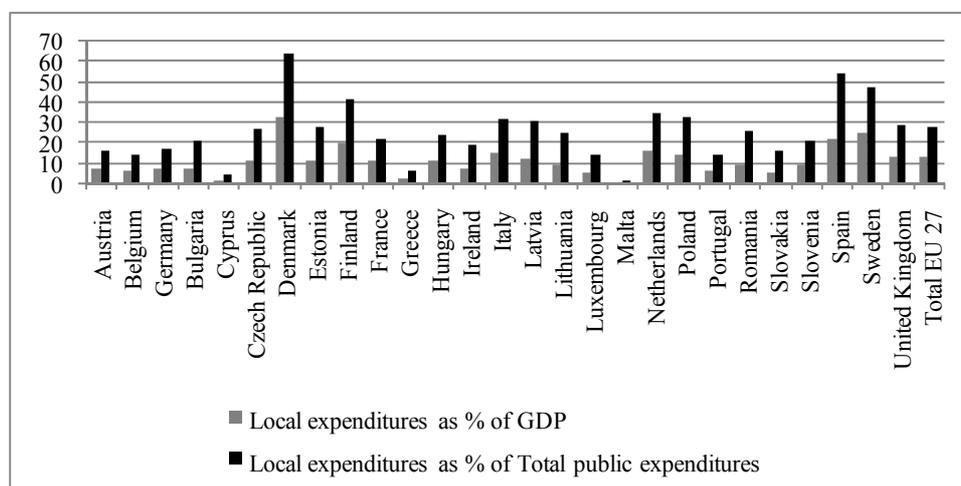
In Italy since 2001, the government realized a reform by which regions got more competences especially in the field of tax legislation and expenditures. However, the problem was that they were not able to manage effectively their competences. Other problem emerging from the public administration system reform was the fact that legislative competences of the regions were not fully implemented in practice because central government did not define basic framework of these competences.

In France as in other countries, the process of fiscal decentralization was realized in several phases. In the first phase (1982 – 2002) competences and adequate financial resources were transferred into all tree levels, but in fact they were still financed from state budget through grants. The second phase (2003) represented by important legislative changes gave higher financial autonomy to local self-governments.

The rate of fiscal decentralization in EU 27 countries

The quantification of the fiscal decentralization rate is usually realized by using budget items as expenditures and revenues of the central (state) budget and local (municipal) budgets. The rate of fiscal decentralization then represents the share of local expenditures or revenues on total public expenditures or revenues including (expenditures and revenues of central budget, regional budgets and municipal budgets) in %. The higher is above defined rate of fiscal decentralization in a certain country, the more is this country decentralized (meaning fiscal decentralization).

Graph 1: Rate of fiscal decentralization – expenditure decentralization



Source: [[7]]

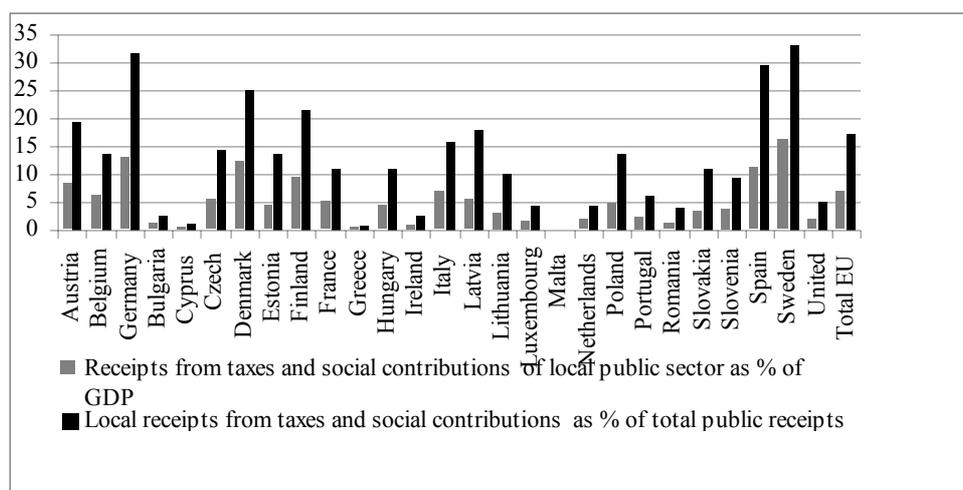
Graph 1 shows the share of local expenditures as a % of GDP in each of EU 27 countries and the share of local expenditures as a % of public expenditures as a quantification of the fiscal decentralization in these countries.

The rate of fiscal decentralization quantified using the budget item “expenditures”, is the highest in countries of Northern Europe as Denmark, Sweden, Finland and Spain. The medium rate of fiscal decentralization can be observed in majority of EU 27 countries. The lowest rate of fiscal decentralization (or the highest centralization) is evident in Cyprus, Malta and Greece.

In comparison with the share of local expenditures as a % of GDP, the highest, medium and the lowest values are evident in same countries as in the previous case.

The Graph 2 shows the rate of fiscal decentralization in EU 27 countries measured as a share of local receipts from taxes and social contributions as % of total public receipts from taxes and social contributions and as share of receipts from taxes and social contributions of local public sector as a % of GDP.

Graph 2: Rate of fiscal decentralization – revenue decentralization



Source: [[7]]

Receipts from taxes and social contributions are the most important revenues also of the central budget and also of the local budgets in all of EU 27 countries. In the context of fiscal decentralization these revenues can be “decentralized” to the different levels of public administration or government. Furthermore, if they are really decentralized, their amount at the lower level of government represents a real bounce of their activity. Thereafter, the relation between competences and responsibility is set.

The highest rate of fiscal decentralization using the budget item “revenues” is observed in Germany, Sweden, Denmark, Finland and Spain, the lowest values in Bulgaria, Cyprus, Greece, Ireland, Malta, Netherlands and Romania. Similar situation is in comparison with share of local revenues as a % of GDP.

CONCLUSION

Nowadays, the Slovak Republic overcame the process of transition due to the wide reform steps realized in past 15 years. The Slovak Republic is member of OECD since December 2000 and member of EU since May 2004.

One of the most important changes the Slovak Republic had to face was the consolidation of the public sector and public finance. Public debt and public deficit are important Maastricht convergence criteria and the Slovak Republic has to perform them. Public sector and public finance reforms in the Slovak Republic included also public administration system reform, tax reform and process of fiscal decentralization. Their results represent systematic changes in structure and system of financing the public sector.

The establishment of a regional level of government in the past 15 years was realized in several countries and refers to the EU regional policy. In the Slovak Republic, the public administration system reform also ended in the establishing of the new level of local government in a form of regional self – governments (2001). Simultaneously the reform of the competences of local governments (2001) was implemented, considered as the first phase of the process of fiscal decentralization in the Slovak Republic, which transferred the competences to the regional and municipal self- government bodies. The next reform step was the tax reform (2004), which introduced the equal income tax at an equal linear percentage tax rate at the level of 19%. Beside these changes, the tax reform set the legislative framework to realizing the second phase of the process of fiscal decentralization in 2005. In general, the aim of the fiscal decentralization is to provide the public goods by the local governments themselves considering local particularities and inhabitants preferences and to increase local government authority and responsibility. The process of fiscal decentralization was realized almost in all EU countries, at first in the western European countries and after in the central and eastern European countries as a part of transition process. In the Slovak Republic, this process was accompanied by two main consecutive events: the expansion of the Slovak Republic economy and the current economic and financial crisis. Finally, the impact of the fiscal decentralization in the Slovak Republic on the financing the local public sector is not evident yet and moreover, it is deformed and tested, likewise the economic development in other EU 27 countries.

References

- [1] Beličková, K. - Neubauerová, E. 2005. *Nástroje ekonomiky verejného sektora*, Merkury s.r.o, Bratislava, ISBN 80-89143-261
- [2] Horváthová, Lenka: *Evaluating the Questionnaire Using Principal Components Analysis and Clustering: the Case of Verifying the Conception of the Fiscal Decentralization in the Slovak Republic*. In: *Transactions of the Universities of Košice*. – ISSN 1335-2334. – č.1 (2010) s. 19 – 25.
- [3] Horváthová, Lenka: *Financing local governments in the Slovak Republic, 2010*. In: *Naukovij visnik Užhorodskovo universitetu*. - ISSN 0869-0782. - Vol. 29, no. 2 (2010), p. 267-281.

- [4] Horváthová, Lenka - Neubauerová, Marianna: Process of fiscal decentralisation in the Slovak republic in comparison with chosen countries. In: *The New Economy : Challenges, Opportunities and Choices*. Delhi : I A Books, 2009. p. 48-58. ISBN 81-89617-78-8.
- [5] Provazníková, R.: *Financování měst, obcí a regionů*. Grada publishing, Praha 2007, ISBN 978-80-247-2097-5
- [6] Šoltés, V. - Jakubíková, E.: Taxation and public finance in the Slovak Republic. In: *Taxation and Public Finance in Transition and Developing Economies*. New York : Springer Verlag, 2008. p. 603-608. ISBN 978-0-387-25711-2
- [7] EU sub – national government: 2009/2010 Edition, CCRE, CEMR, Dexia, [on – line], available at http://www.ccre.org/docs/nuancier_2009_en.pdf

CHAPTER 17.

MULTIFUNCTIONAL DIMENSION OF THE SERBIAN AGRICULTURE SECTOR IN THE FUNCTION OF ACCESSION TO EU

Ana Jaško¹

Nenad Popović²

Ondrej Jaško³

Abstract

This paper presents the contribution to the creation of the Serbian rural development model which is based on balanced regional rural development (BRRD), and requires a constitution of an adequate policy of BRRD as a multidimensional process: political-institutional, socio-cultural, economic and ecologic, concerned with the idea of an integrated approach to achieving strategic aims in the areas of: 1) Establishing a national network for a BRRD; 2) Improving the value of human capital in rural regions, 3) Ensuring that the agricultural sector be competitive; 4) Developing a non-farm economy; and 5) Protecting natural resources and environment. It is also necessary that some measures should be adopted for the purpose of the implementation of the programmes, the projects and the activities defined in the strategy of the Sustainable regional rural development. Bearing in mind that strengthening of rural development policy is becoming increasingly important and that it represents one of the main development priorities of the EU, this could be a good indicator for Serbia if it wants to become a full member of the European Union. Besides empirical proofs of the benefits of presented recommendations, this paper will also highlight the theoretical concepts that are the foundations for the justification of their acceptance.

Key words: *agricultural sector competitiveness, human capital, balanced rural regional development*

¹ Ana Jaško, Institute of Economic Sciences, Belgrade, Serbia

² Nenad Popović, Serbian Economic Center, Belgrade, Serbia

³ Ondrej Jaško, Faculty of Organization Science, Belgrade, Serbia

INTRODUCTION

This paper is part of the efforts aimed at improving rural development and current state in agriculture sector. Paper is based on analysis of statistical data that describe current state, mainly presented in the first part. Main problems that Serbian society has to face with today are a rapid downsizing and aging of rural population. Such problems are not uncommon in transitional countries, and have already been elaborated in literature. [12] Another problem is devastation of agriculture that is a long lasting process in Serbia [28, 29]. Both issues are consequences of negligence regarding rural development for several decades.

Agriculture is prevailing activity in most of the rural areas of Serbia and it is characterized by small households, low level of productivity and low level of income per household. Dominant small households, with at least 3 members, at least one member aged 25 to 55, which have no more than one member with permanent employment, with area of intensively used land (including a lease), below 3ha, less than a total of 10 head of small farm animals (sheep, pigs, goats) and 2 head of cattle, owning a flat or a house in a village in which they live, defined as such in a study [7], according to the findings of that study still do not have sufficient potential for development. Such condition cannot generate stronger development initiatives, and therefore external input is needed, which is described in this paper. As most of the rural areas inhabitants are engaged in agriculture, depopulation of these areas also means devastation (squalor) of agriculture and all agricultural areas. In this paper, authors give their recommendation for promotion the agriculture sector through establishment of BRRD model. There are five major strategic aims that are proposed in its context, elaborated further in second part of the paper.

ECONOMIC PERFORMANCE OF RURAL AREA IN SERBIA

Agriculture is the key component of economic development of Serbia and has a remarkable economic and social importance. This sector participates in the GDP to around 12.7 % (about 18%, it include the food industry), has about 26% share in the total employment and employs 17% of active population, and accounts for 20% in exports. [11] If we compare the degree of industrialization of the Member States of the European Union and Serbia, we find that Serbia is characterized by a low level of industrial development and high participation of the agriculture sector in the composition of GDP by sector. [16]

Table 1: GDP- Composition by Sector (Benchmarking with Other Countries)

Countries	GDP-Composition by Sector					
	Serbia	Portugal	Slovakia	Slovenia	Czech Republic	Croatia
Agriculture	12.7	2.7	2.6	2.5	2.3	6.3
Industry	23.5	23.3	34.4	30.9	37.2	28.1
Services	63	54	63	66.6	60.5	65.6

Source: adapted to <http://www.berr.gov.uk/files/file26252.pdf>

Rural areas represent between 70 and 85% of Serbia's territory, depending on the classification methodology, with between 43 and 55% of total number of inhabitants. These data are comparable with EU countries average where in year 2007 rural areas represented around 90% of territory of all 27 member states and around 56% of population lived in these areas, but the data are not comparable when it comes to the financial assets allocated to the improvement and the quality of living among the rural population. One of the major structural and developmental problems of the Serbian society is a lack of balance and an increase in differences in the rural-urban relations. Due to stated differences, Serbia has for several years faced disturbing trends such as a decrease in rural population (depopulation) that is a result of a negative birth rate and migrations. Out of approximately 4,800 villages in Serbia, almost every fourth, or 1,200 villages, will disappear in a decade and a half if life does not return into them [12]. The major reason for this lays in the fact that living in rural areas is economically unsustainable as incomes of farmers in Serbia are much below the Serbian average as well as there are no job opportunities due to the collapse of industry related to agriculture. All these result in high unemployment rate and poverty in the rural areas. An additional problem to this situation is also the lack of development perspectives of rural areas that could be seen in poor communal, social and transportation infrastructure.

Although Serbia has a significant agricultural land per inhabitant (0.68 ha per inhabitant [13]) that is above European countries average it is characterized by very small households. There are 778,891 family households in Serbia and most prevailing are those with land area of up to 3 ha (59.4%) [29], only 8% have between 8 and 15 ha of land and there are 2% of households that have more than 15 ha (in United Kingdom the average size of farm is 69.3 ha, in France it amounts to 41.7 ha, in Denmark it is 42.6 ha, in Holland it is 18.6 ha, in Germany it amounts to 31.0 ha, in Belgium it is 20.6 ha). The largest number of enterprises-landlords is within the category of 50 ha (20.8%) while the smallest is in category above 5 ha (2.6%) [29]. The productivity level among enterprises is 30% higher in relation to family households.

How important agriculture is for Serbia could be illustrated by the share of agriculture in the country's GDP that was from 11.8 to 15.5 and 5% in the years 2000 to 2008. If we assess the overall contribution of agriculture to other areas of economy, this share is more than 40% of the total GDP [13]. In addition, agriculture employs one third of the active population in Serbia. The importance of this sector could also be seen in export earnings as it was around two billion USD in 2009 (around 20% of total export income). Agriculture is the only sector of the Serbian economy that earned a trade surplus and in spite of the negative effects of the economic crisis in 2009; agriculture incomes were about \$500 million [21].

Agriculture in Serbia has a highly important role in the employment of the population as 24% employed are engaged in this sector. Such a share can be only compared to Romania, in the EU, whereas it amounts to 4-5 times as high compared to the other countries. This share could be even higher if non-formal employment should be taken into account, however this type of employment was not included into the subject matter of this work.

Table 2: Employment per sector in 2009.

	Services	Industry	Agriculture
EU-27	77,2	18,0	4,8
Hungary	72,0	23,3	4,7
Poland	63,9	23,2	13,0
Check republic	68,7	28,0	3,2
Slovakia	69,8	26,7	3,5
Slovenia	65,5	26,7	7,8
Bulgaria	67,6	25,2	7,2
Romania	50,9	22,0	27,1
Croatia	68,3	20,4	11,3
Turkey	58,0	18,9	23,0
Serbia	56,1	19,9	24,0

Source: adapted to <http://data.worldbank.org/indicator/>

Serbia's agriculture is characterized by the concept of export-oriented sectors of the economy. Before the transition period, over 50 percent of its production was placed on the market of the former republics. External trade of agricultural and food products of Serbia in the period before entering the transition process is characterized by an averagely realized export value of approximately \$ 400 million, with the achieved share of export business to 25 percent, the average realized value of imports of \$460 million, accounting for approximately 10% of the total goods export economy [29]. The results of foreign trade in agricultural

and food products, in this period, are characterized by a deficit of \$ 60 million, which a coverage rate of imports by exports amounting to 87 percent.

The transition period of the Serbian agricultural sector is characterized by the continual growth of exports, besides stable import and continually improving the balance trade. Merchandise exports of agricultural and food origin in 2008 shows that the export value was 1957 million, an increase by 16%, compared to the 2007 results (with a share of total merchandise exports of 17.8%). Estimates indicate that agriculture and food industry sector realized about 30% of exports. Meanwhile, the import value amounting to 1,468 million was 31.5% above the actual value in 2007 with the share in total merchandise imports of 6.4%. In 2008, the surplus in foreign trade in agricultural and food products was 489 million with the coverage rate of imports by exports of 133.3 % [29].

MAJOR CHARACTERISTIC OF RURAL AREAS IN SERBIA

Reversible migration, urban-rural, characteristic for transition economies, was recorded in Serbia. These processes in Serbia are explained primarily by a deep economic crisis and the closure of large industrial complexes, resulting in an increase of rural population [7]. In series of factors which explain these demographic changes, the primary one is responsible for the closure of jobs and reduced employment opportunities in the big cities. Restitution of land during the transition process in Serbia has not significantly encouraged the return of the population into rural areas.

The economic structure of rural areas in Serbia is highly dependent on the primary sector and still based on the depletion of natural resources. Traditionally, agriculture is the main reason why Serbia is one of the most agrarian countries in Europe [7]. Heterogeneity of natural resources, private ownership of land and experience in business cooperation, as well as some of the basic preconditions of diversification and development of rural economy, are not used sufficiently enough.

The high share of agriculture and the low share of the tertiary sector in the composition of GDP are basic features of the economic structure of rural Serbia. The achieved level of diversification for its performance is similar to countries in the region [9] and is constrained by almost identical factors.

The achieved per capita GDP in the rural areas of Serbia is ¼ lower than the national average and indicates a significant lag in development. Differences in

labor productivity and economic structure are equally apparent between rural and urban areas and among different regions and types of rural areas.

Poverty in Rural Areas in Serbia

In the European context, social exclusion and poverty of farmers are determined by various factors. Rural poverty is an important aspect of European poverty, particularly because rural areas account for a large proportion of European territory and its population. In some Member States the poverty risk in rural areas is twice as that of urban areas. However, the specific features of rural areas have until now been neglected in the analysis of poverty in Europe. There would still seem to be a lack of public awareness and commitment from the different strands of public institutions in addressing the issue of rural poverty [6].

Table 3: The Distribution of Serbian Farms in Relation to the Poverty Line

	Serbia	Vojvodina	Central Serbia	Western Serbia	Southeastern Serbia
Per centage of Family Households Below the Poverty Line	38.70	39.36	38.73	33.22	42.90
% of Family Households Below the Poverty Line					
Non-farm Households	33.67	33.83	23.27	29.07	42.92
Mixed Households	30.54	38.89	37.90	18.10	29.41
Farm Households	53.44	47.37	61.61	51.92	51.22
Small (to 1ha area used)	40.00	38.55	31.88	32.20	52.81
Medium (1,01-5.0 ha)	34.62	29.59	37.97	28.38	39.39
Large >5.01 ha	43.76	49.50	43.17	42.05	40.21

Source: Bogdanov N. (2007), Small rural households in Serbia and rural non-agriculture economy, Ministry of Agriculture, Forestry and Water Managment, Belgrade http://www.prsp.sr.gov.yu/download/mala_ruralna_domacinstva_u_srbiji.pdf

Of crucial importance for the Western European Countries is the speed of economic transformation of agriculture and its technical and technological progress and adaptation of local and national policy issues to specific countries or regions [7]. Low productivity of agriculture, disguised unemployment, unexplored

land market and the absence of stable production and transport chains, slow down the structural transformation of agriculture of Southeast Europe and contribute to high rates of poverty of farmers and other rural population.

The high concentration of households that live below the poverty line indicates that the multidimensional aspects of social exclusion of the rural population are closely related with the condition of agriculture and farm economy.

According to this criterion, in Serbia and others regions, except the region of Southeastern Serbia, a higher poverty rate is found among large farms. The highest percentage of the poor is among large farms on the territory of the most intensely rural region. Poverty is most present amongst single person households (51.54% of these households are below the poverty line). On one side we have particularly high concentration of poor among the elderly and single person households in Southeastern Serbia. Negative demographic trends have an impact on an increasing share of the poor among single person households in Vojvodina.

The existing distribution of Serbian farms on the line of poverty is influenced by a slow structural reform of agriculture - as evidenced by a high poverty rate among single-person households and small unfavorable economic position of farmers in the past year, what is the argument of poverty among large households with more intensive production.

The main reason for rural poverty in Serbia is a lack or low level of development of rural structures and services. The cooperation between local decision-makers is insufficient, uncoordinated and sporadic. The strategic documents of local government, the educational curricula of the business sector and NGOs, do not include small rural households. The local business sector has no direct cooperation with smaller farms or nor does it recognize the interest in such cooperation. The NGOs work with small rural households through programs aimed at the vulnerable or at education. Small rural households are not included in the cooperatives and other organized forms of business cooperation, nor do they show interest in it. Rural poverty is based on "various circle of decline" described as low density → lack of critical mass for service and manufacturing → low rate of starting firms and business ventures → lack of job creation → migration + aging local population → reduction in population density [7].

This cycle of degradation in many rural areas in the EU is interrupted appropriate policies that led to the improvement of infrastructure, attracting investment, developing manufacturing, service industries and agriculture and achieving positive growth rates. For Serbia, it is therefore of great importance to define strategies for rural development at national and local levels and take action in the

direction of chain termination described trends that lead to the decline of rural communities.

GENERAL INTRODUCTION TO RURAL DEVELOPMENT

The concept of rural development can be found in the theory of economics and economic practice over several previous decades. Rural development originated as a response to the problems connected with *intra* and *inter* regional inequalities in the degree of economic development and it has served as a (suitable) concept for a more complex analysis of development potential within rural areas [4].

The regional rural development (RRD) should be oriented towards people as well as towards provision of adequate living conditions, which means that the decisions on the priority issues in each of the regions are made having in mind its specific features. The main objective of the RRD can be defined as a “permanent improvement (or at least stabilization) of the living conditions for the population in rural regions, especially the poor ones“. In order to be permanent, the improvement of the living conditions has to be based on the economically and ecologically sustainable, socially and culturally adequate, self- determined and institutionally feasible means of resource utilization.

The concept of rural development entered into EU countries’ practice through agrarian and regional development policies. Agriculture and regional inequalities in economic development are mentioned in the first constitutional acts of the EEC (Rome agreement, 1957). In principle, four phases in the development of the concept of rural development can be distinguished [10].

The new rural development policy defined in the *Reform of the Rural Development policy 2007-2013 with specific aims to:* 1) Increasing the competitiveness of the agricultural sector; 2) Improving the environment and countryside through support to land management; 3) Improving the quality of life in rural areas and promoting diversification of activities. There is also a strategic framework for rural development that is given through various strategic approaches, which is described in the text bellow.

In the rural development strategies, there are three conceptual approaches that have been shaped theoretically thus far: 1) strategies focused on sectors (the sector approach); 2) strategies focused on the rural environment (the spatial approach) or 3) strategies focused on the population [4].

Strategies focused on sectors (the sector approach). The sector – exogenous – approach to rural development was a prevailing strategy during the 1960s and in the early 1970s. The basic principles are related to a high volume economy (productive) and concentration of resources.

The rural development policy based on the spatial approach is justified by heterogeneousness of space and its potential, links between metropolises and the provinces, undesired consequences of economic growth and changes for certain areas. The strategies based on the spatial approach stressed construction work and raising the quality of overall local resources – institutions, infrastructure, knowledge and networks. The neo-endogenous development models over the 1990s concentrated on the local territory. These models were aimed at utilizing the local physical and socio cultural resources. According to this approach, the development policy is defined by needs, capacities and perspectives of local factors, and the basic principle includes participatory action and partnership, which includes public stakeholders, private entrepreneurs and volunteers [4].

On the other hand, America recognizes *The Development of Local Management Structures* and *Investment into Human Resources* as the most efficient development strategies, both of which are essentially conceptions linked to the populace. Aside from that, American experts also evaluate as efficient the strategies of improving rural social and communal structures, protection of the environment etc, which are essentially based on the spatial approach. Europe has a more unified distribution of answers to the efficiency of strategies: European experts evaluated a range of strategies as efficient, from those aimed at strengthening local initiatives and partnership, through improving social, economical and physical infrastructures, to protecting the product's geographical origin, two linked to the population and two to sector policies.

That is why this paper proposes that an approach be adopted that is based on balanced regional rural development – BRRD that would create a real basis for achieving the balanced regional development (BRD) on the national level. Such an approach would allow for implementing a multidisciplinary, multi sector and integrated institutional approach, instead of the present one that treats the problems of regional and rural development as separate problems.

This requires a policy of the balanced regional rural development as a multidimensional process – political-institutional, socio-cultural, economic and ecologic, based on the idea of an integrated approach to achieving strategic aims in the areas of: 1) Establishing a national network for a balanced regional rural development (legal framework, institutions and structures); 2) Improving the value of human capital in rural regions; 3) Ensuring that the agricultural sector be

competitive; 4) Developing a non-farm economy; and 5) Protecting natural resources and environment. It is also necessary that some measures should be adopted for the purpose of the implementation of the programmes, the projects and the activities defined in the strategy of the sustainable regional rural development.

BASIC RECOMMENDATION FOR SERBIAN RURAL DEVELOPMENT MODEL

In the case of Serbia, from a practical perspective this means that the existent development level of most rural areas still demands external interventions on the rural employment growth, for local potential cannot endure this effort. In order to support this statement with more arguments, it is necessary to conduct further research in rural employment, labor and capital market in rural areas.

Establishing the National Network for BRRD

Serbia adopted the National Strategy of regional development as well as the strategy of rural development. The departments in charge of the execution and further improvement of these strategies are active in two separate ministries, the Law on regional development was adopted, and agencies for regional development as well as rural development centers were established. Each of these institutional assumptions, however, has some weaknesses that hinder the set objectives to be achieved. These weaknesses are due to the fact that a balanced regional development on the national level is impossible to reach without simultaneously achieving the rural development, and treating them separately results in duplicating administrative capacities, in ambiguity of authority, in the atomization of financial assets at disposal and in the loss of synergy effects that would be achieved if this issue were treated in an integrated manner. This is further supported by the fact that the newly-established National Agency for Regional Development will include the department of small and medium enterprises as well as the department of infrastructure, whereas the rural development will remain the competence of the Ministry of Agriculture, Forestry and Water resources, although the developed countries have long abandoned the sectoral approach and adopted the spatial approach to rural development.

In order that the strategy of sustainable regional rural development be implemented successfully, it is necessary to establish a department of rural development with the Agency for Regional Development that would ensure a quality system support to the rural development in Serbia, especially in villages. A modern approach to the problems in village development requires that they

should be observed and preserved in the context of the development of sustainable rural areas, which, in addition to settlements themselves, include natural and economic resources. The Agency would be engaged in strategic planning of the development of rural communities in Serbia in order that the conditions for life in the rural areas should be created as similar as possible to the urban conditions; it would also be responsible for creating a national network of rural development, bringing into contact the public and the private sectors in order to establish regional centres as basis of support decentralization, for providing an interactive link between the national and the local levels, as well as for the preparation, implementation and control of the strategies and projects designed for the regional rural development.

The basic goal of establishing a national network for rural development is to ensure that the services granted by the state be available to farmers and other stakeholders in rural areas, to inform them on the opportunities to obtain support for their development initiatives, on the events and business opportunities both on the territory of Serbia and abroad, as well to improve the marketing of agriculture and its accompanying industries. The project of establishing the national network for rural development would result into the establishment of regional centres for rural development support as well as community centres for information and development of villages in all the municipalities of the Republic of Serbia.

Serbia would do well to use a positive example and experiences of Slovenia in the development of a national network for an even rural regional development. The agricultural reform in Slovenia commenced in 1991, when the Act on financial intervention into agriculture was adopted that allowed for the restructuring of agriculture towards the EU. As many as 400 regulations were adopted in order that the agricultural legislature should be adjusted, and the accession process lasted from June 1996 until May 2004.

The Agency for payments in agriculture was established in Slovenia in 1999, when Slovenia had been a candidate for accession for already three years; in the following year the Agency took over all the competences in conducting the agricultural policy and was accredited by the EU in 2001.

Aware that the newly accepted member-states do not have so favorable conditions to earn quotas, Slovenians demanded that they be allowed to temporarily supplement direct payments from the national budget. After a succession of additional explanations Slovenia had to submit to the EU and the change of the referential period taken into account in quota calculations, a compromise was reached in that Slovenia was allowed to gradually increase its direct payments.

This was the most delicate part of negotiations, and the solution is considered to be a favorable one for its agriculture.

Characteristic of Slovenia is also a highly developed system of co-operatives, as well as a strong political impact of agricultural workers. The Chamber of Agriculture was founded towards the end of the 1990s, on a principle of compulsory membership. This Chamber is credited for ensuring that Slovenia was granted the quotas equal to those granted to the old member-states of the EU.

In addition to direct incentives, support is given to the rural development programmes, to threatened areas, as well as to ecological projects defined as the goals of the agrarian policy. These are financed from the budget, but also by solidarity funds. The dominant forms of incentives are the non-repayable funds granted according to the EU programmes.

Improving the Value of Human Capital

Improving the value of human capital has both qualitative and quantitative properties, reflected in the achievement of sustainable population policy and in training people in rural areas. This requires that an adequate legal framework be established, with clearly defined regulations and solutions that would, among other things, provide for the institutionalization of an executive body with the Ministry of Work and Social Policy, in charge of renewal and demographic development in the country, especially in rural areas, and entitled to adequate financial assets and subsidies allocated by the state budget.

In order that the prospects of attracting people to remain settled in rural areas should be discussed at all, it is necessary that these people be granted elementary living conditions, which requires much larger investments into the development and construction of an entire infrastructure (transportation, communal utilities and telecommunications), as well as housing and other necessary buildings. Special attention must be paid to the education and development of young people in rural areas.

Labor force in rural areas is mostly employed in activities which require male labor force (construction building, transport, partly a food processing industry) as well as the workers with relatively low qualifications. As a support to this, the data confirms that in the rural employment structure, nearly 50% of the employed acquired secondary education (in Serbia, persons who have completed three-year vocational secondary schools fall into this category). A workforce with such limited qualifications certainly does not meet the requirements of the modern technology era. Investors are reluctant to put in money where there are not well

trained staffs available. Conversely, educated people are less likely to settle down in rural area without an attractive economic environment and job opportunities suitable to their specific needs and preferences

Table 4: Employment of Rural Population

	Employed Rural Population					% Female total
	Total	Male		Female		
		total	structure %	total	structure	
Total	1250660	781503	100	469157	100	37.51
Without any education	39912	12949	1.66	26963	5.75	67.56
Non finished elementary school	203703	111889	14.32	91814	19.57	45.07
Elementary school	320038	204694	26.19	115344	24.59	36.04
Secondary school	608764	407767	52.18	200997	42.84	33.02
College	42263	25116	3.21	17148	3.66	40.57
Faculty	35979	19086	2.44	16891	3.60	46.95

Source: Bogdanov N. (2007), Small rural households in Serbia and rural non-agriculture economy, Ministry of Agriculture, Forestry and Water Management, Belgrade http://www.prsp.sr.gov.yu/download/mala_ruralna_domacinstva_u_srbiji.pdf

Also it is necessary to improve the transportation for the schoolchildren who live far from schools, giving priority to students from Serbian rural areas over the foreign students when it comes to granting quarters in students' residences, etc. Serbia has about 60 agricultural secondary schools. The primary objection to these schools is that they do not train the personnel appropriate for agricultural business management in the market economy conditions. More attention should be paid to the business operations of agrarian companies and farms, as well as to practical skills and knowledge in agriculture and rural development project management. In order to create conditions for employment of young people in rural regions, it is necessary that the secondary school curricula be changed periodically, so that the education system is better geared to the demands in the labor market. Another benefit would be provided by the universities, which could open their departments in rural areas, in accordance with the strategy to ensure a balanced national coverage and a diversity of career profiles, thus ensuring a higher level and a higher accessibility to education for the population and reducing the migrations of the young.

As to a major demand for improving the farmers' knowledge, special attention should be paid to their education/training, both as regards financial assets (grants from national and international funds), introducing standards and information technologies implementation (HACCP, ISO 9000 and 14000, ERP), best agricultural practices and sales (improving the market information provision system), marketing (branding) and farm management.

Ensuring Agricultural Sector Competitiveness

The development of agriculture should become a corner stone of a general policy of development in Serbia and should be allocated far larger financial assets from the budget compared to the previous period. These means will be in accordance with the share agriculture has in the gross national income and exports, as well as with the strategic importance it has as regards the safety of food supply and employment.

In order that the competitiveness of agricultural sector be improved, it is necessary to work out a system solution to its financing, so that the farmers could accurately anticipate the incentives in at least a middle-term period, the increase in incentives, and thus be in a position to plan timely. These require that agricultural policy and budget, as well as the activities to be conducted by these means, be known for the period of at least five years, as well as that a transparent mechanism of cost control and the control of the efficiency of measures financed from the agricultural budget be established.

The agrarian budget of the European countries in the previous period was mainly concentrated upon different forms of subsidies in order that the yields be acquired as high as possible. The overall budgetary support to the European agriculture amounts to about 40% of the €120 billion EU budget. When the overall EU budget allocated for agriculture (for various types of incentives to agriculture) is divided by the total area of farming land in the EU-27, the result obtained is an average amount of subsidies of approximately €320 per ha. The Table below presents the distribution of subsidies in some European countries.

Table 5: Subsidies in European Countries

Country name	Total subsidies (Spending per hectare)	Subsidy categorization		
		Direct aid to farmers	Rural development	Export subsidies
Greece	€852 /ha	70%	25%	0%
Netherlands	€505 /ha	81%	4%	9%
Denmark	€434 / ha	83%	9%	6%
Germany	€388 /ha	80%	13%	1%
Austria	€375 /ha	58%	39%	2%
France	€38 /ha	81%	10%	2%
Hungary	€116 /ha	80%	24%	3%
Bulgaria	€2 /ha	40%	57%	0%
Romania	€76 /ha	41%	54%	0%

Source: adapted to <http://data.worldbank.org/indicator/>

In Serbia, sadly, only a small number of farming households qualify for subsidies: 1) registration of the farming household 2) observing the duties to the state (retirement and disability insurance). Out of an estimated number of 780,000 farming households in Serbia, only 84,000 qualified for subsidies in 2009. Aware that only a small number of such households in Serbia manage to meet all the conditions required to be granted subsidies, it is our recommendation that in the period to come, the subsidies be granted for the agricultural produce, rather than for the land, crop and livestock ownership. It is in this way that subsidies can be granted to many of those who are engaged in agrarian production but are not the land owners. Similarly, this would mean granting the incentives for those using agrarian resources more efficiently and produce more.

A large number of local autonomies have in the past couple of years started the programmes of direct aid to farmers. These programmes are mainly reflected in granting the so-called interest-free loans and incentives in the form of subsidies, regresses, preemie, etc. Among the major projects that are included in these subsidies are the acquisitions of seedlings, high-quality breed livestock, irrigation systems, renewal of machinery, etc. Nevertheless, the Serbian farmers' major problem is the lack of financial means for renewal, improvement, and increase in agricultural production. Favorable loan terms are the predominant conditions for conducting a more dynamic restructuring of agriculture and improvement of the overall rural economy.

Also necessary is the state support to farmers in solving the issues of purchase of agricultural produce, creating conditions for building new farms, smaller plants

for processing farming produce, storehouses and purchasing cold-storage plants. Special measures should be taken in stimulating the farmers and other social groups in villages to form cooperatives and associations (adopting a Law on cooperatives, forming export alliances). The state support must also be granted to building a regional identity, and to the implementation of active marketing and branding chambers.

Special care should be taken to build the necessary infrastructure for crops protection against elements, to develop the irrigation systems, etc. Given that Vojvodina today has 22,000 kilometers of canal networks, it is possible to irrigate 44,000 hectares on condition 100 meters of soil is included on either bank of the canal. The idea is by no means a new one, if it is well-known that the objective of the construction of the Danube-Tisa-Danube canal was to drain the surplus of water from one million hectares and water 510,000 hectares. The canal served well in performing the former function until 2006, however, due to an inadequate maintenance there was much erosion and mud choke, and this operation is not successful any longer. As to the latter, it has never been fully accomplished (only 30,000 hectares are irrigated) [20].

Development of Rural Non-farm Economy

The economics in sustainability of small farms, with less than 5 ha of land, of which there are over 600 thousand in Serbia, the support to amassing the land, the seasonal character of agriculture and forestry, the de-industrialization in a majority of regions as well as a decrease in employment in public services— all these resulted in an ever-increasing unemployment and in an increase in migrations from these areas, regardless of the fact that the rate of depopulation rises daily. On the other hand, the land, the forests and water lows, the geographical position, the cultural heritage, the specific handicrafts and other features of a rural area make the advantages on which new development opportunities can be built, apart from farming. Hence one of the crucial objectives of the social and economic stability of rural regions is the development of a non-farm economy.

The development of a non-farm economy is related to the support given to the inhabitants of a rural community who are willing to take new development opportunities and prospects and be included (demand-pulled), this producing a favorable impact upon employment and income of other subjects of the rural community, or to the support and protection for the poorer members of the rural community who are forced to search for employment outside the farm (distress pushed). As the former approach is largely related to the investments, it is logical to assume that it can result into a greater diversification outside agriculture

(tourism, transportation, processing, packaging) whereas the latter results into the development of industries based on agricultural resources (handicraft and services, seasonal employment in construction work and tourism).

Special importance in the domain of economic activities diversification in rural areas should be assigned to the development of the rural tourism. One comparison between the European rural tourism and that in Serbia will reveal that the European countries today are leaders in the field of rural tourism, with about 200,000 registered providers of such services in this field (more than 2,000,000 beds). The number of directly or indirectly employed in the rural tourism sector in the EU is estimated to be about 500,000. Accommodation on farms, in private country houses and in small family-run guest-houses attracts a direct annual tourist spending of about €12 billion. Rural tourism is best developed in France, Italy, Spain and Austria, which could all serve as a good example to Serbia where only 300 households are engaged in rural tourism, and the offer itself does not exceed 2,500 beds.

Regardless of the awareness of the importance of rural tourism as a viable opportunity for the development of rural regions, Serbia is only in the initial stage of its development, especially as regards rural tourism in the farming households. It is characteristic that the projects conceived so far in this field have not stemmed from the national programmes of rural area development, but entirely from the private initiative of individuals and groups. Sadly, this form of tourism is still rather neglected in the tourist industry product of Serbia, one of the weaknesses being that there are no adequate mechanisms for financing entrepreneurial ideas in this field. On the other hand, Serbia abounds in favorable opportunities for the development of rural tourism due to its geographical position, natural beauty of the scenery, relief that encourages various forms of recreation, gastronomy, folklore, outstanding cultural heritage ...

The factors stimulating the diversification are the same as those that stimulate economic growth, which means, in effect, that diversification can be viewed in the context of endogenous theories of growth. The local natural and physical resources are not the only ones on which decisions are made. The level of infrastructure and the availability of communal utilities are also important, which implies the presence or the absence of social and economic links with urban society. The accessibility to loans and financial sources is not proportional to the levels of poverty in the regions; hence the removal of this barrier is of vital importance in encouraging entrepreneurship and local investments.

Protection of Natural Resources and Environment

The land on which the organic food is grown in the European Union has in the past decade been doubled, the leading producers being Slovakia and the Czech Republic, regardless of the fact that they had joined these processes somewhat late in comparison to other member-countries. The fact that 10 percent of inhabitants (46 million) in the EU prefer to use the food free from genetically modified organisms (GMO), means an opportunity for Serbia to declare itself as the producer of food free from GMO. This is also an opportunity for the rural development, as well as a way to prevent the dying out of the Serbian villages [20]. In addition to economic effects, the setting of this objective will have a significant impact upon employment, as it is widely known that the production of organic food demands three to five times more direct human labor and far more expertise compared to the production using conventional methods.

Another advantage of Serbia is a relatively unpolluted soil adequate for the production of organic foods. This production records an annual growth of 25 percent around the world, which is simultaneously a highest growth rate in any of the industries, since it is the only sector that sells its entire output. Out of 650, 000 ha suitable for organic production, only 6, 000 are used for that purpose. It should be noted that the prices of organic produce are 10-50 percent higher in comparison with those of conventional produce. According to the European Council Regulations, the transit from a conventional to the organic type of production is awarded by the European Union allocating from €600/ha subsidies for one-year crops to €900/ha for perennial crops, in a five-year period, the time required that the soil should be cleansed from any possible pollutants.

As well as in the conventional production, Serbia is successful in the organic production of raspberries and mushrooms that are exported to the European and world markets, and also of fruits and vegetables used in the production of cider vinegar, preserves and red-pepper chutney, and opportunity is also identified in the sales of wild plants. The major problems related to the organic foods production are the lack of farmers' education and training in the types of growing and the advantages of organic produce, but also the lack of market organization.

Special attention must be paid to adopting the measures that can help meet the most recent challenges such as the impact of climate changes upon agriculture and food production in a most adequate manner. The most important measure in this sense is investing in the reconstruction of the existing canal network and provision of new systems for irrigation or drainage of arable land. As regards the energy efficiency, the use of plant stubs in crop farming is a potential that is not exploited in Serbia at all, although the use of those renewed energy sources can

result in annual savings of more than 100 million Euros and in additional earnings for people who would be engaged in their preparation, to be used both in households and in economy.

CONCLUSION

The work begins with the presentation of the indicators of the conditions and development in agriculture in Serbia, the situation in the rural areas in which agriculture is a predominant activity, and proceeds to describe the interrelations between these two subjects of study. The second chapter presents the model of rural development whose implementation is expected contribute to the competitiveness of agriculture, as this is one of the most serious barriers to an effective accession of Serbia to the European Union.

It is generally assumed that agriculture is still the most important sector of the Serbian economy, making more than 11% GDP, which is twice or three times as much as the average of the EU member-states; 24% of the employed is engaged in this sector, which is 4-5 times as much compared to the EU average; it has a share in the total exports constantly higher than 20%, with the recorded surplus growth exceeding 20%. On the other hand, these data do not explain the development level or state in agriculture as a sector, rather the depth of the crisis in the other sectors.

Agricultural resources are very important, however, they are not employed to a sufficient extent. The size of the farming area per capita is largest in Europe, nevertheless, the average size of a farm is 3.5 ha, only 1.6% of the land is watered is irrigated, only 0.3 head of cattle is raised per hectare, and the share of organic production in the overall product is negligible. The overall product amounts to around €300/ha and the state budget subsidies allocated for the purpose of sustaining competitiveness range among the lowest in Europe and amount to €100/ha, however, it is only 20% farms that meet the criteria set for the allocation of these funds. For better results to be achieved in the agricultural sector it needs a long-term strategy that will be oriented towards improving the competitiveness of agriculture, as well as a new rural development strategy, as the present one does not yield expected results.

In the second section of the report the authors propose a background on the basis of which a rural development strategy would be designed based on a multifunctional approach that allowed for satisfactory results to be achieved in the EU countries. The multidimensional nature of the approach is mirrored in planning the rural development on the following: 1) *Establishing a national*

network for a BRRD; 2) Improving the value of human capital in rural regions, 3) Ensuring that the agricultural sector be competitive; 4) Developing a non-farm economy; and 5) Protecting natural resources and environment. Each of the proposed measures is explained clearly and guidelines are provided for its implementation. The conclusion of the analysis of the proposed measures is that improving the competitiveness of agricultural sector, the third measure listed, is most important for the short-term economic growth of rural regions, however, its long-term sustainability depends on the efficiency of the remaining four measures. The implementation of the strategy based on these measures would contribute to achieving the goals of balanced regional and rural development which is demonstrated in the presented BRRD model.

References

- [1] Armstrong, H.W. (2002), European Union Regional Policy: Reconciling the Convergence and Evaluation Evidence. In: Cuadrado-Roura, J.R., Parellada, M. (eds.): *Regional Convergence in the European Union: Facts, Prospects and Policies*. Berlin et al.: Springer-Verlag, 231-272, ISBN: 3-540-43242-6.
- [2] Arcotrass Consortium (2006), Study of the State of Agriculture in Five Applicant Countries-Country Report Serbia, internal document EC
- [3] Bezemer D., (2003), The Rural Nonfarm Economy in the Low and the Middle Income Transition countries, Overview of findings and Lessons from DFID commissioned Surveys, UK Department for International Development (DFID)
- [4] Bogdanov N., (2003), Rural Development - EU policy, State and Perspectives of Serbia, in the Proceedings of Agriculture and Rural Development in European integration, Agriculture, University of Belgrade, pp. 82-92
- [5] Bogdanov N. (2007), Regional Dimension of Rural Serbia, draft version for Baseline Analysis Report for Rural Development Programming, EU project, Support to a Rural development Programming and Paymen System, Belgrade
- [6] Bogdanov N., David Meredith, Sophia Efstratoglou, A typology of rural areas in Serbia, Economic Analysis, br. 177, <http://ea.ekof.bg.ac.rs/pdf/177/1-1.pdf>
- [7] Bogdanov N. (2007), Small rural households in Serbia and rural non-agriculture economy, Ministry of Agriculture, Forestry and Water Managment, Belgrade http://www.prsp.sr.gov.yu/download/mala_ruralna_domacinstva_u_srbiji.pdf
- [8] Bryden, J.M. (2002), Rural Development Indicator and Diversity in the European Union in Measuring Rural Diversity, Economic Research Service, Washington, D.C
- [9] Davis J., Rylance C. (2005), Addressing Poverty through Local economic and Enterprises Development, A Review of Conceptual Approaches and Practice, natural resource Institute, Chatham, UK
- [10] Felsenstein, D., Portnov, B. A., *Regional Disparities in Small Countries*, (Advances in Spatial Science). 1st ed. Berlin:Springer, 2005. 333 s. ISBN: 3-540-24303-8
- [11] Gheorghiu R., Paczynski W., Radziwill A., Sowa A., Stanculescu M., Topinska I., Gand T., and Walewski M. (2004), Operationalizing Pro-Poor Growth Case of Romania. Warsaw, Poland: CASE – Center for Social and Economic Analysis. Available online:

- <http://collection.europarchive.org/tna/20041116001915/http://www.dfid.gov.uk/pubs/files/oppgromania.pdf>
- [12] <http://www.agropress.org.rs/tekstovi/10377.html>
- [13] <http://www.agropress.org.rs/tekstovi/11588.html>
- [14] <http://www.berr.gov.uk/files/file26252.pdf>
- [15] <http://www.berr.gov.uk/files/file26252.pdf>
- [16] <http://www.cia.gov/library/publications/the-world-factbook/fields>
- [17] <http://data.worldbank.org/indicator/>
- [18] <http://www.ekoforum.org/index/vest.asp?vID=14>
- [19] <http://www.emportal.rs/vesti/srbija/106895.html>
- [20] <http://www.pks.rs/PrivredauSrbiji/Poljoprivreda/tabid/1869/language/sr-Latn-CS/Default.aspx>
- [21] http://www.rtv.rs/sr_lat/ekonomija/veci-agrarni-budzet--ohrabrujuca-vest-za-poljoprivredu_160078.html
- [22] <http://www2.gtz.de/dokumente/bib/02-5046.pdf>
- [23] Krugman, P. (1991), Increasing Returns and Economic Geography, *Journal of Political Economy*, 99, 483-499
- [24] Lowe P., Neo-Endogenous Development – Territory and Rural Innovation, www.sociologia.unical.it/rural_areas/paper/eng/lowe.ppt, taken from Bogdanov Natalija, Small Rural Households in Serbia and Rural non-agriculture Economy, Ministry of agriculture, forestry and water management, Belgrade 2007, http://www.prsp.sr.gov.yu/download/mala_ruralna_domacinstva_u_srbiji.pdf
- [25] Maier, G., Tödting, F. (1998), Regionálna a urbanistická ekonomika 2. Regionálny rozvoj a regionálna politika (slovenský preklad německého originálu Regional und Stadtökonomik 2. Regionalentwicklung und Regionalpolitik), Elita, Bratislava
- [26] Novković, N. and Rodić, V. (1999) Financing influence on intensity level of an agricultural production. Proceedings of the 63rd EAAE Seminar: Financing the agribusiness sector, Subotica, pp. 209-218.
- [27] Pejanović, R., Tica, N. and Rodić, V. (2003) Agriculture of FR Yugoslavia in transition. Proceedings of the International scientific meeting "Agriculture and rural development in transition economies" Krakow, pp. 153-160.
- [28] Romer, P.M. (1986), Increasing Returns and Long-Run Growth, *Journal of Political Economy*, 94, 1002-1037
- [29] Serbian Statistical Bureau, Annual Statistical Report, 2009, <http://webrzs.stat.gov.rs/axd/god.htm>
- [30] Strategy of Serbia's Regional Development for years 2007-2012, Official Gazette of Republic of Serbia, no.55/05 and 71/07

CHAPTER 18.

BANKING SECTOR: COMPARATIVE ANALYSIS SERBIA VS EU MEMBER STATES

Vlastimir Vuković¹

Abstract

The convergence of Serbia's banking sector to the EU Member States banking sectors may be investigated by the comparative analysis of some relevant indicators. This analysis uses indicators such as sector development, structures, capacities and performances by the methodology of the European Central Bank (ECB). Based on the findings of the analysis, the convergence level of Serbia's banking sector towards the EU average was evaluated in relation to the two main groups - the old EU Member States (EU15) and the new EU Member States (NMS). The reference groups for the banking sector in Serbia are the new EU members from central, eastern and south-eastern Europe that still have the features of the transition countries (EU18-27).

Key words: *banking sector, comparative analysis, Serbia, EU, convergence level*

INTRODUCTION

Serbia's banking sector has undergone profound changes since 2001, when the new cycle of already inhibited process of economic transition was strongly started. The creation of the modern institutional environment and the entry of the foreign investors have enabled the accelerated expansion of banking operations in Serbia, with a complete change of their structure, volume, capacity and performances.

As a result of this, Serbia's banking sector converged to the average EU Member States in a relatively short period of time - by the end of 2005 - measured by the basic indicators. The development continued in the following years, so the banks in Serbia had already reached a respectable level compared to the EU average banking capacity and performance in 2007.

The global financial crisis and economic recession did not significantly impede the local banking, which benefited to the continuation of the catch up process in

¹ Vlastimir Vuković, PhD, Senior Scientist, Institute of Economic Sciences, Belgrade.

2008 and 2009. A precise determination of the level of sector convergence² requires a comparative analysis presented below.

The analysis was carried out according to the methodology applied by the European Central Bank (ECB), as well as using its statistical data to enable comparison with the average values at the level of the EU banking sector (EU27) and different groups of Member States.³ The first group consists of the old EU members (EU15)⁴, and ten other transition countries - the new Member States (EU18-27).⁵

The second group is comparable to Serbia, because it belongs to transition countries group according to its economic and other properties. Serbia's banking sector is analyzed according to the data from the National Bank of Serbia (NBS). Additional statistics were used from the International Monetary Fund (IMF) and European Bank for Reconstruction and Development (EBRD).

The year 2007 was taken as a base year for the comparative analysis, because a year later there was a distortion of many indicators, especially the performance under shock of the global crisis. The data for 2008 were analyzed separately to examine the impact of the crisis on convergence.⁶

Four basic indicator groups were analyzed: sector development, structures, capacities and performances, which are dedicated special chapters in this paper. The convergence level was evaluated in the summary of this paper.

SECTOR DEVELOPMENT

The sector development indicators are derived from the ratio of the relevant variables: total assets of the banking sector, total loans, total deposits, GDP and

² Economic convergence is usually analyzed using the *convergence criteria that must be fulfilled by each Member States before it can adopt the euro. They relate to performance in respect of price stability, government financial positions, exchange rates and long-term interest rates.* (ECB, *Convergence Report*, May 2010)

³ Comparison with the average values was not done at the level of member states (EU27) because it is methodologically incorrect because of the extreme difference in their size and economic development.

⁴ Fifteen countries, before enlargement on 1 May 2004

⁵ EU18-27 consists of Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and Slovakia. Malta and Cyprus do not belong to the transition countries by their characteristics.

⁶ Last year's data for the EU banking sector will be as a rule presented by the end of this or at the beginning of the following year.

population. The basic indicator is the total assets to GDP ratio, which was 334% in the EU, 27, 351% in the EU15 and 103% in the NMS in 2007 (ECB, 2008). That same year, total assets to GDP ratio in Serbia was 63% (NBS, 2008). Despite the range of this ratio of nearly 3.5 times between the EU 15 and the NMS, a significant progress has been achieved since the beginning of the millennium, when this difference was notably larger. The explanation can be found in the growth rates, which reflect the developments in intermediation: only in period from 2006 to 2007 total assets in the EU 18-27 increased for 51.3% and 23.3% in the EU 15. This evaluation relates also to Serbia's banking sector, although its lagging by this ratio to the EU 15 was 5.6 times and 1.6 times related to the NMS.

The second indicator of banking intermediation efficiency is the domestic credit to GDP ratio, which was around 85% (Finland) and 206% (Denmark) in 2007, while the lowest ratio in the EU 18-27 group was Romanian (36%), and the highest Estonian (93%).⁷ If we compare the domestic credit to private sector and GDP, Romania (36%) is also at the back, preceded by Latvia (88%). According to the same source (EBRD, 2008); Serbia was at 35% just behind Romania, while according to IMF data, Serbia, with less than 30%, was slightly ahead of Romania (IMF, 2009).

At first glance, it can be noted that the distinctions of the domestic credit to GDP ratio are 2-3 times lower than the first indicator, which is a direct result of a higher share of domestic credit in total assets in the EU 17-28 than in the EU15 countries. Essentially, the cause of this is the rapid growth of the retail banking and corporate banking than the wholesale banking in European transition economies, which are characterized by the emerging financial markets.

The banking sector development is further highlighted by the structure of total assets, loans and deposits by groups of countries. In 2007, the banks in the EU18-27 managed with only 1.86% of total sector assets,⁸ while the EU15 managed with 97.82%.⁹ However, the shift is respectable, because the share of banks of the EU18-27 was 1.52%, just two years earlier. Serbia's banking sector has negligible assets in relation to the EU27 (0.05%), but compared to the EU18-27, it has improved from 1.8% (2005) to 2.6% (2007).

⁷ The World Bank / Data.

⁸ At that it is necessary to bear in mind the EU 18 – 27 countries had over 102 million inhabitants in 2007, or 20.6% of the total population of the Union. (ECB, 2008)

⁹ According to the data for 2007, the banking sectors of 12 countries from the EU15 individually had more assets than all of the banks in the EU18-27 combined: United Kingdom (13.2 times), Germany (9.9 times), France (8.8 times), Italy (4.4 times), Spain (3.9 times), Netherlands (2.9 times), Ireland (1.75 times), Belgium (1.7 times), Denmark (1.28 times), Luxembourg (1.2 times), Austria (1.17 times) and Sweden (1.11 times).

It is slightly more favorable structure of total loans, since 2.27% relates to the EU18-27 banks (Serbia 0.05%). Assets and loans in the EU18-27 and in Serbia would be much larger if there were no substitution effect by cross-border loans.

Data for 2008 say that the global economic crisis has hit small banks from the EU18-27, which have noticeably increased their share in the total assets (to 2.04%), loans (from 2.27% to 2.67%) and deposits (from 2.64% to 2.78%) in the EU banking sector (ECB, 2008). At the level of the EU27 total loans have decreased, which is understandable in the time of recession, while the assets of European banks have increased for 2.8%. During the same crisis year, the banking sector of Serbia has increased its assets for 1.8% and loans for 20.8%, while deposits decreased for 4.5% (NBS).

The differences in the developmental level of the banking sectors are most precisely shown by total assets, loans and deposits per capita, shown in the following table.

Table 1: Total assets, loans and deposits per capita (in EUR)

	Total assets p.c.		Total loans p.c.		Total deposits p.c.	
	2007	2008	2007	2008	2007	2008
EU15	102,236	104,287	47,796	47,299	41,075	41,144
EU18-27	7,473	8,419	4,284	5,034	4,302	4,567
EU27	82,760	84,713	38,854	38,684	33,545	33,693
Serbia	2,676	2,734	1,304	1,581	1,645	1,578

Sources: ECB (2010), NBS (2009)

Total assets per capita in the EU18-27 decreased in 2007 for even 13.7 times than in the EU15, and a year later, this difference was reduced to 12.4 times. The discrepancy is less noticeable when comparing total loans per capita - 11.2 times (2007) and 9.4 times (2008) in favor of the EU15, and the least by total deposits per capita - 9.6 times (2007) and 9 times (2008). By total assets per capita in 2007, Serbia was 2.8 times behind the EU18-27, total loans per capita were lower by 3.3 times and total deposits per capita by 2.6 times.

The smallest gap is shown by the ratio of loans to deposits, which is referred to as intermediation ratio (Weill, 2007). In 2007 and 2008, this indicator was 1.2 and 1.1 in the EU15, then 1.0 and 1.1 in the EU18-27 and 0.8 and 1.0 in Serbia.

On the basis of the banking sector development indicators it can be assessed that the convergence level of the EU18-27 is low compared to the EU 15, but continuous catch up process can be observed. The greatest differences exist in

total assets per capita, while the differences in total assets and deposits per capita are less. Consequently, the share of total assets, loans and deposits of the EU18-27 in the total EU27 was from 1.9% to 2.8%. According to the same indicators, lagging of Serbia's banking sector for the EU18-27 ranges from 2.6 to 3.3 times, while the ratio of its assets, loans and deposits to the EU27 is from 0.05% to 0.07%.

Differences in comparison to the EU15 are considerably less measured by total assets to GDP ratio (3.5 times for NMS and 5.6 times for Serbia), and far less according to domestic credit to GDP ratio. The greatest homogeneity is shown by the intermediation ratio (loans / deposits), testifying about the respectable efficiency of banks in transition EU member states, and Serbia as well. Analyzed differences of the sector development indicators also point that retail and corporate banking are far more developed than the wholesale banking. These differences would be less if the total loans, and thus the total assets, were not exposed to strong squeeze by the cross-border loans.

STRUCTURES

Banking sectors are characterized by ownership structure and market structure. According to the ownership, banks in the transition countries are usually classified as foreign-owned, state-owned and local private banks (Bonin et al., 2005). They are also classified as private (foreign and domestic) and state-owned banks (Fries and Taci, 2002), and the least common focus is on domestic (private and public) banks. All these aspects of the ownership structure of banks in the EU18-27 and in Serbia are presented in the table below.

Table 2: Assets share of banks (2007, in %)

	Foreign-owned banks /1	State-owned banks /2	Local private banks /3	Total private banks /1+3	Total domestic banks /2+3
EU18-27	77.6	5.3	17.1	94.7	22.4
Serbia	75.5	15.8	8.7	84.2	24.5

Source: EBRD (2008)

The ownership structure of banks in the EU18-27, measured by the share of assets, shows the dominance of foreign owned banks. By countries, the share of these banks ranged from 28.8% in Slovenia to 99% in Slovakia. A more detailed analysis shows that the share of the assets of foreign banks individually in the EU18-27 countries is inversely proportional to the size of the banking sector, with the exception of Slovenia (Vukovic, 2009).

The actual ratio of banks of foreign origin is much higher if we take into account the cross-border loans, which are usually arranged by the bank groups - owned by local subsidiaries. Banks of foreign origin in Serbia had approximately the same share, where just in 2007 there was noted an extreme expansion of cross-border loans.

Developed countries in the EU 15 have considerably lower share of banks of foreign origin than the EU18-27. Using these differences in the ownership structure of banking sectors in these two groups of countries, the researchers demonstrate greater openness and actual market orientation of the transition countries, in contrast to promoters of liberalism (Berger, 2007).

Comparison of the market share of the state-owned and private banks confirmed that the participation of the first group of banks is minimal, while there were not any of the state-owned banks in Estonia and Latvia in 2007. State-owned banks had the highest proportion in Poland (19.5%) and Slovenia (14.4%). The presence of these banks in Serbia was lower than in Poland, but exceeded the average of the EU18-27 for three times, exclusively because of the reduced interest of foreign investors to purchase them at the time of the global financial crisis. Hence, the certain lag of Serbia's banking sector by the share of private banks, foreign and domestic origin banks.

Table 3: Market structure indicators

	Herfindahl index for CIs		Share of 5 largest CIs in total A	
	2007	2008	2007	2008
EU27*	627	653	44.2	44.7
EU27**	1,103	1,120	44.4	44.1
EU18-27*	1,003	940	55.6	56.8
EU18-27**	1,321	1,264	65.1	64.9
Serbia	569	629	45.9	46.2

Sources: ECB (2010), NBS (2009)

*Note: * weighted average, ** unweighted average.*

The two most important market structure indicators, by the ECB and a number of researchers, are the Herfindahl index for credit institutions (CIs) and Share of 5 largest CIs in total assets. Both indicators show a degree of market concentration, which implies an adequate level of inter-bank competition.¹⁰

¹⁰ However, these indicators do not reveal actual market power of the credit institutions and their potential influence on the market interest rate.

Herfindahl index (Hi) suggests that the market concentration of banks in Serbia is noticeably lower than in the EU18-27 and the EU27 as a whole. Analyzed by country, banks in Serbia were less concentrated in 2007 than in the 21 Member States of the EU, including all EU18-27! Many times more concentrated banking sectors were those of Estonia (6 times), Finland (4.5 times), Belgium (3.7 times), the Netherlands (3.4 times) and Lithuania (3.2 times).

Overall, concentration of banks in Serbia and most of the EU27 was below the competitive market of 1,000 index points, while only three Member States had concentration of banks that was above the oligopoly limit of 2,000 Hi. The degree of concentration in 2008 slightly increased in Serbia and in the EU27, while it reduced in the EU18-27.

Low concentration of the banks in Serbia is confirmed by the share of 5 largest CIs in the total assets or concentration ratio (C5), which was almost identical to the weighted average EU27 and far below the EU18-27 in 2007. However, when comparing the banking sectors of the countries, Serbia had a lower C5 than the 21 countries of the Union (!) in the same year and nearly the twice lower concentration than the several of the most developed EU members.¹¹

It follows that the level of concentration of the bank assets in Serbia is lower than in the EU27 and significantly lower than the average EU18-27, regardless of whether the comparison is done according to the Herfindahl index or concentration ratio (C5). It is important to bear in mind that the concentration in the EU27 and EU18-27 has been relatively low, which has favored the development of competition in the banking market.

In addition to the presented indicators, the ECB examined the number of banks in the analysis of the banking sector, and the average total assets, loans and deposits, as well as the distribution of the largest banks (ECB, 2008). The comparison by group of countries for 2007 showed that there was multiply less number of banks and other credit institutions in the EU18-27 in 2007, on the average 123 less than in the EU15 (average 459), while the number of banks in Serbia was even lower (35 banks averagely in 2007). The average assets per bank in the EU15 (5,833 million) were much higher than in the EU18-27 (620 million) and Serbia (563 million). Thus we can conclude that the countries of the EU18-27 and Serbia are lagging far behind the EU15 countries by the number of banks and the size of their assets.

¹¹ The Netherlands 86,3%, Belgium 83,4% and Finland 81,2% (ECB, 2008).

CAPACITIES

The indicators of the capacity of the EU banking sector, by the ECB, are number of CIs (1), population per CI (2), population per branch (3), population per ATM (4), population per employee (5) and assets per employee (6), while an additional indicator is population density (ECB, 2008). The following table presents the indicators 3-6, which are reflecting the density of the network of bank branches, installed ATMs and the number of employees in the total population, and as well as the productivity of banks.

Table 4: Banking sectors capacity indicators in 2007

	Population per branch	Population per ATM*	Population per employee	Assets per employee
EU15	1,964	1,188	136	13,916,652
EU18-27	3,110	3,056	247	1,843,288
EU27	2,123	1,362	153	12,676,300
Serbia	3,025	5,488	244	651,690

*Sources: ECB (2008), NBS (2009), Note: * 2006 data*

It can be clearly seen and noted that the differences in the branch density per population are relatively small in the EU15 and the EU18-27 - 1:1.6. At the same time it can be said that Serbia has a higher branch density than the average in the countries from the EU18-27. Branch density in Serbia in 2007 was higher than in the 13 Member States, six from the EU15 group of countries and seven countries in the EU18-27!

During the crisis in 2008, branch network in Serbia has been extended further, so the number of inhabitants per branch fell to 2.705! Similar network expansion is evident in the EU18-27 (2,858 inhabitants per branch), despite the crisis, while the branch density in the EU15 decreased (1.961 inhabitants per branch). If we take into account the long-term trend of decreasing number of branches with the largest and economically most developed EU members, it is clear that the differences in the branch density will be even less next year.¹²

Discrepancy by the population per ATM was slightly higher, according to the data for 2006 (?), but it has decreased more rapidly. For example, population per ATM

¹² The downward trend in the number of branches in economically developed countries has lasted since the 1970s, and it is dictated by the need for reducing the costs, and by the technological progress (Matthews and Thompson, 2005).

in Serbia in 2007 decreased to 3.551, in 2008 even at 2.941, which means that the ATMs density network almost doubled in just two years (Vukovic, 2008). Indicators of ATMs density in the EU and groups of Member States, are presented in Table 5, they are not illustrative, since they relate to 2006 (ECB, 2008). Therefore, Serbian indicator of the ATMs density network in the table also relates to 2006.

The banks' capacity lagging in the EU18-27 compared to the EU15 is slightly higher if the comparison is made by population per employee - 1:1.8. The banking sector in Serbia is, according to this indicator, almost equal to the average banking sector of the countries in the EU18-27. Due to the rapid growth of employment in 2008, the population per employee in Serbian banks was reduced to 227.

Banks in the EU18-27 are far behind the EU15 by assets per employee - even 7.6 times. At the same time, it is an indicator of a low productivity of banks in the transition countries and the new Member States, despite the rapid progress since 1996 (Weill, 2007). Serbia's banking sector also lags greatly by the productivity behind the EU15 (21.3 times) and also behind the EU18-27 (2.8 times). The gap is slightly smaller when the loans and deposits per employee are compared, because of the emphasized underdevelopment of the wholesale banking in relation to the retail and corporate banking in European transition countries.

Although the branches are still the most important channel of access to banks in most developed countries, followed by ATMs, potentially the most important significance is given to the electronic channels.¹³ The development of electronic distribution channels of banking products and services has been promoted in the *e-banking*, which has caused huge changes in the level of technology and business methods (Wu et al, 2005). However, the most important is the influence on the rapid expanding of the banks' capacity. The Internet has experienced the largest and fastest transformation comparing to other banking channels. Scarce data from the ad hoc surveys (ECB, 2007) show that the EU15 countries have more developed e-banking, and the development in the EU18-27, as well as Serbia is very expeditious. Mobile phone usage in the EU banking sector has also led to expansion of growth, so that is the reason why it is denoted as *m-banking*.

Comparison of banking capacities has shown a respectable level of convergence (1:1.6-1.8), with an evident trend of a further minimization of differences in the number of employees, branch density and ATMs per capita. However, there are

¹³ *A Comparative Analysis of the US and EU Retail Banking Markets*, Brussels: World Savings Banks Institute and European Savings Banks Group, 2006.

wide differences in productivity, although the assets per employee in the EU18-27 and Serbia have grown above the average.

PERFORMANCES

The ECB analyzed the performances of the banking sector using solvency, liquidity, risks and profitability indicators (ECB, 2009). However, due to the differences in financial reporting, it was not possible until 2008 to calculate the average not only for groups of countries of the EMU, EU15 and NMS, but also for the EU as a whole. Hence, only the indicators from 2008 are available for performance analysis, while these data are still unavailable for the focus groups (EU15 and EU18-27). Also, performance indicators for individual EUMS for 2007 are not available.

The overall solvency ratio of all domestic banks in the EU has been minimally improved - from 11.4% in 2007 to 11.7% in 2008.¹⁴ Compared by countries, there were no extreme differences in 2008; in the EU15 group, this ratio ranged from 9.4% (Greece) to 15.1% (Luxembourg), in the EU18-27 from 10.5% (Estonia) to 14.9% (Bulgaria).

At the same time, the aggregate Tier 1 ratio was increased from 8.1% to 8.3% (ECB, 2009). A greater gap was also evident among the EU15 countries, from 6.9% (Italy) to 12.7% (Luxembourg), a smaller gap in the EU18-27, from 8.8% (Slovenia) to 11.2% (Bulgaria). Also, in 2008 the Tier 1 ratio in Serbia was extremely high - 22.8%, as well as the total regulatory capital to total assets - 20.5% (IMF, 2010). According to the presented data, Serbian banking sector evidently had by far the highest capital adequacy, although in the EU countries it was above the minimum capital requirement.

Liquidity, measured by the liquid assets (cash and trading assets) to the total assets ratio, in the EU15 group of countries ranged from 0.6% (Denmark) to

¹⁴ Data on the average solvency, liquidity and profitability, as well as other performance indicators of the banking sector of the EU, irrespective of the way of the financial reporting at the national level, were first calculated for 2008. The earlier reports contained only the isolated averages for IFRS and non-IFRS reporting countries. The problem is that not all members of the EMU and the EU adopted International Financial Reporting Standards (IFRS), including the two largest - United Kingdom and Germany. Therefore, the ECB revised reporting framework on consolidated banking data for 2008, when for the first time it was possible to compare data and calculate the average for the entire EU (ECB, 2009). At the same time that is why regular annual report of the EU Banking Sector Stability has not been published in 2008, but in August 2009.

41.2% (France) and in the EU18-27 of 5.4% (Latvia) to 25.2% (Romania). The same ratio in Serbia amounted to 30.5% at the end of 2008 (IMF, 2010). Hence it may be concluded that there were significant differences in the level of liquidity among different countries, but that the range of oscillation was much higher in the EU15, despite massive public financial support. Liquidity of banks in Serbia and their capital adequacy ratio were extremely high.

The breakdown of the capital requirements by type of risks in the EU banking sector shows that the credit risk is 80.7% of the minimum capital requirement under Pillar I, then the operational risk (7.3%), market risk (4.6%) and other risks (1.0%). Liquidity risk and counterparty risk are showing a tendency to decline gradually, while the risk from exposures to the new EUMS did not escalate, because the banks in the EU18-27, excluding the three Baltic States, have shown high resistance to the shocks of the financial crisis.

Resilience of the banks in the transition countries (EUMS) is confirmed by the stress tests, which were carried out in the period from July to August 2009 (ECB, 2009). Based on the report it can be summarized that the IMF estimated that the banks in Serbia had better stress testing results. Hence, not surprisingly, the IMF concluded that *Serbia's banking sector remains highly capitalized and liquid, and displays considerable resilience in stress tests* (IMF, 2010a).

For a comparison of profitability, two main indicators are commonly used: return on assets (ROA) and return on equity (ROE). Considering that the data for 2007 have not been disclosed yet, the data for 2006 and 2008 can be used.

According to the data for 2006 (ECB, 2007), ROA profitability of banks in the EU18-27 was considerably higher (1.1 to 1.8%) than in the EU15 countries (0.3 to 1%). In addition, the banking sector in Serbia with 1.7% was right behind Bulgaria and Romania. Higher ROA causes lagging behind other countries, because the amount of return on assets of the national banking sectors is inversely proportional to their development level and proportional to the average level of the pure premium rate (Vukovic, 2008).

ROA profitability of all domestic banks in the EU27 during the crisis in 2008 was negative (0.1%), although only five national banking sector reported a loss from -0.1% to -1.5%. The problem is that there are two dominant banking sectors in this group - United Kingdom and Germany's banking sectors, which absorbed 39.5% of total bank assets in the EU at the end of 2008. Other banking sectors from the EU15 have also suffered a decline in ROA profitability, which ranged from 0% to 0.7%. In contrast to them, banking sectors in the EU18-27 achieved very high profitability in times of the crisis, some even record profitability Bulgaria (2%)

and Romania (2.7%). ROA result of banks in Serbia, also reached a record profitability of 2.1%, which was a sort of paradox at the time of the global financial crisis, characterized by a dramatic drop in profitability of banks (BIS, 2009).

Table 5: ROA and ROE profitability indicators – country-level (in %)

	ROA		ROE	
	2006	2008	2006	2008
Bulgaria	1.82	1.98	24.07	17.32
Romania	1.79	2.65	22.97	29.49
Serbia	1.70	2.08	9.67	9.28
Estonia	1.67	1.31	24.40	15.98
Lithuania	1.66	0.22	26.41	2.68
Poland	1.56	1.37	21.15	14.77
Hungary	1.43	0.97	21.47	15.06
Slovakia	1.27	0.84	22.01	10.26
Czech republic	1.23	1.07	23.48	14.57
Latvia	1.06	0.79	22.79	11.39
Malta	1.02	0.21	12.93	2.58
Portugal	1.01	0.49	18.04	8.09
Spain	0.96	0.68	20.26	12.18
Austria	0.94	0.09	22.52	1.73
Finland	0.93	0.46	14.40	8.31
Greece	0.92	0.58	16.44	10.70
Slovenia	0.89	0.41	14.98	5.23
Cyprus	0.82	0.87	14.55	14.68
Italy	0.77	0.25	16.82	3.53
Luxembourg	0.73	0.04	18.35	1.07
Sweden	0.73	0.46	20.38	12.06
United Kingdom	0.71	-0.37	17.50	-9.71
Belgium	0.71	-1.47	23.34	-44.82
Denmark	0.70	-0.14	14.27	-3.37
Ireland	0.64	0.01	14.63	0.42
France	0.60	0.11	20.15	2.94
Netherlands	0.47	-0.37	14.55	-11.93
Germany	0.31	-0.38	10.24	-22.30
EU27 (Domestic/Foreign banks)	n.a.	-0.11/0.19	n.a.	-3.02/4.59

Sources: ECB (2007, 2009), NBS (2009).

The span of the ROE profitability in the EU18-27 (from 15% to 26.4%) and in the EU15 (from 10.2% to 23.3%) was significantly lower than the ROA span in 2006, as the banks in developed countries had a higher multiplier of the capital (from 15.5 to 33.6 times) than the transition economies (from 12.8 to 21.5). Despite the reduced differences, the banks in the EU18-27 were visibly more profitable, even by the ROE indicator. The same year, the banks in Serbia had a low ROE profitability - just 9.7%, since the multiplier of the capital was only 5.7 (Vukovic, 2009).

The negative ROA result in 2008 was caused by the negative ROE profitability of -3% at the level of domestic banks in the EU 27. At the same time, there were widening disparities between the EU18-27 (5.2% to 29.5%) and the EU15 (-44.8% to 12.2%), because of deleverage in the economically advanced EUMS. ROE profitability in Serbia fell to 9.3%, although the ROA result was a record, as a consequence of a further decreasing of already low multiplier of the capital, which fell to less than 4.5 times.

The presented comparison of solvency, liquidity, risks and profitability indicators unambiguously confirmed the high performance of banks in the EU18-27. The banking sectors of these economies did not lag based on the solvency and liquidity that was equal to the banks in developed countries in the EU15, which received extremely high financial support. Risk measurement also showed a relatively lower level of credit and operational risks, especially market risk in the EU18-27. According to ROA and ROE profitability banking sectors of the transition countries - EUMS were the most successful. However, these differences in the profitability of banking sectors in the EU15 and EU17-28 do not prove the banking integration in Europe (Gropp and Kashyap, 2009).

CONCLUSION: CONVERGENCE LEVEL

The comparative analysis of the four main groups of indicators - sector development, structures, capacities and performances - gave very different results in terms of the convergence level of the banking sectors in the EU18-27 in the developed economies of the EU15.

The comparison of banking sector development indicators suggests that the convergence level of the EU18-27 and Serbia is low compared to the EU15, but continuous catch up process is emphasized. The greatest discrepancy is in the total assets per capita, while the differences in the total assets and deposits per capita are less.

The ownership structure of the banks in the EU18-27 and Serbia is characterized by the dominance of foreign owned banks, in contrast to the EU15 economies.

Concentration of the banks in the EU27 and the EU18-27 was relatively low, which favored the development of competition in the banking market. The level of banks' concentration in Serbia was lower than in the EU27 and significantly lower than the average EU18-27.

The comparison of banking capacities has shown a respectable level of convergence, with an evident trend of decreasing differences in the number of employees, the branches density and ATMs per capita. However, there are still wide differences in productivity.

At the end, the comparison of solvency, liquidity, risks and profitability indicators unambiguously confirmed high-performances of the banks in the EU18-27 and Serbia. The banking sectors of these economies were equal to the banking sectors in developed countries of the EU15 based on the solvency and liquidity, and they had a relatively lower level of credit, operational and market risks, while they were the most successful by the ROA and ROE profitability.

The discussed conclusions about the performance of Serbia's banking sector have been confirmed in the last *Country Report* (IMF, 2010).

Generally it can be concluded that Serbia's banking sector has achieved a respectable level of convergence to the banks in the EU15. Simultaneously, Serbia's banking sector is near the average of the EU 18-27 and by many indicators it is above average.

The experience from the EU 18-27 countries was the most significant for the banking in Serbia in the consolidation and rehabilitation processes (2001 – 2004). The practice of banks in these countries was directly applied in Serbia, because the largest share of these banks belongs to the same parent banking groups. Prospective developments in Serbia's banking sector are inseparable from the EU banks, which are the owners of the $\frac{3}{4}$ of the banks in Serbia. Therefore, it is understandable why Serbia's highly profitable banking market is very prospective and attractive for investments.

References

- [1] Bonin, J., Hasan, I., and Wachtel, P. (2005), „Bank performance, efficiency and ownership in transition countries“, *Journal of Banking&Finance*, No 29 (1), p. 31-53.

-
- [2] Berger, A. N. (2007), „Obstacles to a global banking system: „Old Europe“ versus „New Europe“, *Journal of Banking & Finance*, No 31, p. 1955-1973.
- [3] BIS (2009), 79th Annual Report, 1 April 2008 – 31 March 2009, Bank for International Settlements, Basel.
- [4] EBRD (2008), *Transition Report 2008*, European Bank for Reconstruction and Development, London.
- [5] ECB (2005), *Banking structures in the new EU Member States*, European Central Bank, Frankfurt.
- [6] ECB (2007), *EU Banking Structures 2007*, European Central Bank, Frankfurt.
- [7] ECB (2008), *EU Banking Structures 2008*, European Central Bank, Frankfurt.
- [8] ECB (2009), *EU banking sector stability*, August 2009, European Central Bank, Frankfurt.
- [9] ECB (2010), *Structural indicators for the EU banking sector*, European Central Bank, Frankfurt.
- [10] Fries, S., and Taci, A. (2002), „Banking reform and development in transition economies“, EBRD, Working paper 71.
- [11] Gropp, R., and Kashyap, A. (2009), „A New Metric for Banking Integration in Europe“, NBER Working Paper No. 14735, National Bureau of Economic Research, Cambridge, US-MA.
- [12] IMF (2009), *Republic of Serbia*, Country report No. 09/20, International Monetary Fund, Washington.
- [13] IMF (2010), *Republic of Serbia*, Country report No. 10/25, International Monetary Fund, Washington.
- [14] IMF (2010a), *Republic of Serbia: Financial Sector Assessment Program Update – Financial System Stability Assessment*, Country report No. 10/147, International Monetary Fund, Washington.
- [15] Matthews, K., and Thompson, J. (2005), *The economics of banking*, Chichester, UK: John Wiley & Sons.
- [16] NBS (2008), Izveštaj o stanju u finansijskom sistemu 2008, Narodna banka Srbije, Beograd.
- [17] NBS, Banking sector in Serbia – Quarter report, various issues, National Bank of Serbia, Belgrade.
- [18] Vuković, V. (2008), „Structural Characteristics and Profitability of Banking in Selected Transition Economies“ in: *Financial Systems Integration of Balkan Countries in the European Financial System*, ed. Berthomieu, C., and Režepagić, S., Institute of Economic Sciences, Belgrade, p. 222-230.
- [19] Vuković, V. (2009), *Strukturne promene i performanse bankarstva Srbije: 2002-2008.*, Institut ekonomskih nauka, Beograd, 2009.
- [20] Weill, L. (2007), „Is there a Gap in Bank Efficiency Between CEE and Western European Countries?“, *Comparative Economic Studies*, No 49, p. 101-127.
- [21] Wu, J-H., Hsia, T-L., and Heng, M. (2006), „Core capabilities for exploiting electronic banking“, *Journal of Electronic Commerce Research*, No 7 (2), p. 111-122.

CHAPTER 19.

REGIONAL POLICY FUNDS: HOW PREPARED IS SERBIA TO ACCESS EUROPEAN UNION REGIONAL POLICY FUNDS?

Duro Đurić¹

Vladan Ivanović²

Mladenka Balaban³

Abstract

Bearing in mind that Serbia is dealing with serious and challenging development issues, especially scarce of financial resources, it is extremely important to establish institutional and legal framework for drawing financial means from European Union regional policy funds. The importance and potential support of these funds for Serbia is visible through the fact that European Union financial capacity for the purposes of the equal regional development is more ten times bigger than Serbian yearly GDP. One of basic prerequisites for stable and continuous social and economic development is equal regional growth of all parts of country and as one of basic European values should contribute to planning and application of development policy. As of 2010 Serbia has 5 statistical regions with strong multilevel disparities. One of the key challenges in the future will be to find the way to mitigate differences and European Union regional funds will play inevitable roll. The authors are trying to identify, to analyze and to emphasize decisive obstacles in drawing and exploiting recourses from regional funds. These obstacles are particularly present in facilitating development of under- and undeveloped areas, old and mainly devastated infrastructure, ecological policy matters and extremely low employment rates.

Key words: regional policy funds, Serbia, European Union, legal framework, equal regional development, institutional capacity

¹ Duro Đurić, LL.M, Institute of Economic Sciences, Belgrade, Serbia

² Vladan Ivanović, MA, University of Kragujevac, Faculty of Economics, Kragujevac, Serbia

³ Mladenka Balaban, PhD, Institute of Economic Sciences, Belgrade, Serbia

INTRODUCTION

Ever since its foundation in 1992, European Union has been facing the fact that all member countries have not been equally developed. Although member countries are unequally developed, a problem occurs an uneven development of different regions within countries themselves. Thus Spain and Ireland were considered as weaker economic countries. Therefore, the predecessor of the EU, the European Economic Community in 1988 started determining aims that should be achieved in future. Among the objectives there is the support for the development of industrially weak and underdeveloped regions, for example through funding small and medium businesses⁴. For those causes, appropriate funds have been assigned in the form of structural funds. After establishing the European Union in 1992, new objectives have been determined. The first two positions were taken by the objectives of supporting less developed regions, with lower gross domestic product and those under the influence of industrial productivity decrease, actually where the rate of unemployment was above the average in the EU⁵. According to data published in EU, those funds substantially influenced decreasing the disparities among regions, especially among member states. Today Ireland is the second EU country according to the GDP per capita, prior to United Kingdom and Germany, while the support of these funds certainly was one of the elements that contributed to its high ranking. However, the funds are definitely not the only element nor it can be seen separately from others. Republic of Serbia in 2010 officially filed for EU membership. Stabilization and Association Agreement has already been applied in Serbia. As a potential candidate, Serbia is already using the resources of certain funds, while performing necessary reforms and filing for candidacy for EU membership Serbia is preparing to use other resources from other funds, too.

THE CONCEPTION OF FUNDS – WHAT ARE THE FUNDS AND WHICH FUNDS CAN AND WILL SERBIA HAVE THE ACCESS TO

The agreement on which EU is based is determining the rules on which the integration of new countries would bring certain negative consequences, especially in social and agricultural plans. Creation of specific regional economical and political instruments appeared as a necessity that European Union would be engaged in resolving development disparities of certain regions⁶.

⁴ Boldrin and Canova (2001); Međak and Majstorović (2004)

⁵ Međak and Majstorović (2004)

⁶ Seidel (2002)

The remark should be made that not all funds are intended for regional development, or to all countries. Some funds are exclusively intended for member states, some for candidate countries, while the others even for potential candidate countries.

In different periods of its development, EU founded several structural funds. Thus in 1960, the EU Social Fund (ESF) was founded with the goal to support the implementation of employment and social policy. Then, in 1962, the European Agricultural Fund for Rural Development (EAFRD) was established in order to improve and transform agricultural production. Among the above mentioned, the European Regional Development Fund (ERDF) was founded in 1975 with the aim to support the development of underprivileged regions, among other things it was founded for the needs of Great Britain⁷. As it can be realized, the goals of structural funds in the EU are aiming to strengthen a region and to decrease the differences among regions, to restructure the industry and to prevent and to decrease some unfavourable trends, for example to retrench an unemployment rate.⁸

The managing of the funds is based on the following principles: longterms programming, focusing on defined goals, co-financing of the state user of funds and partnership between the state user and the European Commission. Besides, the EU founded the structural-political and financial instruments. The first was the Cohesion Fund, established in 1993, with the goal of strengthening social cohesion in the frame of the EU and particularly intended to economically underdeveloped member states⁹. There is also the Financial Instrument for Development of Fishery, Aquaculture, Food Processing and Marketing. The European Investment Bank is also very important, a financial service within the EU, that improves further integration, a balanced economic development of different parts of the Union and social cohesion of member states.¹⁰ In the end, there is also the European Investment Fund, founded in 1994, with the goal to take long term grants for major projects of infrastructure and to support the development of small and medium businesses. However, under the initiative of the EU Committee, it is possible to take further actions from so called Union initiative, and from the scope of interregional and transnational cooperation (Interreg), Association for Rural Development (LEADER), sustainable development in the troubled urban districts and boosting depresses urban areas (URBAN) and promoting a better model for working life by fighting

⁷ Ibid.

⁸ Međak and Majstorović (2004)

⁹ Bache (2010)

¹⁰ Stefanović (2008)

discrimination and exclusion (EQUAL). The important part of the cohesion policy consists of three initiatives: Joint Assistance in Supporting Projects in European Regions (JASPERS), Joint European Resources for Micro to Medium Enterprises (JEREMIE) i Joint European Support for Sustainable Investment in City Areas (JESSICA). The aim of the Initiative JASPER is to provide assistance to the regions targeted for convergence through non-refundable financial support¹¹. The structural funds mentioned above, structural-political instruments and the actions are intended to member states of the EU only.

As the Regional Policy Funds of the EU are considered political and economical instruments and programmes founded from the EU in order to provide financial assistance, promote solidarity, support economic and social development and to reduce differences in development between the regions¹² within its borders. For the EU Member States, following instruments are available for the purpose of the regional policy: European Regional Development Fund, European Social Fund and Cohesion Fund. The main goals of three above-mentioned instruments in the period 2007-2013 are: convergence (providing conditions for development of the least developed countries and regions), regional competitiveness and recruitment (through development programmes, adjustment of manpower and investments in human resources) and European territorial cooperation. On 19 April 2010 the Commission presented a synthesis report which wraps up the main findings of the ERDF evaluation. The report shows that 123 billion EUR invested through the ERDF between 2000 and 2006, has had a significant impact on the regions across the EU. Key achievements include: 1,4 million jobs created, 2 000 km of motorway constructed, 4 000 km of rail, 14 million people gained access to cleaner water, 38 000 research projects supported and over 800 000 SMEs supported¹³.

When it comes to candidate countries for EU membership and potential candidates, there are other funds intended for their use. Until 2007, through several instruments the EU offered financial support to candidate states and states that are in pre-accession phase (potential candidates). Those are: The PHARE programme, The Pre-accession Structural Instrument (ISPA) and The Special Accession Programme for Agriculture and Rural Development (SAPARD), for countries of western Balkans, except Croatia, extremely important programme called CARDS (Community Assistance for Reconstruction, Development and Stabilisation), as well as special programme for Turkey. Since then, the mentioned instruments have been substituted by one Instrument for Pre-Accession

¹¹ Mirić (2009)

¹² Sedlaček and Gaube (2009)

¹³ EU Commission; Pachura (2010)

Assistance (IPA). The objective is to help these countries achieve the objectives of the EU in the area of interest, and in the framework of stabilization and accession process. The full amount of the IPA fund for period 2006-2013 has reached 11,468 billion EUR. The following programme priorities are mentioned: institution instalment, justice administration, internal affairs, cross-border cooperation, private sector development, infrastructure development, etc. Although the funds vary based on users, the similarity between structural funds and Cohesion fund with IPA instrument is in the overlapping of goals, principles and modalities of managing the funds.¹⁴

Since Republic of Serbia applied for the membership on 22nd December 2009, only certain resources in these phase of integration can be used as a supporting source for financing development projects. Republic of Serbia and potential candidate countries, first of all, all countries of Western Balkans, are entitled to use fund resources, e.g. IPA, in order to achieve certain number of goals, as well as resources of other funds but in cooperation with one of the EU member states. Thereby Serbia has three neighbouring countries that are the EU member states (Hungary, Romania, and Bulgaria) and two EU candidate countries (Croatia and FYR Macedonia). Thus, Serbia has the opportunity to use the resources intended to transition assistance and institution building, cross-border cooperation (with EU Member States and EU candidate- and potential candidate countries). In order to achieve other three goals, Serbia has to attain the status of a candidate country for the EU membership. It could be expected by the beginning of 2011,¹⁵ according to the EU announcements. However, financing the implementation of the first two objectives has function to prepare the potential candidate country for successful participation in the Community's Cohesion Policy and its instruments upon accession. This should lead to a better and more effective absorption of these funds once they become available.¹⁶

The most important instrument for Republic of Serbia at the moment is the Instrument for IPA that comprises five different goals and differs two categories of funds for potential beneficiaries. Thus, on one side, transition assistance and institution building, cross-border cooperation (with EU Member States and EU candidate- and potential candidate countries), regional development (transport, environment infrastructure, enhancing competitiveness and reducing regional disparities), human resources (strengthening human capital and fighting discrimination and exclusion) and rural development have been determined as objectives. On the other side, IPA acknowledges two categories of the countries:

¹⁴ Mirić (2009)

¹⁵ EU Commission

¹⁶ Ibid.

EU candidate countries and EU potential candidates, among which Republic of Serbia and its province of Kosovo and Metohija, under UN Security Council Resolution 1244/99, are considered. However, only EU candidate countries are eligible for all five components. Potential candidate countries are eligible only for assistance for transition and institution building and for cross-border cooperation.¹⁷ Therefore, Serbia remains without access to funds intended for regional development, human resources and rural development until it reaches the status of a candidate country. The amounts of financial recourses that Serbia has withdrawn (with the projections for 2011. and 2012.) from IPA Funds accounts approximately to 1.113,2 Billion €. ¹⁸ As can be noticed it have been using a growing amounts of money, which is in first line a direct consequence of institutional upgrading and broader participation of different stakeholder in Serbian society.

IPA financial allocation in Serbia 2007.- 2013.¹⁹		
Year	Transition assistance and institution building (in milion €)	Regional and cross-border cooperation (in milion €)
2007.	181.4	8.2
2008.	179.4	11.5
2009.	182.5	12.2
2010.	186.2	12.5
2011.	189.9	12.7
2012.	193.8	12.9

Legal ground of the IPA is Council Regulation (EC) 1085/2006, decided on 17th July 2006, as well as implementation provisions in Commission Regulation (EC) 718/2007. Putting into practice the programme of support is in the jurisdiction of special institutions. Thus, European Commission Directorate General for Enlargement is in charge of attaining the first component, transition assistance and institution building, that Serbia is eligible to. For second component, cross-border cooperation the jurisdiction is entrusted to the European Commission Directorate General for Regional Policy, but only in the part concerning Member States.

The Instrument for IPA in Serbia will be present in longer financial period, from 2007 till 2013, and in the area of cross-border cooperation. The objective of this programme is that a border becomes a point of merging and not separation.²⁰ In

¹⁷ Ibid.

¹⁸ Valentina Ivanić (2010)

¹⁹ Ivanic, Valentina (2010)

²⁰ Delević (2010)

previous period, achieving this objective was funded by the resources from CARDS programme (Community Assistance for Reconstruction, Development and Stabilisation), while cooperation was achieved with Hungary, Romania, Bulgaria, and thanks to IPA programme cooperation was achieved with Croatia, Bosnia and Herzegovina, and Montenegro. Currently, mutual managing with Hungary, Romania and Bulgaria three cross-border cooperation programmes are being operated. Additionally, in the framework of the Adriatic programme, cooperation with Italy is being achieved as well.²¹

Apart from mentioned cooperation, it is expected to achieve even new programmes in “western borders” of Serbia but in somewhat different manner. That is the reason why the funds would be allocated and spent only on the territory of a certain country, and the specific managing structure would be assembled.²²

Within the framework of the PHARE and CARDS Programmes, since 2007 replaced by IPA, Republic of Serbia is a beneficiary of two more instruments. After European Thessalonica Summit in 2003 all CARDS beneficiary countries have been enabled to participate also in Twinning Programme. This support is continued in Serbia even after the programme was replaced in 2007 by IPA. As the targeted administrative co-operation, the main objective of this programme is to assist Candidate Countries (CC) to strengthen their administrative and judicial capacity to implement Community legislation as future Member States (MS) of the European Union.²³

Moreover, as a special sector in the scope of Directorate General for EU Enlargement (DG Enlargement) called *Technical Assistance and Information Exchange Instrument* (TAIEX) has been present in Republic of Serbia since 2004 with the purpose to provide short-term technical assistance to Candidate Countries and to the Western Balkans countries on specific subjects related to the adoption of the *acquis* and assistance in building necessary administrative infrastructure.²⁴

For attaining other objectives, cross-border cooperation, the development of the model Euro-region is of the essential importance. The matter of subject is the judicial and organizational form of cross-border cooperation of areas by the borders of two or more countries. This model does not possess any political

²¹ Ibid.

²² Ibid.

²³ Government of the Republic of Serbia, The EU Integration Office

²⁴ Ibid.

features, nor it has the character of legal entity nor is it constitutional or legal category. It can be used for cooperation of lower levels of authority, e.g. regional and local authorities from different countries that share the same border. Thereby, regional and local authorities can attain common interest objectives, while being supported by EU funds. Therefore, the Euro-region DKMT (Danube-Kris-Mures-Tisa) as a model of cross-border cooperation of Autonomous Province of Vojvodina in Serbia and five cross-border regions in Hungary and Romania. The fact is that two neighbouring countries are now EU member states enables easier access to EU funds and it makes this region more appealing for investing.²⁵

Recently there has been an initiative in European Committee for modelling the strategy for „the Danube region” whose approval is expected in 2011. It is expected that this strategy will be established on three pillars: transportation and connection, environmental preservation and social-economical development.

CONDITIONS TO WITHDRAW FROM FUNDS

Only member states, 27 of them, have the access to the widest range of EU funds. Therefore, in special focus of EU regional policy there are poorly developed regions from EU member states, like Greece, Portugal, greater part of Spain, southern Italy and Sardinia, parts of Ireland, Northern Ireland, Corsica, French overseas departments (DOM – Departments outre mer), and new German federal states (former German Democratic Republic).²⁶

The European Union prescribes that one region is eligible for the financial support of the Structural funds, if it has one of three objectives. These objectives are: development, adapting to major economic changes, for example rural decline, and help those with special educational or employment needs.²⁷ One region is considered as undeveloped if its GDP per capita is less than 75% of the EU average.²⁸

The average GDP per capita in Serbia is 8,5 times lower than the EU average, but there's a big difference between the regions. For example, in the future the regions of Belgrade and Vojvodina will exceed the line of 75% of the average of the Union, while other regions will still need the assistance from the funds. Serbia is, together with other potential EU candidates countries in the West Balkans in

²⁵ Vujčić (2010)

²⁶ Seidel (2002)

²⁷ European Commission

²⁸ Bouvet and Dall'Erba (2010)

the group of 54 countries with lower-medium income per capita (522-2084 euros).²⁹ Unemployment, which is in Serbia cc. 19%³⁰ represents important factor.

Thanks to the expansion of the EU, new challenges emerged. Among new candidate countries there were some extremely poor, while the number of inhabitants with the right to support from structural funds increased. The increase of the expenses that normally follow the accession of new member states led to reforms in the EU regional policy so in the “Agenda 2000” the European Committee set up an economic and social cohesion as a priority when expanding. With the above mentioned Agenda, the fund of 213 billion euro was defined as total asset of structural and regional funds, while the budget frame for period from 2000 to 2006 was 1,27% GDP of EU.³¹

Agenda 2000 takes into account the funds intended for supporting the countries that are comprised by the process of the EU expansion. Thus, the pre-accession support disposes the fund of 3,12 billion euro. Additionally, a special package of support is predicted and exclusively intended to new member states, in annually increasing amount of over 10 billion euro. However, Agenda decreased the number of objectives to three. Those are: underdeveloped regions development, economic and social transformation of areas with structural problems as well as adjustment and modernization of the policy and education system, schooling, and employment, independent from regional connectivity. Means available from structural funds have been decreased in the meantime to 5%. Having set up a threshold, according to which the EU help could not exceed 4% GDP of a member state. Accordingly, until the end of 2006, new member states were entitled to 14,2 billion euro from structural funds.³² In the current financial period 2007-2013, structural funds make 35,6% of the EU budget, with the total of 347 billions euros. Distribution of the financial assistance is based on three objectives: convergence, regional competition and employment and territorial cooperation.³³

In the scope of pre-accession programmes, like IPA, all non-profit institutions could apply as users. Local and regional authorities could apply even natural parks, business support organisations, Euro-regions, institutions, universities, schools, libraries, cultural centres, cultural institutions, NGOs, and their communities, etc.³⁴ A candidate country applies with a project, and users are selected in tenders. Independent experts do the evaluation of project's mark.

²⁹ Džafić, Rovčanin, Klopčić (2008)

³⁰ Statistical office of the Republic of Serbia

³¹ EU Commission

³² Ibid.

³³ Institute for the Study of Civil Society

³⁴ Delević (2010)

Assigned resources are by its character non-refundable, but the amount provided by the EU is 75% of the value of the project, while the user is obliged to provide for the rest. The advantage of this kind of distribution of funds is that more qualitative projects receive the resources, and it is not related to the country from which the project originates. Thus, Republic of Serbia, through its cooperation with a neighbouring country, forms one managing structure of the programme. However, the greater piece of the expenses has to bear the user of the funds that after having costs admitted, they are being refunded by the appropriate EU programme.³⁵

Legal ground for performing the actual project is the project contract. Whereas, on behalf of the EU different agreed sides could appear. On one hand, when it comes to realization of project in cooperation with the EU member states, the contract with the fund beneficiary is signed by authorized programme directorate in a member state. On the other hand, when it comes to projects with candidate countries and potential candidates, the contract with the beneficiary is signed by European Commission Delegation in Belgrade.³⁶ State authority, e.g. Ministry of finances of Republic of Serbia, in this case only have the role of a national coordinator in conducting the programmes, provides support, monitors the work of programme secretary and programme offices at local level. For that purpose, local branches have been opened in Subotica, Vrsac, Bor, Nis, Sremska Mitrovica, Uzice and Prijepolje.³⁷

Regional policy funds support less well off regions, economic growth across the EU and focus directly on areas. But, one of the problems is that they don't focus on the poverty within developed areas. Also, national government may not intervene, because of the direct relationship EU Commission-region. Finally, once EU enhances new poor regions, especially those in the Eastern Europe, many regions in the old member states will stay without this assistance.

EVALUATION MARK FOR SERBIA IN THE TERMS OF FULFILLING OBLIGATIONS NECESSARY FOR USING THE FUNDS

European Union Regional policy and its carrying out don't understand national regional policy and its carry out. It may understand regionalization, but doesn't have to. The legislative framework for the regional development in Serbia consists of the Constitution of the Republic of Serbia, the Strategy of Regional Development 2007 -2012, as well as the Stabilization and Association Agreement

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

and the legislation that ratifies it.³⁸ Having regards to preparations for applying for the status of the candidate country for EU membership, Republic of Serbia adopted a legal act on regional development. In that regard the region is considered any statistical functional territorial unit, comprising one or more areas, established for the purpose of planning and performing regional development policy, which is not the administrative unit nor it is a legal subject. In addition to existing regions of Belgrade, Vojvodina and Kosovo and Metohija, two additional regions were formed in a way that the regions on the territory of central Serbia, region of Sumadija and western and southern and eastern Serbia. It should noted that it is not at all legal or political category, but a statistical regionalisation, harmonisation with Eurostat. Namely, every country that would like to join the EU needs to determine certain statistical territorial units.³⁹ It is done in accordance with NUTS methodology (Nomenclature d'unités territoriales statistiques). However the identification of statistical regions is not a condition for using pre-accession assistance, that Serbia already uses. The legal act on regional development⁴⁰ and the Regulation on nomenclature of territorial units for statistics⁴¹ determined the NUTS I regions (Serbia – north and Serbia - south) and NUTS II regions (five above mentioned), but NUTS III regions consist of local authorities as a part of an administrative district. According to NUTS classification, criteria for determining statistical regions are existing administrative units, number of inhabitants, geographical, socio-economical, historical, geopolitical, cultural and natural characteristics. Thereby, a vital condition is achieved for granting and benefiting from the structural EU funds in future.⁴² Beside this, Law on regional development regulates the existance of statistical division and agencies is important for obtaining and using of instruments of regional policy funds in the future. For the period from 2007 to 2013, Republic of Serbia will from IPA programme receive the support of 1,4 billion euro,⁴³ which will help in preparation for using structural and Cohesion funds when certain conditions are satisfied. In order to prepare itself in the best possible way, it is highly recommended that every future regional organization to do according to economic criteria and not based on political or historical. This is supported by the examples of the states which have already been the EU member states. For example, Poland, Czech, Slovakia, and Bulgaria completely changed their regional organization with the aim to attract more resources from the EU structural funds.

³⁸ Constitution of the Republic of Serbia, Regional development Strategy, Law on Ratification of the SAA.

³⁹ Bouvet and Dall'Erba (2010); Becker, Egger, von Ehrlich and Fenge (2008)

⁴⁰ Law on regional development

⁴¹ Regulation on Nomenclature of territorial units for statistics

⁴² Bache (2010)

⁴³ Medak (2010)

Newly defined statistical regions should serve for monitoring the development indicators of a certain area, so in the future the fund resources would be optimally distributed. Thanks to the statistical indicators, GDP at a region level could be determined, and of course all other facts, like the rate of unemployment, the rate of incomes, educated structure of the inhabitants, etc. Accordingly, undeveloped regions are qualified to the funds as potential beneficiaries for development support. In this sense, statistical regions of Vojvodina and Belgrade are undoubtedly developed, while the other three regions represent the dark side of economic development in Serbia. Opposing to that, more than a half of undeveloped municipalities are located in the region eastern and southern Serbia, few of them in the region of Sumadija and western Serbia, only three in Vojvodina, while none of them is in the Belgrade region.⁴⁴

Our neighbours, FRY Macedonia and Croatia, had even in 2004 i.e. 2005 reorganized their statistical regions after NUTS model. Thus, FRY Macedonia has 1 NUTS II and 8 NUTS III statistical regions, while Croatia has 3 NUTS II, and those regions comprise several counties (NUTS III).⁴⁵

When it comes to economic criteria of receiving support, Republic of Serbia, as whole, already fulfils criteria for regional development support, having the GDP at the level of 33% of average EU GDP. However, there are no crucial political and legislative criteria, and that is the status of a candidate country for the EU membership, that would fully enable use of resources from IPA programme, while for using resources from the funds for regional development country have to be the EU member state.

If we take a closer look at the candidate countries for the EU membership, our neighbours Croatia and FYR Macedonia, pre-accession instruments are applied in realisation of all predicted goals. Thus, in Croatia there are three functioning multiannual Operational Programmes: Environmental Operational Programme (EOP), Transportation Operational Programme (TOP) and Regional Competitiveness Operational Programme (RCOP). In FYR Macedonia support of Regional Development Operational Programme is focused on the transport and environment sectors with a total allocations in the same period of 40,5 million euro. In the scope of transport, it is about supporting further development of the South East Europe Core Regional Transport Network, i.e. corridors VIII and X (for the latter Serbia is especially interested in). On the environmental level, focus is on waste water treatment and solid waste management.⁴⁶

⁴⁴ Mirić (2009)

⁴⁵ Croatian Bureau of Statistic; State Statistical Office of the FYRM

⁴⁶ Ibid.

In legal context, Republic of Serbia has made a significant advance towards conducting reforms necessary for using EU funds intended for regional development in the future. As it could be seen, the access to certain funds, as well as realisation of certain goals, is related to political and legal status of the state. As a potential candidate, Serbia could in a greater scale use the resources from pre-accession funds, such as IPA, above all through stronger cross-border cooperation with member states and candidate countries. Therefore, the creation of the new Euro-regions could have a great effect. The new statistical division of Serbia could in future use as a base for qualitative administrative and regional organisation of the country. However, it is essential to take into account real economic and social interests of inhabitants of the region, bearing in mind that the critics of new division have already appeared stating the arguments that the areas that are not similar or naturally connected are joined into one region. All stated programmes that Serbia has been the beneficiary so far are not intended to regional development, but to prepare the states for the candidacy for the EU membership, and therefore for the use of available funds. Achieving the status of the candidate country, Serbia would have the possibility to benefit even the resources intended for the regional, human capital and rural development. Thus, it would be prepared for the EU membership when it would have access to all funds for regional development, as well as other member states. Until then, it would have to be satisfied with limited access to the funds and achieving the limited number of fund objectives. Republic of Serbia candidacy for the EU membership encourages in this context, but long postponement of getting the status of a candidate country, and hereby becoming a member state would lead to great disproportions in the development between Serbia and its neighbours, new EU Member States. In the meantime, the *Stabilization and Association agreement* with Serbia has been ratified by six EU member states so far.⁴⁷

The conclusion is that the Republic of Serbia did make a big step forward by adopting the relevant legal framework for the policy of the regional development. Especially because of the fact that Serbia traditionally does not recognize definition of the regional division. This is the reason why it is necessary that the regions are defined by economic-social criteria and not by political criteria. In a long-term statistical regional units are the good base for withdrawing financial resources from EU funds, while the administrative regions are political and constitutional question. Therefore, active engagement of all levels of the state administration is essential for obtaining the results in the field of the adopted legal framework. The Government should make an effort to assist local selfgovernment in developing stable and sustainable institutions, which, once obtained the status

⁴⁷ Government of the Republic of Serbia, The EU Integration Office

of a state candidate, and later the status of the EU member state, could successfully use the resources of the regional funds.

The experience of 10 new EU member states confirms that institutional settings are playing a the most important role for the efficiency to absorb the financial means from funds. In Irish case can be concluded that the Structural Funds have had an crucial role in facilitating economic development and fostering higher economic growth, which have led to higher public revenues in later period. Absorptive capacity had been problem only in initial phase of using this funds, but during the later years the Irish public finances were making the surplus. That was the base for much higher level of domestic public investment during Cohesion and Structural Funds (CSF) 2000-2006 when the EU funding declined.⁴⁸ But the crucial prerequisites for effective use of financial resources from EU funds are properly functioning market economy and well shaped market-based institutions. This can be seen especially in Irish case.

Accountability of the system of domestic public finances, which is used for receiving and recording EU aid together with co-financing and monitoring of spending resources from end users, are also the important *ex-ante* step for overall successful managing the different structural projects.

From purely macroeconomic perspective can be said that the EU Funds are having two very important implications on general economic development. In one hand, they are actively contributing to aggregate spending of the country, which has multiple impact on economic growth. On the other hand, the are contributing to the increase of productive capacity in the economy throughout investments in physical infrastructure, human capital and through subsidizing investments of private sector.

Some of the studies on the example of Ireland has shown that the CSFs have influenced that the growth of GDP was 2% higher as it would be the case without CSFs financial and economic support.⁴⁹ This county has received in the period 2000-2006 €3.2 billion from CSFs, which is equivalent, on an annual basis, to about 0,4% of 2001 GDP.⁵⁰ The Republic of Ireland is successful story in using and managing CSFs from which can be drawn for other countries very important lessons. But experience of Ireland is of value for Serbia only in next phase of integration, where mentioned funds will be available for use.

⁴⁸ John Bradly (2002)

⁴⁹ Barry F., Bradly J., Hannan A., (2001)

⁵⁰ David Hegarty (2003)

CONCLUSION

Financial support itself is not solution to the problem and disparities in regional development. It is merely one of the factors that can have influence on decreasing disparities and improving the development of economical undeveloped regions. The greatest burden of responsibility is on the Government beneficiary states to direct funds in proper way. Republic of Serbia as a potential candidate has made a great effort in conducting legal and technical preparations for using funds. In that sense, regionalization may be a good preparatory activity. However, this does not mean that Central Government should be less engaged in the process. By the time it attains the status of a candidate country, Serbia could do more on cooperation plan with neighbouring countries and by doing so it would receive more resources from the EU funds, such as IPA. However, Serbia could expect real progress by becoming an EU member state.

Only as a member of EU Serbia could expect the stable and long-term growth of GDP, that means new investments, growth of average income per capita, and relief of the state budget which would release numerous resources for other purposes. At the same time the use of recourses from CSFs will play the role of signalling – attracting important foreign direct investments, as it was the case in some other EU member states in initial phase of integration processes. But there are several very important barriers, even though the Serbia could have the possibilities to use the recourses from CSFs. For the most important is the absence of National Development Plan (NDP), and this document should be prepared and applied before the Serbia would have an opportunity to access CSFs. The other, as the case of Ireland has confirmed, the proper political and administrative structures have to be built for adequate use and maximizing effects of use of financial recourses from CSFs.

References

- [1] Bache, Ian (2010), Europeanization and multi-level governance: EU cohesion policy and pre-accession aid in Southeast Europe, *Southeast European and Black Sea Studies*, 10: 1.
- [2] Barry F., Bradly J., Hannan A. (2001), The Single Market, The Structural Funds and Ireland's Recent Economic Growth, *Journal of Common Market studies*, Vol. 39, No. 3, pp. 537-552.
- [3] Becker, Sascha, Egger Peter, von Ehrlich Maximilian and Fenge Robert (2008), *Going NUTS – The Effect of EU Structural Funds on Regional Performance*, Mimeo, University of Stirling.

-
- [4] Boldrin, Michele and Canova, Fabio (2001), Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policy, In: Economic Policy, Vol. 16, No. 32, pp. 205-253.
- [5] Bouvet, Florence and Dall'Erba, Sandy (2010), European Regional Structural Funds: How Large is the Influence of Politics on the Allocation Process?, In: Journal of Common Market Studies, Volume 48. Number 3, pp. 501-528.
- [6] Council Regulation (EC) N° 1085/2006, *Official Journal L 210*, 31.7.2006, pp. 82-93.
- [7] Croatian Bureau of Statistic, Official website <http://www.dzs.hr>.
- [8] Delević, Milica, Saradnja uklanja granicu i istočnu i zapadnu, In: Decentralizator, N°1, mart/april 2010. Belgrade, pp. 15-17.
- [9] Džafić, Zijad, Rovčanin, Adnan, Klopić, Nermin, Development of Small and Medium Enterprises: B&H Compared to Other Western Balkans Countries, In: Economic Analysis 2008, N° 1-2, pp. 88-103.
- [10] EU Commission official website <http://ec.europa.eu>.
- [11] EU Funding Portal <http://www.2007-2013.eu>.
- [12] Government of the Republic of Serbia, The EU Integration Office official website <http://www.seio.gov.rs>
- [13] Hegarty, David (2003), Framework for the Evaluation of the Structural Funds in Ireland, Fifth European Conference on the Evaluation of Structural Funds, Budapest, Hungary.
- [14] Institute for the Study of Civil Society, <http://www.civitas.org.uk/eufacts>
- [15] Ivanić, Valentina (2010), Uticaj pretpriprustupnih fondova na razvoj Vojvodine, konferencija "Decentralizacija Srbije – stanje, potrebe, perspektive", Novi Sad, Srbija.
- [16] McCarthy, Rosarie (2002), Ireland and EU Structural Funds: Lessons for Candidate Countries, Redharc, Vol. 3, pp. 137-147.
- [17] Međak, Vladimir and Majstorović, Srdjan (2004), Regionalna politika Evropske unije
- [18] Međak, Vladimir, Strukturna politika EU – šansa za države članice, In: Decentralizator, N°3, jul/avgust 2010. Belgrade, pp. 14-15.
- [19] Mirić, Ognjen (2009), Regionalna politika Evropske unije kao motor ekonomskog razvoja, Evropski pokret u Srbiji, Beograd.
- [20] Pachura, Piotr, Innovation Policy based on Network Paradigm, In: Economic Analysis 2010, N°1-2, pp.126-133.
- [21] Regional development Act, „Official Gazette of RS“ N°51/09 and 30/10.
- [22] Regulation on Nomenclature of statistic territorial units, „Official Gazette of RS“ N°109/09 and 46/10.
- [23] Sedlaček, Sabine and Gaube, Veronika (2009), Regions on their way to sustainability: the role of institutions in fostering sustainable development at the regional level, In: Environment, Development and Sustainability 12(1), Wien.
- [24] Seidel Bernhard (2002), Regional-, Struktur- und Kohäsionspolitik, in: W. Weidenfeldt, Wolfgang Wessels (Hg.): Europa von A bis Z. Taschenbuch der europäischen Integration, Bundeszentrale für Politische Bildung, Bonn.
- [25] Statistical Office of the FYRM, Official website <http://www.stat.gov.mk>.
- [26] Statistical office of the Republic of Serbia official website <http://webrzs.stat.gov.rs>.

-
- [27] Stefanović, Zlatko (2008), Pravo Evropske unije, Pravni fakultet Univerzitet Union, Službeni glasnik RS, Treće izdanje, Beograd.
- [28] Vlada Republike Srbije, Kancelarija za pridruživanje Evropskoj uniji, Beograd.
- [29] Vujčić, Dragan (2010), Evroregioni – model prekogranične saradnje, In: Decentralizator, maj/jun 2010, N°2.

PART III.
THE ROLE OF POLICY
IN SME DEVELOPMENT AND
EU ACCESSION

CHAPTER 20.

POLAND'S INTEGRATION WITH THE EUROPEAN UNION AND ITS IMPLICATION FOR SMALL AND MEDIUM SCALE ENTERPRISES

Mirjana Radović-Marković¹

Imani Silver Kyaruzi²

Abstract

The development of SMEs is very sensitive to the overall economic situation of every country such as the dynamics of economic growth, stability of the local currency, supply and demand on the home and foreign markets and the state's micro-economic policy. This paper discusses the SME development in Poland since its accession to the EU in 2004. In this context, the authors examine the question of whether the SME development policies following Poland's integration into the EU has contributed positively to the sustainable development of the Polish economy– we examine whether the country's accession into the EU has created a better environment for entrepreneurship development than it was in the pre-accession phase. In this paper, we attempt to provide answers to three key questions: (1) What were the main specific adjustments necessary to accession requirements? (2) What are the main opportunities for Polish SMEs arising out of EU membership? (3) What kind of progress has been made in the SME sector after Poland's accession into the EU?

Considering the research problem the authors have reviewed the academic literature in search of a theoretical background and conducted the analyses based on state statistical data.

Key words: *SME, accession, entrepreneurship, development, Poland, EU*

¹ Full professor, Institute of Economic Sciences, Belgrade, Republic of Serbia, email: mradovic@gmail.com

² Ass. professor, Birmingham Graduate School, Birmingham, UK, imanisilver@googlemail.com

INTRODUCTION

Poland's integration into the EU economy was a gradual process which was formally initiated in 1991 when Poland and the EU signed the Europe Agreement. This process was completed in 2004 on the referendum in which 77% of voters supported Poland's EU accession, while 23% voted against it (see Ewa Balcerowicz, 2007).

A number of conditions and opportunities were discussed during this process. First, the process of integration called either for deeper restructuring and modernization of traditional industries and enterprises or for emergence and development of new and modern high technology industries. Second, the integration with the European Union gives the Polish a chance to revitalize their economy and pass from an area at the periphery into a business hub of expanded Europe with blending management cultures, administration models and entrepreneurship types. Within these opportunities, short, medium, and long-term specific adjustments were deemed necessary. Short, medium, and long-term specific adjustment effects include, for instance, an improved quality of the natural environment, improved working conditions, a higher quality of the market offer, a change in the economic structure and long-term effectiveness in the allocation of production factors. In essence, they include both the effects characteristic for the transformation process itself, and the effects resulting from an adjustment to accession requirements connected with the membership in the EU.

THE ENTREPRENEURIAL ENVIRONMENT IN POLAND IN PRE-ACCESSION PHASE

The rapid growth of entrepreneurship and small firms has been one of the greatest successes in post-Communist transformation in Poland. In other words, small enterprises have become the growth engine of post-socialist economies because they tend to be more responsive to consumer demand than large firms. Formerly it was the state-owned enterprises that generated employment, but now it is the private sector which provide employment outside the state sector. Small enterprise entry has been explosive in Poland, and is most rapidly growing among transition economies (Berkowitz et.al, 2001). In particular, the *SME* sector has played an important role in absorbing the negative consequences of the changes in the Polish economy.

The history of SME development in Poland dates back in 1982, when the sector of small enterprises began to develop. However, this move was not automatically

translated into success as it existed without a considerable influence on the improvement of the economy. In 1985, the share of private enterprises in industrial production was only 3.21% (GUS, 1990)³. These enterprises, particularly in the first half of the 1990s, somehow helped to reduce unemployment. There are evidences to suggest that many employees who had previously been working in state-owned companies set up their own businesses, thus creating new jobs. The private sector created jobs for about 72% of all employed in the Polish economy and more than a half of fixed assets are now in private hands (SMEs in V4 countries, (2010).

Since the mid-1990s the rate of development of private enterprises has been much slower due to the existing bureaucracy when it comes to setting up new companies and accessing bank loans. Despite some obstacles, the private sector became the dominant form of ownership. By the end of 1999, the privatization process covered over 60% of the total number of state enterprises that existed in 1990. The private sector's share in the total investments is estimated to be around 60%. Foreign capital played an important role in restructuring of the economy. The growing number of small and medium enterprises (SMEs) has been a positive feature of changes in the ownership structure. At the end of 1998, there were nearly 2.8 million of SMEs which accounted for 99.8% of total number of enterprises. Large enterprises accounted for only 0.2% (GUS, 1999). Over 7.1 million people were employed in SMEs, accounting for nearly 63% of total labour force. The SMEs created about 50% of the GDP (The Government Center for Strategic Studies, 2000). In addition, the entrepreneurial environment in the country in the pre-accession phase was characterized by the strong regional disproportion and competitive gaps occurred when they were compared with firms in EU. The major competitive advantages of EU firms vis-à-vis companies in Poland include a higher investment capacity, the use of more advanced technology, as well as experience with the internal market.

In a Polish survey of 500 SMEs (2001), 68% of respondents reported a technological gap with EU competitors (Polish Agency for Enterprise Development, 2002.) This is the result of the natural, social and economic conditions. The success of SMEs, is therefore, influenced by the set of selected external and internal factors. In similar vein, going through various indices of development in Poland, one will observe that most economic entities, especially the industries in the country, were still in their infancy. In spite of the government programs supporting the SMEs in Poland, their role in the economic growth has not been fully recognized. The country's economic policy has always favored large companies and that is why a number of this policy's elements are less

³ Statistical data from the Polish Central Statistical Office (GUS).

favorable for SMEs (relatively low tax rate for state companies and capital ventures and progressive tax rates for individual businesses). It is for this reason that it was necessary to conduct an economic transformation and change the economic structure of the country. Short, medium, and long-term specific adjustments were necessary to accession requirements connected with future membership in the EU.

The SME support was one of the priorities in the government's economic agenda. Within this context, the government document entitled "Directions of government actions for small and medium-sized enterprises till 2002" defines the SME policy during pre-accession period and it is focused on the adaptation of the Polish SMEs to intensifying competition especially in the conditions of the *Single Market*. This program takes into account the experience gained during the implementation of the first programme of government SME policy and the directions of activity set out in the National Integration Strategy and the National Programme of Preparation for Membership, and the Program of support for the development of regional technology transfer institutions. The main goal of that programme is to ensure favorable conditions for the creation and the full use of the SME growth potential. This goal is split into three indirect goals as follows:

- (a) **Raising SME international competitiveness:** Specific measures were targeted at strengthening the companies' international competitiveness. Within these measures, the government activities had to take the form of:
 - (i) legislative changes oriented towards reducing enterprise costs connected with workforce employment;
 - (ii) financial support for innovation;
 - (iii) development of economic infrastructure including a business counseling network;
 - (iv) creation of a network ensuring common access of entrepreneurs to information important from the view of their business activity type;
 - (v) facilitating access to management know-how for entrepreneurs. One example is the *Polish Strategy for the light industry 2000-2005*, which provides various types of support to increase the international competitiveness of the clothing, textile and leather industry in the fields of price, quality and technology.
- (b) Fostering international competitiveness of enterprises represents the basic policy strategy in relation to EU accession not only in Poland, but also in many of the candidate countries' general economic and business development programs.

(b) Growth of SME Exports: It was considered important that the scope of using the state competitive policy instruments should be entity-tailored in order to stimulate the development of export and high-tech industries.

(c) Growth of Investment Outlays in the SME Sector: Within the implementation of this goal it was planned to: (i) enlarge and reinforce financially the system of loan guarantee funds facilitating access to bank loan for entrepreneurs; (ii) promote development of non-banking institutions in the financial environment of the SME sector such as funds of venture capital type, loan societies (credit unions); SME support includes a number of initiatives within the framework of the Structural Funds. These initiatives were aimed at influencing both the demand side through co-funding national or regional business services addressed to SMEs and the supply side through assistance in creating, developing and supporting the business infrastructure.

The task of the undertaken measures was to provide support for the SMEs in less developed regions (with per capita GDP below 75% of the EU average) in their effective adaptation to the Single Market conditions. Its importance is confirmed by the EU experience, which indicates that the Single Market generates varying implications for SMEs operating in more and less developed countries. That is one of the possibilities of assessing opportunities standing before Polish SMEs. It was expected that an important role in these processes should be played by the SME sector. It is meant to pay special attention and to study more closely the experience of EU countries in the field of such fundamental determinants of SME business activity, such as growth of sales turnover, employment and exports and adjust this experience to the weaknesses and strengths of the Polish SME sector. The impact and nature of these opportunities depend on the firm size, the type of the firm's business activity and its sensitivity to the Single Market programme. The adaptation processes of the Polish economy to the Single Market requirements are connected with deep transformations in the country's economic structure being an effect, among other things, of changes in domestic demand structure and international trade structure, foreign direct investments, concentration and restructuring processes, development of different forms of domestic and international co-operation. An important role in these processes belongs to the SME sector, which should undergo major transformations. These transformations have to be promoted also by a quality of the economic policy and strategic behaviors of enterprises themselves. In addition, some experts especially showed some degree of caution and pointed out that the Poland-EU integration increased the economic risk for enterprises, especially production and finance risks. Therefore, a significant role in the process of adapting to new changes should be played by the state policy (Skawińska & Zalewski, 2003).

The enlargement process may pose challenges with respect to the labour market in at least two ways: (i) through the accelerated structural change and (ii) through a free movement of labour within the expanded EU. However, labour supply in transition countries hardly keeps pace with these requirements, as it is

characterized by relatively low mobility of workers across labour market strata, occupations and sectors (European Commission, Brussels,2001). Under these conditions, both unemployment and skill gaps occur.

In addition, the integration into the EU required a complex process of adaptation of legislation, regulatory systems and methods of certification and standards to meet the EU requirements. The adoption of EU legislation in Poland in the pre-accession phase was seen as an important step meant to increase the effectiveness, efficiency and reliability of their entire institutional framework, such as the functioning of administrative authorities, courts, or the macro-economic policy. Specific improvements for businesses were expected, for example, in the fields of corruption, legal proceedings or public procurement procedures. The fight against corruption was one of the key challenges in the pre-accession phase in Poland.

Key barriers to SME development included: i) regulatory complexities and administrative costs; ii) high tax rates; iii) inadequate access to financing; iv) lack of qualified labour; and v) deficiencies in knowledge, management and competitiveness.

The effects of policy on SMEs is that although government took a number of steps towards SME development, government policy was limited in its scope by not addressing the needs of entrepreneurs. The lack of policy in providing access to capital, technology, business skill training, and preferences to small business for low rate credits and tax incentives was a major hindrance in SME development in Poland.

SMEs DEVELOPMENT IN POLAND AFTER ITS ACCESSION IN THE EU

Currently, Poland is the biggest market in Central Eastern Europe (CEE) with 38.5m people. The access of Poland to the European Union introduced a great challenge for the business sphere and inhabitants. The European market became the “local” market offering national entrepreneurs new chances and possibilities (Krzysztof, 2007). The impact of the integration of the Polish SMEs depends to some extent on their ability to adapt to the new external environment in order to maintain and/or improve their competitiveness.

Most of the East European countries in the process of transition show certain specific features with respect to the economic development and development of entrepreneurship. It is possible to notice (Table 1) discrepancies in GDP per capita between Poland and EU countries. Namely, Poland makes for only 56% of

value reached in EU countries ,but there is a few discrepancies in unemployment and inflation between Poland and EU countries.

Table 1: Selected economic indicators in 2008 (in %)

	Poland	EU countries (27)
GDP per capita	56	100
Unemployment	7	7.6
Inflation	4.2	3.7

Source: basing on SME Sector in Poland in 2007-2008, Warsaw, PARP 2009, p. 22

Between 2002 and 2008, the number of SMEs has grown in Poland by 5 %. The SMEs have greatly contributed to the employment, investment and value added in the Polish economy. In addition, their contribution to the national GDP was 47 % in 2007. The SME sector accounts for 99.8% of all firms in Poland. Total employment in the SME sector is 5.9 million employees, or 70.1% of all workers employed. They are active in retail and wholesale trades, services and in the production and employ 2.1 persons on average. Their density per 1000 inhabitants varies quite significantly from region to region. Poland is close to the European average (and ranks as 15th) in terms of “enterprise density” (SMEs in V4 countries, 2010).

Table 2: Structure of SMEs and Employment in Poland (2008)

	ENTREPRISES		RMPLOYMENT	
	Number	Share	Number	Share
Micro	1 502 959	96.0%	3 295 674	38.6%
Small	44 500	2.8 %	988 919	11.6 %
Medium-sized	15 185	1.0 %	1 595 013	18.7 %
SMEs	1 562 644	99.8 %	5 879 606	68.9 %
large	3 105	0.2%	2 654 220	31.1 %
TOTAL	1 565 749	100.0 %	8 533 826	100.0 %

Source: Eurostat , 2009.

The economic transformations taking place in Poland in recent years have been also accompanied by changes in the companies' structure. There is a disproportionate share of micro-enterprises, with fewer than 10 employees, and

relatively few firms in the intermediate size classes, especially the 10-49 employee class. Namely, in the structure of the SME sector in Poland the highest share belongs to the micro enterprises (96.0% in 2008), which is achieved mainly at the expense of small enterprises, and may suggest growth barriers between these two categories .

SMEs in Poland are rarely involved in export activity, they tend to lack the capacity, resources or willingness to invest in new technology and the low quality of their products or processes makes them generally uncompetitive in global markets. Micro-enterprises operate in particular in crafts, commerce, transport, industrial manufacturing, construction industry, real estate and business services. They employ about 3.2 – 3.5 million people which amounts to nearly 20% of total employment in the economy (on average 2 persons per micro-enterprise).

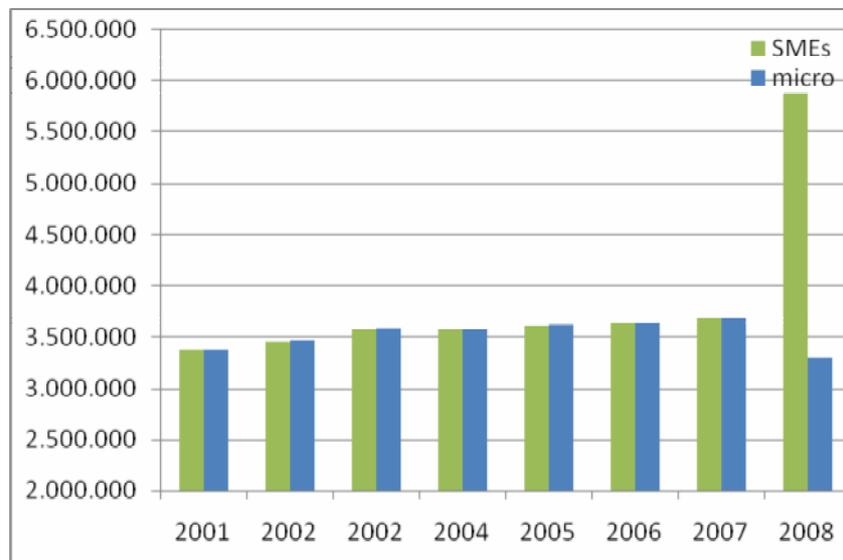
The contribution of micro firms to employment in Poland (39 %) is higher than the European average (30 %), while the contribution of small firms is relatively lower. As a consequence, the contribution of the total SME sector to employment (69 %) in Poland is only slightly higher than in the EU on average. Despite these, the small and micro businesses became an important source of growth in the new employment in Poland, although these potentials have not been fully utilized yet.

In comparison with more established EU member states, private enterprises in Poland are very few technology based .The small share of technology oriented and high value added SMEs in the economic structure, combined with the low level of expenditure on R&D and other innovation-related activities emphasizes the importance of prioritizing the development and implementation of effective innovation policies. Polish SMEs perform poorly on most innovation indicators, reflecting underdeveloped market-oriented innovation systems at the national and regional levels (Ruszkowski,2010). In this context ,the strategic goals of Science, Technology and Innovation policy focus on R&D and innovation and its potential contribution to competitiveness. In general, the role of STI Policy is focused on promoting excellence at the national level and the competitiveness of the national economy, rather than regional needs. It has five main priorities as follow: (1) Human resources for a modern economy; (2) Research for the economy; (3) Intellectual property for innovation; (4) Capital for innovation; and (5) Infrastructure for innovation.

A number of researchers suggested that entrepreneurship and innovation policy is not perceived as a vote winner by regional politicians, who often see greater political benefit in supporting road or rail improvement schemes or similar high profile infrastructure initiatives, rather than promoting entrepreneurship.

Under the present system, regional innovation-related projects tend to be small and proposed by entrepreneurs rather than the scientific community. The planned „KNOW,, centres, focused on universities, are unlikely to be evenly distributed regionally because their main goal is to contribute to national innovative performance rather than to regional development (OECD,2010)).

Graph 1: Number of registered SMEs and Micro firms in Poland, 2001-2008.



Source: Used statistical data from GUS

The role of small companies, employing up to 50 persons, has been constantly growing. Additionally, the percentages of firms, which perceive themselves as competitive on European markets grew from 43.3% to 52.2%, whereas the percentage of firms that consider themselves unable to effectively compete on the European markets dropped from 16% to 10.6% (Krzysztof, 2007).

According to the recent research of the Institute for Private Enterprise and Democracy (2009) carried out among small companies, most companies (60%) belonged to the service sector and the rest were construction companies (40%). In the medium-sized companies group, one half offered services and the other half belonged to the production sector. As for the large companies, 60% were service delivering companies and 40% of the large firms belonged to the manufacturing sector. In the whole sample, the service providing companies constituted 56%, the manufacturers made up 31% of the population and the remaining 13% were construction companies. While a sectoral approach to industrial policy dominated

in the period prior to accession to the EU, in post-Accession the emphasis has been horizontal, rather than targeting specific sectors or enterprises.

The most significant barometers of the strength of the SME sector is also its survival rate (Chmiel, 2007; Zagoździńska et al., 2008). Research by Chmiel (2007) confirms that firms from the SME sector enjoy a relatively high rate of survival (60 per cent) in their first year of operation – a statistic that has remained constant for the last few years. A four-year rate of survival is estimated to be about 30 per cent. Both entry and exit rates for enterprises, almost entirely small ones, are higher in Poland than on average in the EU. This indicates considerable dynamism in the sector which has contributed to the progressive diversification of the Polish economy since the end of central planning.

The majority of enterprises in Poland are sole proprietorships, amounting to 76.1% of all existing companies. The second most popular organizational structure is a civil law partnership (a company that has no legal personality) constituting 7.7% of all economic operators. Companies based on the commercial law – mostly limited liability companies amount to 6.7% of all economic entities. Other organizational schemes are significantly less popular.

A commonly held view is that the implementation of entrepreneurship and economic development policy at the regional level has been slow, with limited co-ordination. Some explanations for this point refer to a lack of political commitment at the regional level to promoting entrepreneurship and a lack of understanding of the potential importance of entrepreneurship and SMEs to economic development (OECD,2010). A lack of co-ordination is likely to contribute to increased fragmentation of policies in the eyes of entrepreneurs rather than the simplification that makes it easier for them to find and access the support they need. The recently established National Co-ordinating Committee for Development Policy is recognition of the need to improve co-ordination within the system.

THE PERSPECTIVES OF SMEs DEVELOPMENT AND THE PRIORITIES OF ENTREPRENEURSHIP POLICY IN POLAND

Poland's status as a new member state of the European Union has important implications for entrepreneurship and innovation policy in the country. The current approach is heavily dependent on EU Structural Funds, which the country relies on to provide funds for policy implementation. This is facilitated through a combination of National Operational Programmes (NOP) and Regional

Operational Programmes (ROP), which inevitably means that policy priorities and the orientation of policy are influenced by criteria established at the EU level.

Many programs in Poland are broadly-based – they try to appeal to different stakeholders in the Polish economy, such as entrepreneurs, employees, public institutions and agencies, research centers, business and technology incubators, universities, and research and development institutes, etc. The priorities of national entrepreneurship policy include human capital, improved access to finance, better regulation, R&D and innovation, access to markets, business environment, including infrastructure. One of the current policy priorities is regulatory reform, driven partly by the EU agenda.

The implementation of entrepreneurship policy in Poland involves a number of key institutions and networks at the national and regional levels. The national business support network (KSU) is managed by PAED. This network of service providers consists of independent, „not-for-profit organizations that provide support for start-ups and established businesses. The main areas where PAED consider publicly funded support is necessary are information, pro-innovation advice, loans, and loan guarantees. At the same time, the support needs of businesses vary between different regions, which mean that a „one size fits all□ approach is unlikely to be effective. In addition, other national and regional actors are involved in delivering business support to SMEs.

The SMEs are encouraged to grow as the Polish government offers incentives on technological tax, investment grants up to 70% of investment costs for SMEs and employment grants of up to €5,000 per new employee as well as grants for R&D activities (Capaldo, 2008). At the same time, Polish SMEs were supported by loans of The European Investment Bank (EIB). Namely, since 1990, the EIB has signed loan contracts in Poland amounting to some EUR 23.5 billion, but in the times of the economic crisis, Poland is also facing numerous challenges in financial markets, thus searching for the most appropriate model for regulating financial sectors. The most appropriate model must fit the financial needs of SMEs which vary between regions. For example, start ups in poor (particularly agricultural) regions need microfinance, because they lack self financing possibilities. On the other side, SMEs in Eastern Poland were said to need basic support because of particular difficulties they face in accessing finance. Effective co-ordination of policies originating in different parts and levels of government is essential if policies are to be effective in achieving their objectives.

In addition, organizations have been forced to radically alter both their organizational structure and culture, to cope with the demands of the increased competition. As decision-making becomes more widespread throughout

organizations, training will be critical in ensuring that the correct choices are made. The key areas of government's assistance relate to preparing business plans, improving products, increasing managers and owners skills and so forth. Namely, the available training assistance programs are directed towards two types of audience: business owners or young managers who need managerial training in key functional areas of their business, and skilled workers looking to improve their technical skills in areas of their expertise.

For decision-making powers to be more widespread, information will have to be made available to a wider group of persons so that armed with the facts, they can make the correct decisions. If employees are expected to participate in the decision-making process, training becomes critical in ensuring that information is used wisely in this process. Organizations will also be expected to respond proactively to changes in the business environment. Responding quickly will no longer be enough; with this increased competition, firms will have to learn to anticipate changes so that they can survive and maintain their competitive advantage. Failure to do this will result in other firms taking advantage of the opportunities that have arisen. Alternatively, it could lead to an inability to effectively manage current and future threats to their existence. As firms attempt to manage the „new,, environment, they normally seek to revise their culture and structure to those, which are felt to be more suitable for handling such rapid changes. These changes in the organization culture and structure have led to the need for a different „kind,, of employee. These changing requirements have resulted in some criticisms of the formal education system, as employers complain that graduates from these institutions are not meeting their needs. In that context, the formal educational institutions are being asked to re-think the way they undertake education and training. Skills, gap/mismatch and continuous or lifelong learning have received national attention by governments in most developing and other countries. Such skills are considered a necessity in what is now commonly referred to as a „Knowledge-Based Economy,, (KBE) or „New Economy,,. They will require employees to be multi-skilled as they seek to combine tasks and even different jobs in one person or position. This will cause employers to seek out employees who are thought to be more “trainable” and more capable of working on their own or with minimum supervision. In other words, the old principles no longer work in “New Economy”. Businesses have reached the old model's limits with respect to complexity and speed. The real problem is a ruinously dysfunctional mismatch between today's business environment and the classic business model. Namely, the wrong model may transform a company into the vehicle of its own death. The successful companies in the future will be those wise enough to harness the full potential of the entire organization in the rapidly changing business environment. The world is going to be too tough and competitors too ingenious as companies are shaken loose from

traditional ways of conducting business. The winners will be the unbridled firms that are responsive to challenges and adroit in both creating and capturing opportunities. To match an increasingly networked business environment within and among companies, the ability to manufacture value will have to be distributed across the company to a much greater extent than in the past. Additionally, learning is the key competency required by any organization that wants to survive and thrive in the new knowledge economy. Market champions keep asking learning questions, keep learning how to do things better, and keep spreading that knowledge throughout their organization. Learning provides the catalyst and the intellectual resource to create a sustainable competitive advantage. Knowledge organizations obtain competitive advantage from continuous learning, both individual and collective. In organizations with a well established knowledge management system, learning by the people within an organization becomes learning by the organization itself. In other words, managers need to transform themselves.

CONCLUSION

Poland's membership of the EU involved economic integration across a variety of fields, with important potential implications for the external environment in which business is conducted in Poland. These implications stem first from the need to adapt Polish legislation, regulatory systems, and methods of certification and standards to EU requirements; and, second, from the continuing process of transforming the Polish economy into a market-based system.

The enlargement process of the EU is changing the business environment under which SMEs are operating. From the viewpoint of enterprises, many of the changes in the business environment mean the opening-up of new markets as well as the potential appearance of new competitors on 'own' domestic markets. The economic impact of the changing business environment on SMEs in Poland and other new Member States depended upon the accession in the EU to a large degree and to some extent, upon the initial position of enterprises in terms of their relative competitive advantages and disadvantages.

In this paper we tried to explain how much Poland has used this opportunity after the EU accession. This question is very important because the extent to which this accession process has influenced Polish enterprises has had an impact upon the whole economy. According to our research, the integration with the EU gave the Polish a much needed opportunity to revitalize its economy and make its way from an area at the periphery into a business hub of expanded Europe with blending management cultures, administration models and entrepreneurship types

including the implications for SMEs at the micro level. In addition, the integration with the EU obtained the removal of barriers to the flow of goods, services, capital and labour and provided new market opportunities, increased competition on domestic markets, and facilitated access to new sources for inputs.

Public policies have a role to play in leveraging the dynamic nature of entrepreneurship, devising programmes that support market mechanism that may not be well adapted to entrepreneurship and promoting entrepreneurship in the population at large (OECD, 2010). Despite the Polish SMEs were supported by loans of The European Investment Bank (EIB), but in the times of the economic crisis, Poland was still facing numerous challenges in financial markets.

We can conclude that there has been a visible progress after the EU integration, however, the key barriers to further growth remain in the business environment for SMEs and entrepreneurs. For instances, there are certain mismatches in the labour market, with a gap between the supply of workforce skills available and the types of skills required by the emerging SME sector. It emphasizes the importance of prioritizing the reform of the vocational training system, paying attention to the specific training needs of SMEs in particular sectors. An improvement to the vocational training system also needs to incorporate a spatial component, since the survey (Country report summarizing the survey conducted among the companies, 2009) evidence demonstrates the particular problems experienced by SMEs in smaller towns. Because of that, it is necessary that a better network be created among scholars focused on investigating small businesses and entrepreneurship and the growing demand for entrepreneurship education. This approach should connect entrepreneurship research and teaching more closely. On the other hand, the research must lie in both its intellectual eclecticism and connections with policy agendas and practical problem solutions. In that way, many theoretical settings would be reduced that have not come across a box in practice. Special emphasis should be given to continuous improvement of work force through life-long education, in order to decrease differences between the Polish economy and the EU-27 member states. Bearing in mind that one of the goals in the long-term Polish development strategy is the movement towards the Knowledge Economy and an equal participation in the Single and Global markets competition, knowledge and a good knowledge management should be considered as the key success factor of the SME sector. In addition, designing a package of SME policies should be based on a rigorous analysis of the strengths and weaknesses of the region and fine tuned to the specific economic and sector structure.

References

- [1] Balcerowicz, E. (2007), *The Impact of Poland's EU Accession on its Economy*, CASE – Center for Social and Economic Research, Warsaw, Poland
- [2] Berkowitz, D., et.al. (2001), *Does Privatization Enhance or Deter Small Enterprise Formation?* University of Pittsburgh, US
- [3] Capaldo, F., (2008), *How is the crunch affecting SMEs abroad?*, available in the internet http://www.thisismoney.co.uk/work/small-business/article.html?in_article_id=457376&in_page_id=10
- [4] Chmiel, J. (2007), "Small and medium enterprises in Poland in 2005-2006," Warsaw: PARP
- [5] Country report summarizing the survey conducted among the companies (2009), Institute for Private Enterprise and Democracy, Warsaw, Poland
- [6] OECD Review of SME and Entrepreneurship Issues and Policies at National and Local Levels in Poland., 2010. Available in the internet <http://www.oecd.org/dataoecd/21/55/44729520.pdf>
- [7] Krzysztof, W., (2007), *Impact of the Accession to the European Union on Polish Enterprises Development* in: VI. Nemzetközi Konferencia A közgazdász képzés megkezdésének 20. évfordulója alkalmából (Conference Proceedings of 6th International Conference organized in the *XX annual of Faculty of Economics*), II. kötet (volume II), ed. A. Somogyi, Miskolci Egyetem -Gazdaságtudományi Kar (Miskolc University – Faculty of Economics), Miskolc-Lillafüred, pp. 183-191.
- [8] Ruszkowski, E. (2010), *A Review of SME/Entrepreneurship in Poland*, available in the internet <http://blogs.law.unh.edu/itti/2010/04/a-review-of-smeentrepreneurshi.html>
- [9] *SMEs in V4 countries* (2010), Visegrad info, available in the internet . <http://www.visegrad.info/smes-and-innovative-businesses/factsheet/smes-in-v4-countries.html>
- [10] *The Impact of EU enlargement on European SMEs*, Observatory of European SMEs 2003, European Commission , No. 6
- [11] Polish Agency for Enterprise Development, *Report on the Condition of the Small and Medium-Size Enterprise Sector in Poland for the Years 2000-2001*, Warsaw, 2002, p. 235.
- [12] Skawińska E, Zalewski R., (2003) , *Economic aspects of the Poland-EU integration; an assessment of costs and benefits in relation to agribusiness* in *International Conference Agricultural policy reform and the WTO: where are we heading?*, Capri, Italy
- [13] The Government Center for Strategic Studies, Warsaw, 2000
- [14] *The Industry's Statistical Annals*, GUS, Warszawa, 1990
- [15] Zagoździńska, I., Foryś, A. and Kotowski, J. (2008), "Działalność przedsiębiorstw nefinansowych 2006 roku," Warsaw: GUS

CHAPTER 21.

EU AND SERBIA: SME POLICY IN TIME OF CRISIS AND BEYOND

Isidora Beraha¹

Elena Baranenko²

Ana Jaško³

Abstract

Small and Medium-sized Enterprises are recognized as the backbone of every economy and the key source of economic growth, dynamism and flexibility in advanced industrialized, as well as in transitional and developing countries. Policymakers are conclusive in attempt to promote the more dynamic development of SME sector by creating policies and consistently implementing the basic principles contained in the European Charter for Small Enterprises. The further course of the Serbian integration into the European Union will be primarily determinate by the development of the SME sector. The SME sector in the Serbian economy accounts for the largest part of total number of active companies, GDP, total export and import and for the majority of employment. Due to the fact that the world financial crisis has worsen the already vulnerable SME sector in Serbia, the government, by setting the adequate policy framework in which SMEs can operate, has provided economic benefits through the selection of business support instruments, the problems they address and the way they are delivered. Even though the importance of the role SMEs play is even more emphasized in times of crisis, these enterprises are facing significant problems when providing necessary financial resources and maintaining liquidity.

Key words: *small and medium-sized enterprises, economic growth, Serbia, EU, government, integration, policy, financial crisis*

¹ Isidora Beraha, Institute of Economic Science, Belgrade, Serbia

² Elena Baranenko. Institute of Economic Science, Belgrade, Serbia

³ Ana Jaško, Institute of Economic Science, Belgrade, Serbia

THE IMPACT OF CRISIS ON SME SECTOR

Over the last decade, the SME sector grew and developed dynamically across the EU countries. In the period 2002-2008, 9.4 million new jobs were created in the SME sector which stresses out that SMEs have been the job engine in the European economy. An increase by 2.4 million new SMEs was recorded and today they represent 99% of businesses in the EU, thus being a key driver for economic growth, employment, innovation and social integration. An impressive growth of the SME sector was partially slowed down by the financial crisis, which hit SMEs much more dramatically than the large ones.

SMEs are more vulnerable in times of crisis than the large firms for many reasons, among which the following ones are considered to be the most relevant [12]:

- it is more difficult for them to downsize as they are already small;
- they are individually less diversified in their economic activities;
- they have a weaker financial structure (i.e. lower capitalization);
- they have a lower or no credit rating;
- they are heavily dependent on credit and
- they have fewer financing options.

The crisis started to show its effects in the middle of 2007, and by the late 2008 a rapid decline of world trade and a loss in business confidence occurred, followed by decline in production, exports, investments and private consumption. There was barely any sector in the industry that was avoided by the crisis, and the recession particularly hit manufacturing, construction, transportation and automotive industry. The negative effects of the crisis have additionally emphasized the problems SMEs are often confronted with, which mostly refer to a lack of financial resources, followed by a lack of human resources, liquidity problems, administrative and legal burdens. Decline in production and trade in large enterprises consequently worsened the position of SMEs in supply chains, as they carried out a significant part of the burden of the large firms. SMEs faced an increase in payment delays which resulted in a shortage of working capital and in a decrease in liquidity. The public sector's payment delay deepened the problem of liquidity, thus reducing SME's investments. The short term impacts of the crisis on SMEs can be summarized as a decline in sales and profits, followed by more intensive competition in markets and limited access to finance. Because the crisis led to a less favourable balance of risks, the number of business start-ups was negatively affected. In light of the crisis, SMEs recourse to operating costs reductions and cuts down in inventories and investments, including innovation spending.

A drastic drop in demand for goods and services and a tightening in credit terms put in question the creation, survival and growth of SMEs across Europe. Due to the difficult access to capital, their liquidity positions and higher risks on collateral, the banks tightened the credit conditions for all their clients. In order to survive, banks and other financial institutions oriented towards keeping the strongest clients, while the practice of lending to SMEs deteriorated. Faced with difficult access to credits, SMEs are searching for other sources of finance, but access to venture capital and private equity seems to be limited as well.

Comparing to SME sectors in EU member states, SMEs in transitional countries were hit by the financial crisis more dramatically, mostly because they were already facing numerous financial and non-financial problems, they obtained lower level of development, and institutional support was less efficient. In Serbia, along with reduced inflow of foreign capital at the beginning of October 2008, the first effects of the crisis occurred imposing new business conditions characterized by a more rigid discipline in debt repayment. An increase in the price of capital, reduced amount of funding and loans, downturn in demand for goods and services, and reduced export and import activities affected the operation and development of SME sector.

Faced with the crisis, the policy makers were forced to review and redefine the scope, the volume and the direction of their policy measures. In order to ease off the negative effects of the crisis, the majority of European countries adopted anti-crisis packages, which generally comprise of measures aimed at stimulating demand, credit enhancement measures (including recapitalisation of banks) and labour-market measures. Regarding the SME sector, a large number of short-term and long-term measures, ranging from tax reductions to structural and institutional changes, have been taken so far. Governments have put a lot of efforts into improving SMEs' access to finance, obtaining the scope of their business activities and preserving the level of their investments. Special attention has been given to the extension of loan and credit guarantee schemes, an introduction of public guarantee schemes with an aim to improve the capacity of banks to finance SMEs, as well to the maintenance or an increase of cash-flows. In some countries governments put pressure on banks to continue lending to SMEs. Belgium and France, for example, introduced a "credit mediator", whose role is to ensure that enterprises obtain credits from banks.

SME POLICY IN EU AND SERBIA

The development policy for the sector of small and medium-sized enterprises has for quite some time been one of the priorities of the European Union. The first

steps to spur the SMEs development were undertaken as early as 1980s, however, they were predominantly oriented towards cutting the administrative constraints, bringing into accord the VATs in the EU member states, adjusting the conditions of financing to foster transparency of the pay systems, the harmonizing the social aspects of business operations of small firms, promoting the competitiveness of SMEs, etc.

The beginnings of the so-called “modern“ SME policy of the EU dates back to the year 2005, when the European Commission issued its Recommendation defining the micro, small and medium-sized enterprises, and when the document “Implementing the Community Lisbon programme - Modern SME policy for growth and employment“, based on Lisbon Strategy of 2000 was adopted [3].

The document highlighted 5 key areas: 1) Promotion entrepreneurship and skills, 2) Improving SMEs access to markets, 3) Cutting red tape, 4) Improving SMEs growth potential, 5) Strengthening dialogue and consultation with SME stakeholders. Within these areas the goals were set that were supposed to contribute to a more effective implementation of entrepreneurship potential of Europe and giving impetus to the SME sector.

All these steps have considerably aided the development of the SME sector and created the background for the next document, known as the Small Business Act. The European Commission adopted the document in June 2008, and it can be said to present one of the major EU initiatives for the SMEs. The Small Business Act integrated all the initiatives known of at the time and proposed new measures necessary to support the SME sector. „Adopted in June 2008, the “Small Business Act” for Europe reflects the Commission's political will to recognize the central role of SMEs in the EU economy and for the first time puts into place a comprehensive SME policy framework for the EU and its Member States“[10].

The key element in pursuing the policy and decision making on all the levels in the European Union, according to the SBA, is the importance of the “Think Small First“ principle that states that the public administration should pay full attention to small and medium-sized enterprises.

The SBA is established on 10 principles meant to coordinate and regulate the activities related to the SME policy implementation by the Commission and the member-states [11]. The main goal of the SBA is to alleviate the administrative burden for the SMEs and cut the red tape that hinders the growth and a successful development of the SMEs. The SBA encourages a broader access and participation of EMSs in the EU programmes, in financing, as well as at the government tenders (the transparency and availability of information is to be

increased). It also stresses the necessity that tax burdens be resolved and a competitive tax infrastructure be created.

The major priorities of the SBA are oriented towards creating a more favourable business environment, facilitating the access to the sources of information, developing innovations and R&D, achieving new opportunities through making use of the benefits of the Single Market, creating new jobs and a faster economic growth.

Until recently, SME policy received relatively little attention in transitional countries. The focus of governments was on consolidating macro-economic stabilization and on managing the restructuring and privatization of large companies. Only limited support was available for SME sector.

After a period of random establishment of SMEs in Serbia at the end of 1990^s and at the beginning of this century, the main institutional bodies were established to guide the development of small and medium-sized enterprises and the constitution of SME policy. It is the Ministry of Economy and Regional Development that is responsible for the promotion and development of the SME sector in Serbia. A series of measures have been undertaken to foster SME development since the political changes back in the year 2000. Along with the growing awareness about the importance of SMEs for economic growth and development, the national Strategy for the development of SMEs and entrepreneurship 2003-2008 was adopted. The strategy outlined the key objectives and was based on the following five pillars: 1) Promotion and support of entrepreneurship and the establishment of new enterprises 2) Human resources for competitive SMEs sector 3) Financing and taxation of SMEs 4) Competitive advantages of SMEs in export markets 5) Legal, institutional and business environment for SMEs.

The following two strategic documents are considered to be the essence of the Serbian SME policy – the above mentioned Strategy for the development of SMEs and entrepreneurship and the Plan for stimulating the development of SMEs and entrepreneurship 2005-2007, whose implementation is limited by the absence of appropriate budget.

Serbia has adopted a medium-term approach to SME development. The solid policy framework has been established by implementing reforms in the field of company registration and tax policy. The system for export promotion has been significantly improved and is considered to be among the best ones in the Western Balkan countries. Serbia is the only country in the Second group that systematically applies Regulatory Impact Analysis (RIA) to new legislation and regulations and develops a pro-active profile on innovation policy.

Along with the adoption of the European Charter for Small Enterprises in 2003, under the framework of the Lisbon Agenda, the institutional support for SMEs in Serbia was given a significantly new perspective. Since then, the Charter's policy guidelines have become a key reference for enterprise policy development in Serbia [7].

The assessment of the progress that Serbia achieves in respect to the development of SME policy is being made by using the common evaluation framework – SME Policy Index. The most significant progress has been achieved in the following areas: 1) Education and training for entrepreneurship 2) Cheaper and faster start-up 3) Better legislation and regulation 4) Availability of skills 5) Improving on-line access 6) Getting more out of the single market 7) Taxation and financial matters 8) Strengthening the technological capacity of small enterprises 9) Successful e-business models and top-class business support 10) Developing stronger, more effective representation of small enterprises.

According to the latest evaluation of the policy results, it can be stated that significant step forward has been made. However, the process of policy implementation is still relatively limited. Certain procedures improved considerably over the last two years. Serbia has already conducted a comprehensive reform of the company registration process, thus reducing significantly the amount of time needed for business registration. Satisfactory improvements were made in respect to the taxation and financial matters dimension. SMEs have better access to soft loans through credit guarantees and to governmental funds aimed at supporting exports, start-ups and innovation. The dimension related to legislation and regulations was improved, as well.

Less favorable performances were achieved in the field of entrepreneurial education. Several pilot projects have been introduced so far, but the Strategy on entrepreneurship teaching in vocational schools has not been adopted yet. The strategy is expected to introduce entrepreneurship as a key competence at all levels of formal education. The concept of entrepreneurial education and training has just started developing in the whole region, and it is still confined to traditional business areas. There is a considerable gap between a supply of skills and a demand for skills on the market. Serbia has not yet established systematic tracking of training requirements relative to market demand [8].

Further policy initiatives are necessary concerning technological co-operation, intellectual property rights, business incubators and clusters. Clusters are related to economic development by providing an environment that is conducive to innovation creation, vertical integration and specialisation and pressure for competition which enables SMEs to increase their productivity, operational

efficiency, export performances and competitiveness. Clusters are recognized as one of the key factors for strengthening SMEs. Today there are only 20 operating clusters and 10 cluster initiatives in the Serbian economy. The majority of the existing clusters still haven't reached the sufficient level of development. The survey of the problems of Serbian clusters suggests that there is a lack of programs and policy measures designed to address the needs of specific clusters. More dynamic cluster development requires the strengthening of cooperation and networks among governmental institutions, universities, research institutions and private sector. In order for the Serbian SMEs to benefit from EU market, additional support is needed in introducing EU quality and technical standards.

Before the crisis, the Serbian government was primarily focused on putting the SMEs at the forefront of decision making, on strengthening their potential to create jobs and foster economic growth, on improving their access to finance, as well as on promoting competitiveness and innovativeness. Significant number of written documents was adopted by the government in order to create legal and institutional framework for the development of SME sector, and to improve the conditions for doing business. Serbia is still far away from reaching EU standards in the quality and scope of institutional support for SMEs.

POLICY RESPONSES TO CRISIS IN EU AND SERBIA

The world economic crisis created a demand for designing and pursuing a comprehensive and sophisticated SME policy in the EU. As a result, in December 2008, the European Council adopted the SBA Action Plan of measures, a significant priority for the needs of SMEs in the global crisis. The measures are designed to facilitate the access to finances, the access to markets of both the EU and the third countries, to improve the business environment and cut administrative constraints. The European Parliament also addressed the member states and invited them to commence the implementation of the SBA as promptly as possible. The Parliament insisted that the SBA is a document of vital importance for the recovery of SMEs, as well as that a prompt and efficient execution of the activities listed in the SBA can help reduce the impact of the crisis. It simultaneously focused upon the necessity for the implementation of the measures stated in the European Economic Recovery Plan adopted in November 2008.

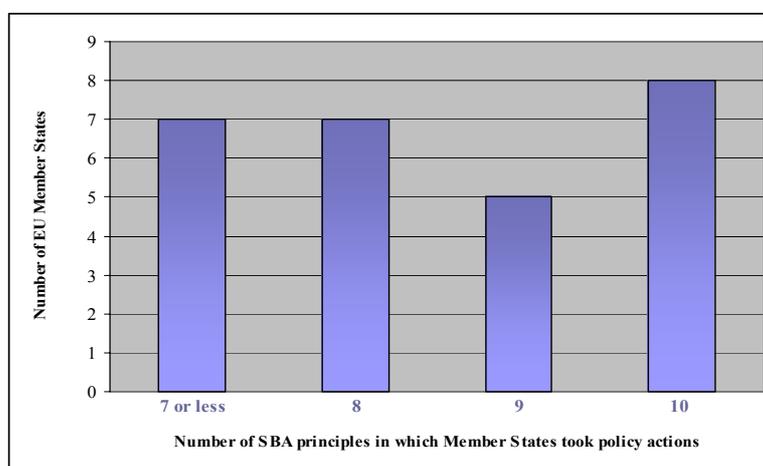
In 2009, the European Commission made considerable efforts to achieve the goals set in order to reduce the negative effects of the financial crisis upon the SME sector. According to the Report on the Implementation of the SBA data, the Commission adopted 5 proposals. A new General Block Exemption Regulation

was introduced that aided governments to ensure financial support for the SMEs. On 1st June, 2009 a proposal to reduce the VAT rate was enacted, which allowed for the member states to intensify their economic activities. The three remaining proposals have not been enacted yet, however, the European Council and the European Parliament are working hard on adopting these in a shortest possible time.

The EU member states also strongly support the European Commission initiative. However, individual approaches in the implementation of the SBA and the results achieved differed from state to state. In Belgium, for example, the government adopted the Plan including 40 measures that cover the basic goals of the SBA. The governments in Italy and Ireland formed working groups to monitor the implementation of 10 major SBA principles. The UK, Romania, Finland, France and the Netherlands reported on the methods of the SBA implementation in their National Progress Reports of 2009. In other member states only concrete measures designated as priority measures in the SBA were adopted.

It is interesting to see the data from the “European SMEs under Pressure“ report on the SMEs according to which 500 measures were imposed within the 10 SBA principles implementation in the 2007 – 2009 period.

Graph 1: SBA principles coverage by national policy measures



Source: [4]

According to the report, one fifth of all the activities within the framework of the SBA implementation in the member states were conducted in the “Access to Finance“ category (about 20%). The categories that followed were “Skills and

innovation” with 16%, “Enterprenurship” with 14%, “Responsive Administration” (11%), “Internatiolization” (10%), “Public procurement and State aid” (9%), “Think Small First” (6%), “Environment” (5%), “Single market” (5%), “Second chance” (4%), respectively [4].

Within the activities in the SBA implementation, positive results were achieved in cutting administrative constraints. In the member states, for example, the average space of time required to start up a firm in 2009 was reduced by one day and amounted to 8 days. The costs were also reduced from € 463 in 2008 to € 417 in 2009 [5].

In addition to simplifying the rules to gain access to state aid, the European Commission adopted the framework for state aid for 2009/2010, thus enabling the member states to secure the subsidized loans, credit guarantees, and direct state aid to SMEs in an easier manner. An important role in facilitating the access of SMEs to finances in 2009 belongs to the European Investment bank, which raised the amount of credits for the SMEs up to €11.5 billion (in 2008, loans amounted to € 8.1 billion).

A majority of member states adopted the policy of implementing measures for facilitating the access of the SMEs to the sources of financing, especially by bank loans, by creating and expanding credits and credit guarantees for the SMEs.

The next initiative that could help Europe return to the path of sustainable development and economic growth and create even more favourable conditions for the SME business is the Europe 2020 strategy, adopted in June 2010 (to replace the Lisbon Strategy (2000-2010)). The new strategic goal of the Europe 2020 Strategy is exiting from the crisis, ensuring a high living standard, and boosting employment, productivity and social cohesion [6].

When the first effects of the crisis occurred in Serbia, the government had to react promptly in order to avoid the collapse in the SME sector. In January 2009, a set of measures were adopted by the government in order to lessen the negative effects of the crisis. The aim was to help SMEs with their liquidity/solvency problems, increase the amount of funds and loans available to them, preserve the level of employment and prevent the further fluctuations of foreign exchange rate and reduction in import and export activities.

Along with the introduction of the Program for stimulation of production, export and liquidity of the economy in February 2009, the subsidized loans for maintaining liquidity and financing durable current assets were introduced by the government, as well as subsidized consumer loans and financial leasing for

domestic commodity goods purchasing. In 2009 the total of 480 million Euros was assigned to crediting SMEs. Foreign credit lines were introduced and credits were provided by domestic banks at more favourable terms.

Because preserving financial stability was recognized as a top priority assignment, the National Bank of Serbia adopted measures directed towards improving the foreign currency liquidity of banks. In the last trimester of 2008, the amount of ensured deposit has increased from 3000 to 50 000 Euro. In order to increase and stimulate domestic savings, the income from interest on foreign currency savings was exempted from tax as from January 1, 2009. Additional measures were adopted for keeping loan making activities and helping companies get more favorable loans with the subvention of the state for liquidity and investment.

FUTURE PERSPECTIVES

Having in mind the role of the SME sector in the European economy, addressing future policy recommendations is not an easy task. Recent concerns have predominantly been related to anti-crisis measures aimed at helping SMEs survive. The realization of SME's growth potential in the future requires an advanced approach oriented towards promoting entrepreneurship and creating friendlier environment for small businesses. Governments should focus on medium and long-term policy actions that will foster more dynamic and innovation-led growth of the SMEs, rather than on short-term measures for their survival.

SMEs have been in the focus of EU policy makers' attention much before the crisis. Within the framework of the Small Business Act for Europe, a broad policy affecting SMEs and entrepreneurship is being implemented by both the European Commission and member states. A set of mechanism, such as networks and business support measures, are introduced in order to deliver support to SMEs. The emergence of the global financial crisis has deepened the already existing problems and brought new challenges regarding the future SME policy directions.

Decisive policy aimed at strengthening legal and regulatory framework and introducing mechanisms under which SMEs will be able to increase their capital, as well as at fostering the development of innovative, fast-growing enterprises is necessary.

Policies in the future will have to focus on creating more efficient systems of SME finance. A lack of appropriate financing is a key obstacle to the creation and dynamic development of innovative SMEs. Innovations provide the basis for future technological progress and economic growth of nations, and due to SME's

flexibility and inclination to undertaking and risk, they tend to be more innovative than the large companies. In that sense, further development of venture capital markets and business angel networks is necessary. Venture capital should be provided greater support by the governments, in terms of increasing guarantees for risk capital, more co-investments and various fiscal incentives. The equity financing needs to be emphasized as an option that can enable enterprises avoid concerns about qualifying for a loan and repaying the loan from the profits. The SME lending by banks has to be encouraged, and banks' loan portfolios designed to meet the specific needs of the SME sector.

The most fundamental role of the government is related to entrepreneurship education. The government needs to be more actively involved in promoting entrepreneurship within society. Considering that entrepreneurial education is essential for further development of SMEs, people should be encouraged to start and develop their own businesses. A new approach to education system at all levels is necessary. Entrepreneurship education must be an integral part of the curriculum of gradual and vocational schools and universities. Evidence suggests that in most European countries this extremely important governmental role is still insufficiently developed. Unless the awareness about the importance of this issue is raised, greater contribution of the SME sector to social and economic development of European countries will not be possible.

In comparison to EU member states, the SME policy in Serbia is still underdeveloped. Significant step forward has been made in recent years, but too many challenges remained. SME sector in Serbia is characterized by high mortality rates, lack of strategic marketing approaches, low labor productivity, costly and time-consuming administrative procedures, and limited access to finance, expensive loans and low equity/debt ratio. Looking further ahead, SME policy in Serbia will have to focus on developing efficient system of SME finance. The low availability of various types of financing is recognized as one of the key problems of SMEs in Serbia. Future perspectives will certainly depend on the ability of the government to develop policy and create measures that will address the specific problems and needs of SMEs, not only in regard of financing, but of legal and regulatory framework, business environment, entrepreneurial education and the concept of life-long learning, management skills, innovation capacity, clustering and internalisation, as well.

References

- [1] Access to Finance Analytical Report, European Central Bank, Flash Eurobarometer, European Commission, 2009
- [2] Begović, B., Paunović, M. (2008), Analysis of government financial support to small and medium enterprises in Serbia, March, 2010, www.prsp.sr.gov.rs,
- [3] European Commission Recommendation No361/2003. <http://www.reach-compliance.eu/english/REACH-ME/engine/sources/regulations/launch-2003-361-EC.html>
- [4] European SMEs under Pressure, pp. http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/pdf/dgentr_annual_report2010_100511.pdf
- [5] http://ec.europa.eu/enterprise/policies/sme/files/support_measures/startups/startups2009_en.pdf
- [6] <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%2007%20-%20Europe%202020%20-%20EN%20version.pdf>
- [7] http://www.iien.bg.ac.rs/downloads/08_women-entrepreneurship_mr.pdf
- [8] <http://www.oecd.org/dataoecd/37/23/30632995.pdf>
- [9] Report on SMEE 2008, Ministry of Economy and Regional Development, Development Fund of the Republic of Serbia, Republic Agency for the development of SMEE, Belgrade, 2009
- [10] Small and medium-sized enterprises (SMEs), "Small Business Act" for Europe <http://ec.europa.eu/enterprise/policies/sme/small-business-act/>
- [11] Small Business Act for Europe, pp. 4.
- [12] <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0394:FIN:en:PDF>, Opening up of new finance for SMEs, cutting of administrative burdens and increasing of investments in order to modernize infrastructure
- [13] The impact of the Global Crisis on SME and entrepreneurship Financing and Policy Responses, Contribution to the OECD Strategic Response to the Financial and Economic Crisis, Centre for Entrepreneurship, SMEs and Local Development, OECD, 2009

CHAPTER 22.

REFORM OF ACCOUNTING AND ACCOUNTING EDUCATION IN THE SLOVAK REPUBLIC AFTER THE EURO ZONE ACCESSION

Radoslav Tušan¹

Abstract

In the process of joining the European Union, it was important to harmonize the accounting system of Slovakia with the one used in the member states of the European Union. The Slovak Republic prepared a new Act on Accounting, which reached a comparability of Slovak accounting jurisdiction with the directives of the EU. This act has been effective since January 1st of 2003.

The Act on Accounting still remains a general juridical norm and is used by every accounting unit. A basic philosophy of the act “a truthful and a faithful representation” persists.

The accounting is a compulsory course at all universities in the Slovak Republic with the economic orientation. Professors of Slovak universities took up the grant of World Bank and Ministry of Finance regarded a new teaching plan and a curriculum of the financial accounting courses. A goal of this grant was to improve the accounting curriculum at the institutions of higher education, introduce courses with the practical application of the International Accounting Standards (IAS), the International Financial Reporting Standards (IFRS), the International Standards on Auditing (ISA) and courses of auditor’s professional work ethic.

Key words: *accounting, Act on Accounting, accounting unit, accounting principles, accounting education*

¹ Radoslav Tušan, Faculty of Economics, Technical University of Košice, Slovak Republic

REFORM OF ACCOUNTING IN THE SLOVAK REPUBLIC

Economic and politic changes in the Middle and East Europe after 1989 initiated a consecutive transfer from the central planned economy to market economy. The role of the state as the one owner of the businesses finished. Private ownership and entrepreneurs became a part of the economy. The very important issue was to begin the privatization of national property and sector and to assure the economy of free trade.

Transformation required creating a new character of system of accounting. New accounting system was based on the Act no.563/1991 on Accounting, effective since January 1st, 1993. This act has been amended few times since. The aim of these revisions was to approach a basic accounting jurisdiction of the European Union and its Directives.

The basic juridical norms concerning the system of accounting in the Slovak republic are:

- Commercial Code which states an obligation for the entrepreneurs to keep their accounting books, to generate accounting report and in certain occasions to certify the faithfulness and trueness of the accounting by auditor,
- Act on accounting is a general juridical norm,
- Decrees of the Ministry of Finance of the Slovak Republic define the stature of accounting, methods and procedures within a single-entry bookkeeping, as well as within double-entry bookkeeping. Decrees also classify a form, a structure and a content of individual and consolidated accounting reports for different types of entrepreneurial and non-entrepreneurial units.

In the process of accessing the EU it was important to harmonize the accounting system of Slovakia with the frame used in the member states of the European Union. The European Parliament and The European Council came up with the Regulation No.1606/2002, according to which all companies that hold their stocks on regulated market have to create their consolidated accounting reports according to IAS/IFRS (International Accounting Standards/International Financial Reporting Standards), since 2005.

The Slovak Republic prepared a new act – Act No.431/2002 on Accounting, which reached a comparability of Slovak accounting jurisdiction with the directives of the EU and allowed to use IAS/IFRS in special cases. This act has been effective since January 1st, 2003 and superseded previous Act No.563/1991 on Accounting. [1].

The Act No.431/2002 on Accounting still remains a general juridical norm and is used by every accounting unit. A basic philosophy of the act is “a faithful and truthful representation of facts which are objects of accounting and about a financial situation of the entity”. The Ministry of Finance issued Decrees for different types of the accounting units, concerning the accounting methods and procedures for the single-entry as well as the double-entry bookkeeping systems, also a form, a structure and a content of the individual and the consolidated financial report. These Decrees have been effective since January 1st, 2003.

The Act on Accounting defines all subjects that have to keep accounts and generate accounting reports. For the purposes of this Act, persons listed below shall be considered as the accounting units:

1. Legal entities – juristic persons,
2. Foreign individual and juristic persons,
3. Individual persons, who are engaged in business or other profit-making activities, if reporting their expenses necessary to generate, assure and maintain their income for purposes of determining the income tax base.

Accounting units use double-entry bookkeeping system or single-entry bookkeeping system in dependence on the type of accounting unit.

The double-entry bookkeeping system is a basic accounting system and every accounting unit is required to keep its accounting records in this system. Although, the act states an exemption that specifies which accounting units can use single-entry bookkeeping system.

The accounting unit shall account for events which are the subject of accounting within the period to which these events relate, taking into consideration their nature and timing. This period is called accounting period and it can be a calendar year (from 01/01 to 12/31 of a relevant year) and or a financial year (a period of 12 consecutive calendar months not identical with the calendar year).

The accounting unit keeps book and construct accounting reports in the monetary units of Euro currency and in the state language. An accounting document issued in a language other than the state language must be easily comprehensible. The accounting units keep their accounting records correctly, completely, provably, comprehensibly and by methods guaranteeing permanency of their accounting documents.

The accounting unit accounting in the double-entry bookkeeping system shall keep the following books of account:

- a) a journal where the accounting entries are ordered in chronological sequence,
- b) a general ledger where the accounting entries are ordered in systematic sequence.

The Act on Accounting defines the valuation of assets and liabilities used for bookkeeping and generating accounting reports. Assets and liabilities are valued either at the date of accounting transaction; at the date of generating the accounting report or at the other date during the accounting period if it is required by a special directive (e.g. Act on Banks).

The assets and liabilities are valued at:

1. acquisition cost,
2. the entity's own costs (costs incurred),
3. nominal value,
4. replacement costs,
5. fair value.

The accounting unit should adjust the value of assets and liabilities by appropriate amounts expressing risks, losses and deterioration at the date of preparation of the accounting report. All anticipated risks, losses and deteriorations are expressed in the accounting report through reserves and depreciation.

A criterion for valuation, called a fair value, was taken from IAS and has been used since 2003. The fair value for the purposes of the Act on Accounting is:

- a) market price as a price at domestic or foreign stock market or other kind of market,
- b) qualified estimation or expert's testimony in a case that market price is not accessible or if market price does not express a fair value,
- c) valuation according to special directives,
- d) value of manufactured work worked by concessionaire to public procure mentor.

The accounting report reflects truthful and accurate representation of unit's assets, liabilities, expenses, revenues and financial situation. This principle of truthful and accurate representation is major and all other principles (e.g. principle of not changing used methods, etc.) are subordinate.

Act on Accounting recognize three types of the accounting report:

- a) ordinary accounting report which is generated to the last date of accounting period,

- b) extraordinary accounting period is generated in other cases when books of accounts are closed during accounting period (e.g. liquidation of business),
- c) interim accounting report – generated if it is required by separate legislation.

Individual accounting report shall be audited by independent auditor, if the accounting unit:

- 1. is a trading company with compulsory registered capital, if at least two of the following conditions were met in the year preceding the year of auditing the accounting reports:
 - a. the total asset value exceeded EUR 1,000,000;
 - b. the net turnover exceeded EUR 2,000,000;
 - c. the average number of employees exceeded 30.
- 2. has this obligation prescribed under separate legislation, (e.g. company's shares are marketable at regulated market),
- 3. is a legal entity (e.g. non-profit organizations) whose sum of annual assigned tax ratio exceeds EUR 33,194.

The accounting report shall be audited by independent auditor until the end of the accounting period following the relevant accounting period.

Under the double-entry bookkeeping system, the accounting reports consist of:

- a) balance sheet,
- b) income statement (or profit and loss statement),
- c) notes (here are attached other statements, if necessary, e.g. cash-flow statement in a case that accounting report has to be audited, etc.)

The accounting report is constructed within six months from the due date of the accounting report. All facts in the accounting report have to be useful, significant, comprehensive, comparable and reliable.

The accounting units, that are required to have their accounting reports audited, also generate an annual report. This annual report is audited as well.

The amendment of the Act on Accounting has been effective in the Slovak Republic since January 1st, 2005. This amendment harmonizes accounting terminology and Slovak accounting legislative with the legislative of the European Union, specifically in the area of generating the accounting report and annual report.

Starting on January 1st, 2006, the accounting units such as banks, subsidiaries of foreign banks, Export-Import Bank of the Slovak Republic, insurance companies,

subsidiaries of foreign insurance companies, Slovak stock exchange, etc. are required to generate the individual accounting reports compatible with the requirements of IAS/IFRS.

The same requirement applies also for a trading company, if at least two of the following conditions were met in at least two consecutive accounting periods:

- a) the total asset value exceeded EUR 165,969,594;
- b) the net turnover exceeded EUR 165,969,594;
- c) the average number of employees exceeded 2,000.

In this case the accounting report is to be audited.

The publishing of the data from the accounting report and the creation of the consolidated accounting report use these rules since 2005.

The accounting units, which are registered in the Commercial Register, are required to submit their accounting report and annual report to the Documents Collection of the Commercial Register within 30 days from the approval of the accounting report. The accounting report can be a part of the annual report.

The consolidated annual report and the consolidated accounting report (which is a part of the consolidated annual report) are submitted to the Documents Collection of the Commercial Register within one year since the end of the accounting period. The consolidated Balance Sheet and the consolidated Income Statement are submitted to the Commercial Publication within one year as well.

The accounting units, that generate the accounting report in accordance with IAS/IFRS, are also required to put their accounting reports on internet at the same time and in the same extent like they were submitted to the Commercial Publication.

The consolidated accounting report and the consolidated annual report are generated by a consolidating (mother) accounting unit. The consolidating accounting unit (a trade company, a cooperative, etc.) is an accounting unit that:

- has a majority of votes or
- has a right to appoint and to impeach a majority of statutory board members or supervisory board members and is a partner or a shareholder at the same time or
- has a right to manage the accounting unit or
- is a partner or a shareholder of the accounting unit and a majority of statutory board members and supervisory board members were appointed by this partner or shareholder or

- is a partner or a shareholder of the accounting unit and has a majority of votes based on the agreement with other partners or shareholders.

The consolidating accounting unit generates the consolidated accounting report and the consolidated annual report, if at least two of the following conditions are met on all levels of the consolidation in their individual accounting reports in two consecutive accounting periods:

- a) the total asset value of mother and her daughters units exceeded EUR 17,000,000;
- b) the net turnover of mother and her daughters units exceeded EUR 34,000,000;
- c) the average number of employees in the mother and her daughters units exceeded 250.

The consolidated accounting report generated in accordance with IAS/IFRS was first time generated for the accounting period started on January 1st, 2005. The criteria for the consolidated accounting report were adopted from the Seventh Directive of the EU.

The accounting system of big accounting units in the Slovak Republic as well as in the other countries of the EU is very clearly defined and ruled by IAS/IFRS. But the development of the accounting system of small and medium size units is still questionable and the most discussed problem. IASB (International Accounting Standard Board) agreed on the document about small and medium size companies in April 2004. In this document, IASB recommends to apply general accounting standards, which means to generate the accounting reports in the same extent as it is in the case of big accounting units. In the first phase, all accounting standards will be adapted for the accounting needs of small and medium size units and they will be published as an item. Later, every proposal of an accounting standard will have a clause specifically prepared for small and medium units. The small and medium units are a significant part of the accounting units in the Slovak Republic and if the European Committee approves this clause for the small and medium units, it will play an important role in the accounting legislative and in the accounting profession.

ACCOUNTING EDUCATION IN THE SLOVAK REPUBLIC

Changes in the accounting education in the Slovak Republic are connected with the social and the economic conditions after 1989. The adoption of the Commercial Code in 1991 enabled to establish and develop business in its various forms. A former accounting legislative did not accomplish its basic functions:

documentary, informatory, controllable and supportive function for a decision making process. Because of these facts, it was necessary to initiate an accounting reform. This radical reform was made by publishing the Accounting Procedures (National Accounting Standards) on January 1st, 1991 (Tušan, Stašová 2008).

Legal frame of the accounting and the accounting report did not classify terms such as: assets, liabilities, registered capital, profit, expenses or revenues. Even though, these terms were used in the accounting directives. A new Act on Accounting, effective since January 1st, 2003 was the first legal document that defined all these terms.

All changes in the accounting education were made in a connection with the changes in the accounting legislation. Since 1993, the accounting has become an executive and a decision making instrument. At the same time universities started to teach a Business Accounting.

The university education has three levels in the Slovak Republic. The first level is a bachelor degree and it takes three years to get this degree. The second level is an engineer degree and it takes two years. This second level is more specialized in the chosen field of study. Graduates of the third level – a doctorate degree – use a title PhD.

The accounting is a compulsory course at all universities in the Slovak Republic with the economic orientation. A goal of this course is to teach students to create and to use accounting data in the financial management of profit as well as nonprofit businesses in the market economy.

The accounting is a compulsory course on the first level of the university education and usually it is divided into two semesters. The first semester of the accounting course aims at the methodical knowledge of the accounting and the understanding of the double-entry bookkeeping system. Main topics explain the legislation of the accounting, the methodical resources, the common accounting terms and the accounting policies. In connection with these basics of the accounting theory, a student at the end of this semester must be able to keep accounts of assets, liabilities, expenses and revenues. Also, through the understanding of the basic financial accounting, a student should be able to analyze and interpret the main financial relations (internal and external) of the company (Tušan, Stašová 2008).

The accounting course continues in the second semester. It specializes in the definitions and the accounting records of the long term assets, the accounting of the financial accounts, the stocks accounts, the own equity and the long term

payables. A special area of the accounting course concerns about classification and bookkeeping of the expenses and the revenues. Another part of the accounting course is the accounting report – methods used for calculation of an income and the income taxes. The last part of this course specializes in the formation of the ordinary accounting report and the accounting documents, in the verification of the accounting report by auditor and its disclosure.

Curriculum of the accounting course:

- Accounting methods and accounting procedures valid since Jan.1st, 2003
- Classification, structure and valuation of the long term tangible and intangible assets
- Purchase of the long term tangible assets with advance payments
- Purchase of the long term intangible assets with advance payments
- Acquisition of the long term tangible assets
- Financial investments from own resources of the accounting unit
- Depreciation of the assets
- Liquidation of the long term tangible assets – accumulated depreciation and adjustments to profit of the accounting unit
- Revenues from sold long term tangible and intangible assets
- Shortages, damages and surplus of the long term tangible and intangible assets
- Donation of the long term tangible and intangible assets
- Long term capital investments – definition, valuation, accounts
- Long term capital investments – loans, deposits
- Long term capital investments – shares and bonds
- Purchase of merchandise in the Slovak Republic with advance payments
- Purchase of merchandise in foreign countries – exchange rates differences
- Utilization of merchandise and revenues from sold merchandise
- Activation and donation of merchandise, merchandise for marketing purposes
- Inventory created by the accounting unit
- Shortages, damages and surplus of the inventory
- Products of the accounting unit – production, utilization and sale
- Products – shortages, damages, surplus, donation
- Purchase and sale of goods
- Current assets accounts: cash, bank accounts and receivables
- Short term investments – purchase and sale of shares
- Short term and long term bonds
- Paid and received advance payments
- Receivables and payables from commercial relations
- Bills of exchange
- Travel expenses

-
- Wages and salaries
 - Social security accounts
 - Individual income tax – advance payments
 - Revenues and costs of future accounting periods
 - Incomes and expenses of future accounting periods
 - Definition and structure of owner's equity
 - Registered capital
 - Classification of costs and revenues and calculation of profit at the end of the accounting period
 - Profit distribution
 - Off-balance sheet accounts

The accounting courses on the higher levels of the university education are more specialized in the chosen field of study. Each study specialization has different requirements in its accounting system. Students can choose from these courses:

- Accounting of insurance companies
- Accounting of banks
- Accounting of non-profit companies and state funds accounting
- Managerial accounting
- Cost accounting and controlling
- Accounting report

Future changes in the accounting courses will concern not only about the content of the course and the teachers' approach, but also about new forms of education. Modern information and communication technologies bring crucial changes into the educational system and of course, also into the accounting courses. These technologies enable to obtain knowledge using more senses and without presence of a teacher. Slovak universities (not only those with the economic orientation) offer long distance education through self-instructive materials, educational technologies, internet and tutor's help. Authors of educational textbook scripts present the electronic version as well. The textbooks have a compact style, they separate crucial information from secondary data, and they specify entry knowledge necessary for the study of different chapters. Methodical instructions and system of tests and accounting examples are important components of the textbooks and they allow verifying of the accounting knowledge and skills. The new technologies change the entire educational process and they offer the education for the bigger amount of students. The important aspect of these changes is especially fast and easy access to information and motivating environment.

Some Slovak universities teach accounting course in English (as an optional course), because many Slovak students stay abroad and study at the foreign universities through different exchange programs.

The accounting education follows the national legislation of the accounting. Content of the accounts is defined by the mandatory accounting chart and Slovak accounting procedures. The aggregation of the accounts into the accounting statements is mechanical, because accounting legislation specifies a stable and unified form of these statements for all accounting units. The accounting education is therefore focused on the obtainment of the bookkeeping skills and knowledge. This way of studying tempted students to habitual matching of the accounts with the accounting transactions. Students did not think profoundly about the business transaction and its final impact on the financial situation of the accounting unit. This is a reason why it is important to modify the system of the accounting education at the Slovak universities and start to teach accounting instead of bookkeeping.

In the year of 2003, the World Bank offered an international grant and a grantee-McGill University in Montreal- prepared a new teaching plan and a curriculum of the financial accounting courses, which should be a base of a new trend in the accounting education at Slovak universities. A purpose of this grant was to provide a help to the Slovak Republic in the implementation of the World Bank's recommendations, norms and acts. A goal of this grant was to improve the accounting curriculum at the institutions of higher education, introduce courses with the practical application of the International Accounting Standards (IAS), the International Financial Reporting Standards (IFRS), the International Standards on Auditing (ISA) and courses of auditor's professional work ethic. It was also necessary to increase the number of professors and other professionals from the accounting and auditing area and to provide a high quality training in the international accounting and auditing courses at the Slovak universities.

A technical aid of the World Bank was provided for these purposes:

1. to reform the accounting curriculum at all institutions of higher education, to support a practical application of IAS/IFRS/ISA and to increase auditor's professional work ethic,
2. to organize the retraining programs for accounting and auditing instructors of the institutions of higher education by international experts,
3. to prepare textbooks and studying material in accordance with IAS/IFRS and ISA,
4. to arrange special training programs for the officials of the tax administration and other departments of the Ministry of Finance,

5. to organize the training programs for entrepreneurs, corporate management, government officials and others interested in the international dimensions of the accounting.

Therefore, a goal of the accounting education is to teach students the content and methods of the accounting. Also, students should be able to understand the accounting data and their structure. At the same time it is necessary to respect the general accounting principles of the accounting reports, the billing, the valuation and the revelation of the information according to the international instruments of the accounting regulations.

The very important output of the World Bank's project was the edition of the book for university students which were edited by members of the team of the project. The book's title was: Financial controlling with application of IAS/IFRS standards. This book was distributed to each university with economics studying program.

PROJECT OF CERTIFICATION OF THE ACCOUNTANCY PROFESSION IN THE SLOVAK REPUBLIC

The project of certification of the accountancy profession was designed in connection with the transformation of social and economic system and with the effort of the Slovak Republic to integrate into European structures. This process requires not only the adjustment of the legislation but also the harmonization of the Slovak accounting with the accounting of the European Union.

A goal of this certification project is to achieve such standard of the accounting profession and such position of the accountants in the Slovak Republic as in countries of the European Union. The accounting profession is valued as one of the most reputable and irreplaceable professions and it plays an important role in all business activities.

The Slovak Chamber of Certified Accountants was founded in 2002. The principle objective of this project was to create the educational system comparable with similar systems in Europe, in order to guarantee the recognition of certificates in other countries in the same way as it is now practiced by individual European countries (see Directive on Mutual Recognition of Professional Education of EU). [3].

The accounting profession requires not only the knowledge of accounting and taxation, but also facts from other areas such as law, economics, statistics,

managerial accounting, finances, financial strategies and controlling, financial analysis, auditing and International Accounting Standards.

The system of certification has been designed for the accountancy profession at large, i.e. it offers education in disciplines indispensable for the performance of the accounting at the lowest level of skills through to the top level of the accountancy professions.

On the other side, the system of certification has not been supported yet by any national legislation that would require certificates for performance of the accounting profession, but this project certainly helps to increase the quality of the accounting services. The Slovak Chamber of Certified Accountants is preparing legislative standards for this profession.

The Ministry of Education of the Slovak Republic approved and accredited the system of certification and this project became a part of educational system in the Slovak Republic.

The project of certification offers certificates of three levels. Each level requires different work experience, previously completed education and different courses to pass. All courses are compulsory and it is necessary to pass all exams of certain level to be able to obtain the certificate.

First level: Accounting Assistant

- Required entry education: high school diploma,
- Required work experience: one year,
- Compulsory courses to obtain the certificate: Accounting I., Economics, Legislative System of the Slovak Republic I., Taxes I., Quantitative Methods in Economics, Information Technologies.

A graduate of this level is qualified to perform the accounting in various types of companies and in the public administration. A graduate is able to deal with the common accounting transactions and to prepare the accounting statements and the tax documents.

Second level: Balance Accountant

- Required entry education: high school diploma and the first level certificate,
- Required work experience: two years,
- Compulsory courses to obtain the certificate: Accounting II., Taxes II., Managerial Accounting, Managerial Finances, Legislative System of the Slovak Republic II., Quantitative Methods and Management.

A graduate of this level is qualified to perform the accounting in the medium sized companies and supervise the accounting departments of big companies. A graduate is able to deal with most of the special accounting transactions, to generate the accounting reports and to use the instruments of managerial accounting, financial management and auditing.

Third level: Accounting Expert

- Required entry education: university degree or PhD. degree, the first level and the second level certificates,
- Required work experience: four years,
- Compulsory courses to obtain the certificate: Financial Strategy, Financial Analysis, Auditing, International Accounting Standards IAS/IFRS and Consolidation.

A graduate of this level is qualified to perform the accounting as a chief accountant in both medium sized and big companies. A holder of this certificate can apply for a license that qualifies him/her to perform the profession of the judicial expert of the economic activities.

The latest activity of Slovak Chamber of Certified Accountants is organizing of two educational programs:

- “IFRS Specialist” which is coordinated with the Slovak Chamber of Auditors,
- Educational program established with international educational institution ACCA (the Association of Chartered Certified Accountants). [3].

The aim of these programs is to prepare the interested persons for their accountancy profession on high level. This will improve their position on labor market of accountants.

CONCLUSION

Slovak Republic accessed the European Union at the day of 1st May 2004. Before accession it was important to realize and to continue in political and economic changes and reforms. The very important issue was to continue in privatization of national property and sector and to assure the economy of free trade. Transformation required creating a new character of system of accounting and accounting education. In the process of accessing the EU it was important to harmonize the accounting system of Slovakia with the frame used in the member states of the European Union. Slovak Republic prepared a new act on Accounting,

which reached a comparability of Slovak accounting jurisdiction with the directives of the EU and allowed to use IAS/IFRS in special cases.

Changes in the accounting education in the Slovak Republic are connected with the social and the economic conditions after 1989. All changes in the accounting education were made in a connection with the changes in the accounting legislation. The accounting is a compulsory course at all universities in the Slovak Republic with the economic orientation. A goal of this course is to teach students to create and to use accounting data in the financial management of profit as well as nonprofit businesses in the market economy. Slovak universities joined the World Bank's project of internalization of accounting and auditing education with aim to improve the accounting curriculum and to introduce courses with the practical application of the International Accounting Standards (IAS), the International Financial Reporting Standards (IFRS), the International Standards on Auditing (ISA) and courses of auditor's professional work ethic.

Useful tool for improvement of accountants' position on labor market was creation of Project of certification of the accountancy profession in the Slovak Republic realized by Slovak Chamber of Certified Accountants.

References

- [1] Act on Accounting 431/2002 Z. z.
- [2] IFRS Foundation and the IASB. About us [online], Published 2010. [quoted 19.9.2010]. Available from:
<<http://www.ifrs.org/The+organisation/IASCF+and+IASB.htm>>.
- [3] Slovak Chamber of Certified Accountants. [online], Published 2010. [quoted 19.9.2010]. Available from <<http://www.skcu.sk>>.
- [4] Tušan, R., Stašová, L., Accounting education in the Slovak Republic. In: Accounting Reform in Transition and Developing Economies. New York: Springer Science + Business Media, 2008. p. 337-341. ISBN 978-0-387-25707-5.

CHAPTER 23.

EDUCATIONAL AND TRAINING MODEL FOR IMPLEMENTATION OF E-CRM STRATEGY

Jovan Zubović¹

Ivana Domazet²

Aleksandra Bradić Martinović³

Abstract

In developed market economies led by fast development of IT and database software, like EU and USA, priority of business activity is two-way strategic communication between companies and their consumers. Customer relationship management (CRM) is a relatively new concept, which aims to enable more effective and efficient implementation of company objectives through analytical review of customer needs. While there are numerous software packages that support it, CRM is not technology itself - it should be a fundamental change in organizational culture. The development of appropriate software allows CRM system to become automated process, but it does not imply successful implementation. Effective CRM strategy can not be integrated overnight. Changes must occur at all company levels which must take shape in accordance with the principles of CRM. Despite high expectations, as many as 50-70% of CRM initiatives fail to deliver expected outcomes. High failure rate is a result of fast and unplanned implementation of CRM. In this paper we define and analyze six most common reasons for the failure. Further on, by using several models we present a new „CRM E&T model” which provides safer implementation of CRM.

Keywords: CRM, strategy, education, training, ET Model

¹ Jovan Zubović, Institute of Economic Science, Belgrade, Serbia

² Ivana Domazet, Institute of Economic Science, Belgrade, Serbia

³ Aleksandra Bradić Martinović, Institute of Economic Science, Belgrade, Serbia

INTRODUCTION

In the modern market economy, along with development of computer technology, Internet and database software, key business activities is becoming two-way communication between companies and consumers. Managing relationships with the consumer (customer relationship management - CRM) is a relatively new concept which is increasingly developing due to changes in management, strategic business planning and personalized services, consumers.

Development of new information technologies affects changes in business transactions from push to pull strategy specification, and changes in the position of customers in a value chain. Customers, as the main company assets are becoming more demanding and sophisticated in their shopping behavior. Hence it is necessary to consider the basic dimensions of Customer relationship management which can significantly improve competitive position: Customer selection (identification), Customer acquisition (attraction), Customer retention (holding), Customer growth (maintaining long-term relationship).

The CRM concept includes capabilities, methodologies and technologies that enable the company to operate in improved customer relationships. The purpose of CRM is to enable more effective (and efficient) implementation of company goals through a more analytical understanding of real customer needs. CRM focuses on creating and maintaining lasting relationships with customers. Although there are several commercial CRM software packages on the market which support CRM strategy, CRM is not technology per se, but rather a fundamental change in organizational philosophy with emphasis on the consumer. These software packages with appropriate hardware enable CRM system to become an automated process, with a goal to provide not only information but also to serve as an important support system for decisions making and analyzing market trends. However, successful CRM strategy can not be implemented overnight by simple installation and integration of a software package. Changes must occur at all levels, including company policy, employees' training, marketing systems, information management and other. This means that all business aspects must comply with the principles of CRM.

Core of CRM is alignment of business strategy, organizational structure, company culture, customer information and information technology, in order to meet customers' needs in all contacts with them and achieve business gains and profits. Business strategy that gives a client the central role is able to provide an answer to a question that many companies often do not know - how many clients they have and which of them are really profitable.

For this reason, in this paper we analyze potential problems in the implementation process of CRM and present education and training (ET) model, which aims to simplify and make efficient implementation of e-CRM to a company.

THE ROLE OF CRM

The aim of introducing the concept of CRM is to optimize customers' management lifecycle, increase company profitability, and meet customer needs in order to achieve the highest degree of loyalty. Multi-dimensional vertical and horizontal analysis of information collected during each transaction or interaction (purchase, technical support and other activities), delivers lot of information about customers which will serve a basis for future customer oriented strategy. Thus, CRM should not be viewed only as a technological improvement, but as an informational-technological solution that gives opportunity to create unique customer database and improve it in time. Technology influences principles of communication, and communication influences customer relationships.

Target audience along with customers includes stakeholders and interest groups. For that reason CRM could be viewed as a tool which improves synergic effects of all marketing communications. Implementation of CRM improves competitive advantage, facilitates competition, and opens foreign markets. It also helps anticipate what is necessary to change in order to become a system which will stay along with the needs of increasingly demanding global market. Prerequisites for the creation of anticipative and rational CRM companies are seven skills of rational people (customer awareness, entrepreneurial thinking, adaptability, initiative, innovation, cooperation and influence).

CRM strategic framework is interaction of four inter-related functional business processes (Domazet, 2010, pp 196-197):

1. Formulation of company strategy (business strategy and customer strategy);
2. Value creation through customer perception and awareness;
3. Integration through multiple channels (multi-channel management which includes sales force, output information, phone and direct marketing, e-commerce, mobile commerce, etc.)
4. Campaign successfulness evaluation through monitoring.

Integrated CRM improve synergic effects of processes to a greater level than each process individually would achieve. The role of CRM is integrative since business processes are viewed as integrated set of activities which provide company growth through:

- Identification, understanding and effectively customer relations
- Targeted sales of existing products and services to new and existing customers,
- Development of new attractive offers, price discounts and marketing programs for customer,
- Retention and sharing of profit with the most profitable customers.

According to Llamas-Alonso et al the effects CRM implementation may be multiple (2009, p.11):

- More effective segmentation of target groups,
- Analytical forecasting of market trends,
- Faster response to market changes,
- Profitability analysis of individual customers,
- Ability to direct sales to highly profitable customers,
- Improved quality of services and sales opportunities,
- Longer customer retention,
- Shorter sales cycles and higher profitability of the sale process,
- Synchronization and analysis of information gathered from various sources,
- Improved efficiency and flexibility of operations,
- Intensive development of competitive advantage and company reputation as a strong business partner.

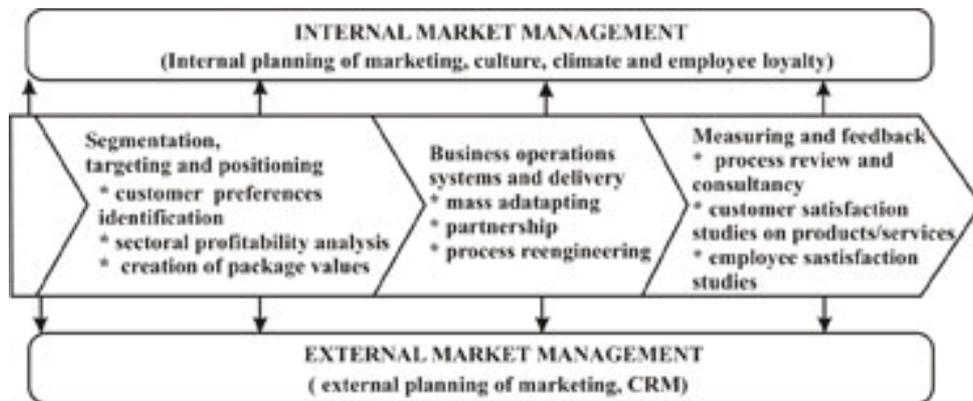
Research conducted in 2009 in EU has confirmed that the companies which have implemented CRM have: the growth of almost 60% faster than competition without developed CRM; market growth by 6% yearly, higher selling price by 10%; return on investment (ROI) of 12%; increased customer loyalty by 5% and increased profitability by 25% - 85%. Companies that have not developed CRM concept on average lose 50% of their customers every five years, out of which about 65% are lost because of poor services and communication, which is extremely expensive since the cost of acquiring new customers is five times higher than the cost of retaining the old ones (Domazet, Zubović, 2007, p. 82).

The basic requirements for successful implementation of CRM are: a good knowledge of business and competition; knowledge of end consumers, a market way of thinking, synchronized company behavior - an integrated approach to managing channels of communication, sales, and database development. These assumptions form the basis of a conceptual framework for developing a strategy CRM strategy (Payne A, Frow P. 2005, p.171).

CRM VALUE CHAIN

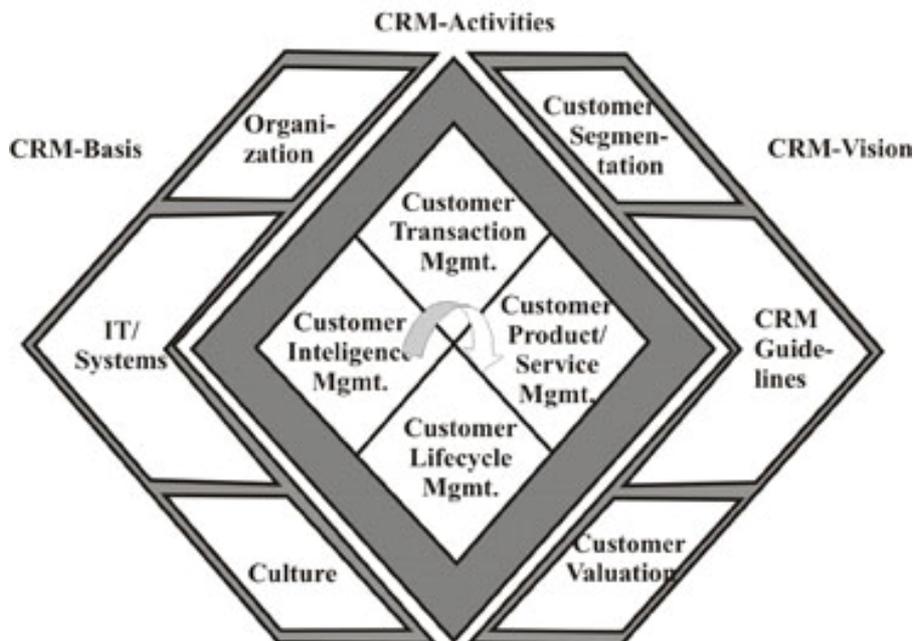
Customer relationships management as a process includes: defining bid value, segmentation, targeting and positioning, operations and delivery systems, measurement and feedback, external and internal market which is shown in Graph.

Graph 1: CRM chain



Source: Adapted on Lovreta at all (2010, p 180)

Graph 2: CRM diamond



Source: Adapted on Mack O, Mayo M i Khare A. (2005, p. 100)

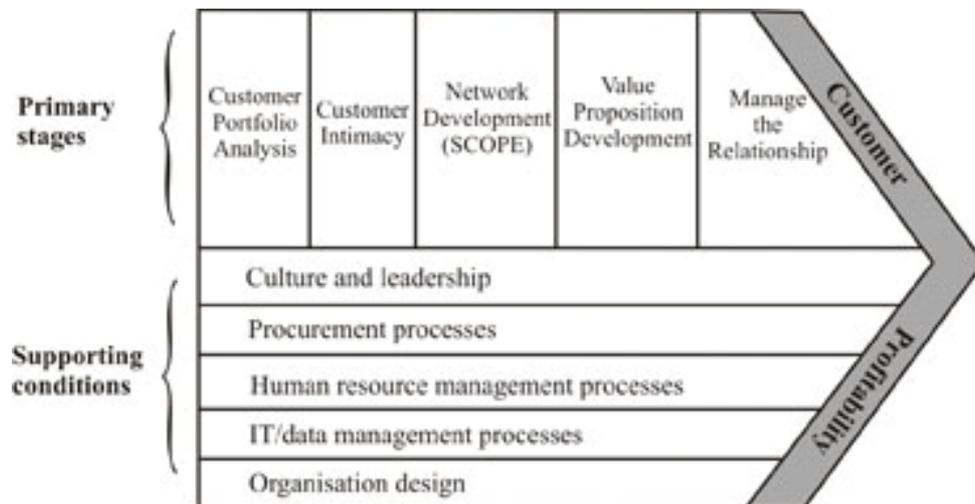
This strategic approach to organizational design is explained by Mack et al (2005) where they organized elements of a successful CRM strategy into a Diamond framework as presented on Graph 2. It focuses on vision, activities and basic business activities as key factors of successful implementation of CRM in a business environment.

Finally when compiling the above, Buttle (2001) presented “The CRM value chain (Graph 3) as a proven model which businesses can follow when developing and implementing their CRM strategies ... The model is grounded on strong theoretical principles and the practical requirements of business”.

The ultimate purpose of the CRM value chain process is to ensure that the company builds long-term mutually-beneficial relationships with its strategically-significant customers. Not all customers are strategically significant. Indeed some customers are simply too expensive to acquire and service. They buy little and infrequently; they pay late or default; they make extraordinary demands on customer service and sales resources; they demand expensive, short-run, customized output; and then they defect to competitors.

CRM value chain indicates to primary and secondary activities in building long term relationships with customers, in order to achieve higher level of their satisfaction as the basis for long-term loyalty.

Graph 3: CRM value chain



Source: Buttle F (2001)

Five primary activities in CRM value chain include:

1. Consumer Portfolio analysis - an analysis of the customer database aiming to offer different products to them.
2. Understanding the consumer – activities on understanding individual or groups of consumers and building database accessible to all stakeholders whose decisions and activities may affect the attitudes and behavior of consumers.
3. Networking - building a strong network of relationships with employees, suppliers, partners and investors who understand the requirements of target consumers. Central role in the model is given to consumers, which is surrounded by other elements: suppliers, owners, investors, employees, and other partners. Management and coordination, according to these elements, can ensure the structuring, communication and delivery of preferred products to consumers.
4. Development of products/services value - development of proposals which create value for both consumers and the company.
5. Managing relationships with customers - with a focus on structures and processes.

Supporting activities are aiming at: culture and leadership, procurement processes, Human Resources, data management process and company organizational design. In this paper we will specifically focus on the Human resources activities in CRM.

PREREQUISITES FOR CRM IMPLEMENTATION

There are different approaches to defining what necessary elements are for CRM strategy to be successfully implemented. According to Zubović, Bradić Martinović and Džopalić (2010) requirements for creation of high quality CRM models are:

- Customers satisfaction and loyalty
- Data protection
- Business intelligence tools
- Enterprise resource planning
- Creation of integrated business systems

Satisfaction, loyalty and creation of long-term value for customers

Customer satisfaction can be defined as a "customer response to the assessment of perceived differences between expectations and actual product performance, as he saw them after purchase (Veljković 2009, p. 101). Satisfaction is required for continued cooperation between customer and company and it is the main, but not

the only prerequisite for existence of loyalty. Customer satisfaction is the key to retain existing and attract new customers (Maričić 2008, p. 480).

Companies have to trace customer response to their offer, no matter if it is positive or negative. If customers are satisfied and the preference is expressed through re-purchase of products/services over the long term, we can talk about loyalty. The buyer who is loyal in addition to buying our product is spreading positive promotion and helps the company to attract new customers. An important role in creation of loyalty plays customer's trust and commitment to company brands. It is important to note that loyal customers for company are at the same time lost customers to its competitors.

The traditional approach to marketing focused more on sales than on development of long term relationship with customers. If focus of attention is on what happens after sale, on how customers see and use company's products/services and on how satisfied and loyal they are, company can create loyal customers and keep existing ones at the same time with successful and profitable business activities.

Value of customers for company is defined by the concept of Customer Lifetime Value – CLV. It represents a net present value of future profits expected from customer's purchases during his lifetime. By applying the appropriate discount rate we can estimate "gross" lifetime value. From that amount we should subtracted the sum of the expected costs of attracting customers, customer retention expenses, sales costs and expenses of serving the customer and thus obtain a net profit realized from a customer in a lifetime.

Privacy protection as the basis for customer confidence

Personalized CRM is based on the principle that each customer should be treated separately. It refers to each physical person who buys products for personal consumption as well as to all companies which purchase products to create their own products/services (for further reproduction). For that principle to be implemented successfully it is necessary to gather data about each customer, load it into information system, process it and store so as to create a model which can provide desired information about customers. In order to for customers to be willing to give information we need from them, they must be sure that their privacy is protected from abuse.

Companies should devote great efforts to show their customers that they understand the problem of privacy. For the company is important to inform each customer, preferably in written form about attitudes towards protection of privacy, about how collected data will be used and to ensure that none of the data will be

available to third parties. Confidentiality and privacy as the elements of information security policy in business intelligence systems can be achieved by information security policies and procedures, encryption and security tools (Vujović 2005, p. 421).

In developed countries security of data, information systems and telecommunications became one of the priority tasks of legal systems. As the information technology is developing so is the security issue transferred from national to an international plan. International organizations and associations are slowly dealing with these problems, and in certain cases they form special teams to monitor and address growing risks and opportunities brought by new technologies.

Some of the issues (data protection, privacy, etc) are found in the Universal Declaration of Human Rights, European Convention on Human Rights, the Universal Postal Convention, the International Convention on Telecommunications, and so on. This has created a framework to adapt laws to the needs, changes and demands of modern information development in the international level (Drakulić 1996, p.12).

The growing need for information and fear from their abuse has led to the necessity of its special treatment. Technical capacity of storage, processing, transmission and use of data are all larger. Number of users of data is continuously growing, as well is the number entities about which and from which data is collected. Expansion of IT technology has imposed the necessity of applying different methods to ensure safety of data.

Internet as a specific electronic media, offers technologically new approach to business activities, which requires innovation in legal regulation. Widespread use of e-commerce created a need to regulate basic concepts, procedures, messages integrity, authenticity of signatures, security of operations and a many other issues. Regulation of electronic signatures, quality of products and services, customer protection and intellectual property, and the fight against computer crime are some of the issues to be covered by changes in legal system.

Determinants of Business Intelligence

According to Ćirić (2006, p. 21) Business Intelligence (BI) represents the all potential use of data and information in the enterprise for making better business decisions in accordance with the identification of new business opportunities, especially when decisions are complex and non-routine, as it is the case with CRM. Business Intelligence refers to applications and technologies needed for consolidation, analysis and enabling of access to large amount of data which

should simplify better business and strategic decisions making (Rainer, Turban 2009, p. 268.)

BI systems enable company to know their customers behavior and their reactions, competitors' and business partners' expectations, as well as history of events from external and internal environment. The possibility of understanding and presentation of obtained information in a clear and rational way is of a vital importance for management decisions making.

The main objectives of introducing BI solutions are: faster access to data, generating various reports, accuracy and clarity in presenting the information to multiple users, integrated platforms and applications, secure and personalized custom work, cooperative environment and many others. BI Software supports tracking actions and results of operations and their comparison with pre-defined goals. The data from different systems and applications are converging and integrating in a Data Warehouse (DW) in order to provide analysis of key indicators and trends and indicate the possible deviations from the original plans. DW provides delivery of information to all interested users. The main reason for use of DW is that the analysts can make complex search and perform a variety analyses on given information and predict the effects of decisions and the consequences that they bring along.

There are two types of information systems included in BI:

- Systems which provide tools for data analysis including decision support systems (DSS), data mining (DM) and multidimensional data analysis (Online Analytical Processing - OLAP)
- Systems for providing easy access to data in structured form - digital dashboards.

Decision support systems (DSS) are computer based information systems which combine models and data in an attempt to solve semi structured problems with major role played by consumers (Turban et all 2003, p. 445). They are practically a collection of integrated software applications and hardware which represent a standing point for decision making process in an organization. Companies from all business sectors rely on these models, techniques and tools with a goal of finding an answer to everyday business issues. In an effort to clarify the term, DS systems can be separated into seven broad categories, each aiding decision making by different methods: Communication Driven, Data-Driven, Document-Driven, Knowledge-Driven, Model-Driven, Spreadsheet-based and Web-based.

Data mining (DM) provides selection of intuitive information from large databases and represents a powerful technology which has a large potential to

help companies focus on most important information in their data warehouses. This tool should predict future trends and consumer behavior and in such a way help companies to make proactive decisions based on knowledge. Automated analysis of DM help in issues which were traditionally time consuming to resolve. Practical DM is able to find hidden information which is unexpected even to experts.

Multidimensional data analysis (OLAP) is often used when it is necessary to support large amount of repetitive small transactions, which is the case with purchasing analysis. OLAP databases are used to store historical data over a long period of time, often collected from several data sources, and the size of a typical OLAP database is often orders of magnitude larger than that of an ordinary OLTP database. OLAP databases are not updated constantly, but they are loaded on a regular basis such as every night, every week-end or at the end of the month (Chaudhuri, Dayal 1997, pp.65-74). The core of the OLAP technology is the data cube, which is a multidimensional database model. The model consists of dimensions and numeric metrics which are referred to as measures. The measures are numerical data such as revenue, cost, sales and budget. Those are dependent upon the dimensions, which are used to group the data similar to the group by operator in relational databases. Typical dimensions are time, location and product, and they are often organized in hierarchies. A hierarchy is a structure that defines levels of granularity of a dimension and the relationship between those levels. A time dimension can for example have hours as the finest granularity and higher up the hierarchy can contain days, months and years. When a cube is queried for a certain measure, ranges of one or several dimensions can be selected to filter the data.

Digital Dashboards and scorecards are multilayered performance management systems, built on a BI and data integration infrastructure, that enable organizations to measure, monitor, and manage business activity using both financial and non-financial measures. They are full-fledged business information systems designed to help organizations achieve strategic objectives. They help measure the past, monitor the present, and forecast the future, allowing an organization to adjust its strategy and tactics in real time to optimize performance (Eckerson 2006, p. 5). They are user friendly with lots of graphics, and most important they enable managers to access detailed reports on exceptions from rules. Important use of digital dashboard supporting information needs of managers is management cockpit. It is a room for strategic management in which there is a large amount of digital tables which provides to high level managers better managerial abilities.

BI allows the company to make decisions in the right time on the basis of information, which can be source for gaining competitive advantage. In order for BI to operate effectively, the company must have: appropriate hardware and software, secure access to database, large amounts of information and the ability to measure performance.

The information is most often considered as the second most important company resource, along with human resources, and they both are useless if not used properly. BI allows collecting information on market trends and allows entrance to the market with new produce/service in response to the demands and desires of customers. Knowledge about competitors, business partners, customers, trends, key economic indicators are very important in deciding when is the right time to expand or reduce business operations.

High quality of reports can be provided only if the end users may combine knowledge from various fields. Cooperation between IT experts and business users need to prepare reports which are easily understandable and graphs and tables are clear because end-users do not have knowledge on platform technical capabilities. It is important to understand who the main beneficiaries for each functional set of reports. It often happens that end-users reject innovations because they are not accustomed with working on complete BI solutions. Users need training which requires lot of time and it is expensive. The aim of training is to teach users how to get the most from the database and to actively participate in creating BI reports.

Enterprise Resource Planning

Integrated solution, known as Enterprise Resource Planning (ERP) is the process of planning and management of resources and its application within company. The concept of ERP is often misinterpreted, as it does not plan resources. The main goal of ERP is to integrate all departments and functions throughout the company in a single computer system that can serve all company needs. It is not only the integration of technological components, but of the entire organizational structure. ERP software, therefore, goes beyond the boundaries of functional departments.

This system evolved on the market in the early 1990s. At that time the biggest problem in business activities was getting timely and accurate information. Today we are looking on how to use the information we have. In order to meet market demand, developers have designed software that combines several different requirements. Successful companies are abandoning non-integrated IS that are oriented to individual functional areas and are using software solutions that

integrate the value chain, optimal use of resources and synchronization of planning, organizing, leading and control.

Development of ERP system may be divided into two phases. The first generation of ERP solutions focused on business transactions and has not provided computerized models necessary for real time response to changes in demand, supply, labor or facilities. This problem was solved with second-generation ERP, which began its development at the beginning of 21st century. This generation of software is a web-based and allows both employees and external resources (suppliers and customers) an access to system data in real time.

ERP software is extremely complex for use. Companies often need to change existing business processes in order to fit the format of the selected software. Besides, its implementation process lasts for months, the software is expensive and requires professional consulting assistance which cost large amounts of money, and training of employees to work on it takes long time.

The basic idea of the implementation of Information and Communication Technology (ICT) is based on the need to increase productivity, efficiency and effectiveness in carrying out business activities. The first step in meeting those needs is selection of appropriate IS from a category of business ERP systems. Business IS in this category generally include support for most business functions at all levels, from operational tasks to strategic management, and if properly implemented within the company, may bring positive effects very fast, and pay back money invested in them quickly (Ćirić, 2006, p. 24).

According to Ptak and Schragenheim (2004, p.89) in deciding on ERP software implementation one of the most difficult issues is how to manage expectations - process reengineering. A company that introduces ERP system must be aware that its successful implementation requires change of business practices. This change is most complicated part of the whole process of ERP implementation. It is important to focus not only on the total time of implementation but on understanding why the company needs ERP and how such a system would improve its operations. The success of ERP highly depends on the team working on the project. The software is very sophisticated and expensive and its implementation is very complex. In order to avoid the dropouts of skilled workers it is necessary to develop a good motivational mechanism in order to avoid employment of external consultants for the same job. Once the software is installed, the team members become very valuable for the company because they know much more about all the processes than other workers and managers. Companies can not afford to return team members to their previous jobs because after implementation of ERP more jobs are created, at least in the medium term.

Benefits of implementing ERP solutions can be divided into four categories: market share, customer satisfaction, profit margins, and return on investment stakeholders. However, it requires discipline and skill in project management. The discipline of project management requires clear definition of tasks, individuals responsible for their completion, and milestones to indicate the progress. Project teams should include IT professionals, and both internal and external consultants. If the team is created and led properly, implementation of ERP software can be done on time and within a planned budget.

It is important to note that despite CRM is a module of ERP software, the lines between CRM and ERP are beginning to blur as ERP vendors incorporate CRM functions into their software and CRM vendors add ERP capabilities to their offerings. Both industries are working to develop all-in-one applications to streamline internal operations and customer activities.

Integrated Business Systems

Development of ICT and the occurrence of various software solutions, have led to the development of new business models that extend marketing concepts, strategy and tactics in the market. Companies are increasingly taking place in a dynamic and global environment with numerous partners. Relationships that are established are more complex and customers are more demanding and they have lots of information. Company can be viewed as a system in which several functions are interdependent and IS should be integrated in such a way as to provide information to all functions that are in interdependent relationship. Development of information systems is very complex, as it gathers information needs from all levels of management, and it should standardize all procedures (Vujović 2005, p.160).

Processes which create added value in the company are taking place in a dynamic environment with many competitors, and as these relationships are becoming more complex, so is growing the need to develop new software solutions that will support all processes related to these relationships. The implemented software processes information on demand, supply, forecasting results, available inventory and manufacturing capacity in real time. Deshmukh (2006, p. 33) notes that for that purpose integrated solutions which combine specialized management software (also known as xRM applications) like: Customer Relationship Management (CRM), Supplier Relationship Management (SRM), Partner Relationship Management (PRM) and Employee Relationship Management (ERM) are developed.

These solutions, combined with ERP systems and Supply Chain Management (SCM) enable that value optimization, made within long-term business processes among enterprises, business partners and employees, becomes center part of company's corporate strategy. CRM software has to meet demand and expectations both from the company and the customers and to provide close cooperation with other organizational units and stakeholders.

Introduction of CRM is fundamental change in the quality of interaction with customers. Organizational design is changing in order to have more effective interaction, and to provide greater added value to customers, which will lead to increased profitability. Having the right information at the right time and having effective interaction throughout the supply channel is crucial to survive in the market. It is important that everyone understands that CRM is a new way of doing business. The introduction of CRM will modify traditional behavior toward customers (Newell, 2003).

Despite achieving return on investment in IT, modern companies around the world continue to spend significant amounts of money on IT in order to raise efficiency and improve its competitive position in the market (Picolli 2008, p.22).

CRM FAILURE

Unlike expectations of majority, failure rates of CRM projects according to available statistics are very surprisingly high. This is the basic list of CRM failure stats for the period 2001-2009 is shown below (Krigsman 2009).

- 2001 - Gartner Group: 50%
- 2002 - Butler Group: 70%
- 2002 - Selling Power, CSO Forum: 69.3%
- 2005 - AMR Research: 18%
- 2006 - AMR Research: 31%
- 2007 - AMR Research: 29%
- 2007 - Economist Intelligence Unit: 56%
- 2009 - Forrester Research: 47%

Depending on the source as many as 50-70% of CRM initiatives fail to deliver expected outcomes. It is possible to discover six common reasons for its failure:

1. Strategic Errors

Strategic errors which result in CRM implementation failure include the following issues:

- The right leadership is not in place: a business leader needs to be in charge of the CRM effort not in IT sector. Successful CRM is a major business initiative, not a technology initiative.
- CRM Strategy is not clear: Strategy and vision need to define what customers experience at each interaction, and how will they be handled. The vision needs to be clear to everyone. A major pitfall occurs when business constituents have differing expectations of CRM's benefits. Sharing a common vision is a key.
- The CRM strategy is different from the business strategy: CRM is sometimes seen as a lower level automation step or patch, rather than a top level re-thinking of how customers are served. Your CRM strategy and business strategy need complete alignment.
- Processes are not re-designed: CRM is an expensive way to automate inefficient or ineffective processes. Companies obtain results from newly implemented CRM if they begin with focus on sales processes. The steps taken should include:
 - o Defining and developing new market segments
 - o Increasing the ability to: Cross-sell, Up-sell, Retain, Acquire, Reactivate, Experience (Enhancement through better customer interaction strategies)
- Customers are not consulted: It is crucial to know what customers think of company before, during, and after the CRM implementation? It is very often the case that the "C" in "CRM" is not consulted in all phases of the initiative.
- Unclear metrics: It's critical to review plan to measure key performance indicators in order to determine the real business value of CRM implementation. The quality of metrics has been a deciding factor in making or breaking many CRM projects.

2. Implementation Errors

- Inability to link channels: It is necessary to consider all customer interactions and processes. It is often happening that projects are focused on some parts of customer experience, but ran into trouble when they were unable to link with or serve well all parts of the customer experience.
- Lack of readiness for continuous improvement: Implementation process of CRM may be bumpy. Company should be ready to redefine strategies, goals, metrics, and learn from feedback. Successful CRM projects are rarely completely successful from the initial outset.

3. People errors

- Introducing CRM to all employees at the same time: Introduction of CRM to all is very difficult. It is better to start with a small team of employees chosen to represent a company. Initial project should make a dramatic difference, with clear key performance indicators for all other employees.
- Changing the system, but not the people: It's easy to focus too much on the new technologies and processes rather than focusing first on the people who will use them successfully. Employee feedback is required and overall buy-in in order to avoid failure. The entire company needs to own "customer-first." They need to see that the CRM vision takes them to a better place than where they are now.

4. Process errors

- Instead of enhancing new processes, changing the CRM system to fit old processes: To avoid the pain of revision, some companies don't take the opportunity to re-engineer and optimize their processes. They look to CRM as a patch rather than one completely new approach to improve customer satisfaction, grow sales, and upgrade productivity.

5. Technology Errors

- Customer data is in more places than expected: As implementation gets underway, key data can turn up in several parallel systems which create confusion. Gathering stage needs to be careful and thorough.
- Different CRM solutions are in place but do not work well together: Often marketing, sales and service departments have different CRM software installed to track the same customers. As a result, these departments can't share data, and have redundant support and administration costs.

6. Customer Management Errors

- Customers do not experience new benefits: Company is implementing CRM in order to satisfy customers. Increased satisfaction among customers along with increased customer value to your business should always be looked upon during planning and implementation of CRM, which is often avoided.

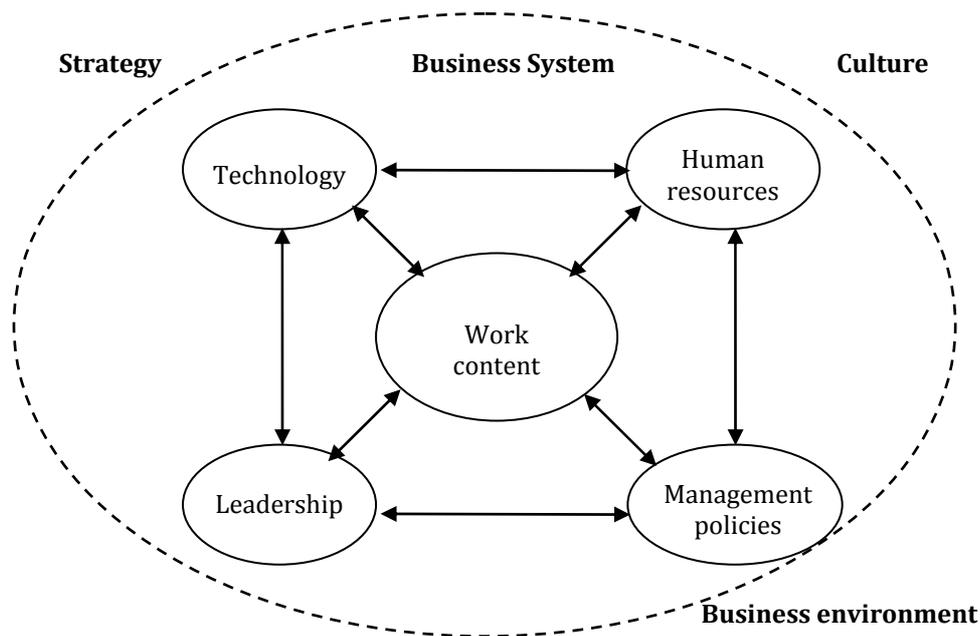
ENTERPRISE ORGANIZATION STRUCTURE

The first step in reducing the risk of CRM implementation failure is to understand enterprise organization structure with its key elements (Graph 4):

- Work scope

- Technology
- Leadership
- Human resources
- Management practice and policies

Graph 4: Enterprise organization structure



Source: Adapted on Beer et al (1985, p. 570)

Work content includes the tasks and roles performed by employees. It is a “set of activities undertaken in the development, production and distribution of goods or services” (Sinha and Van de Ven, 2005). Work content includes work scope, control, diversity, needs and feedback that are directly related to work tasks. Work scope varies depending on the horizontal and vertical specialization. Control refers to the level of control that employees have on their operational aspects of work such as speed, setting deadlines for certain actions or adopting strategies. Diversity refers to the aspect of work that shows the level of stability in business activities over time. Needs are the requirements, both physical and intellectual (cognitive) in carrying out business activities. Here we must also include emotional intelligence especially in activities that are cognitively demanding (Glomb et al 2004). Feedback is used to assess how well the work has been done. Some tasks in companies are not automated, so the feedback is more difficult. Although feedback can be very beneficial both for the organization and

the employee, constant surveillance can lead to mental disorders and low impact on the business (Stanton 2000).

Technology – Company operations are heavily influenced by technical and technological subsystems. Technology of work task may directly influence the ability to control the working activities (Mintzberg 1979). In a very controlled and automated technical systems, such as robotized plants or automatic call centers possibility of discretion in terms of how to work performance (speed, order, etc..) is practically non-existent. Some technology systems are so sophisticated and complex, that they completely automate the cognitive part of work, resulting with employees who are no longer aware of any work they do (Wall et al 2002). Different levels of technological improvement enable some tasks to become entirely predictable and on the other hand where it is impossible to predict the result of the work.

Leadership - style of leadership (managers and supervisors) can also shape the content of their work and link it with other elements of the business system. For example a high level of autonomy can be used as a substitute for transactional and transformative leadership behavior (Whittington and others 2004). Oppositely direct involvement of managers or supervisors in the process of allocation of tasks to employees, setting up the dynamics of work and decide on methods of work will directly reduce the level of competence and discretion that employees have. If the jobs and tasks are highly specialized there is a need for the first line of management to act as a linking mechanism in coordinating activities of other individuals. If there is a grouping of activities and tasks within one job, or a work team, the need for coordination of first-line management will be significantly lower.

Human Resources – Successful implementation of business activities is directly depending on the level of dedication to work and skills of employees. The level of knowledge, skills and abilities used by employees influence specialization and the work load. Work roles often do not fully capitalize on existing knowledge, skills and talents of employees (Morrison et al 2005). That is why it is very important to have good knowledge about employees and what they are able to do. CRM value chain and enterprise organization structure emphasize the importance of human resources in business activities. This means that human resources are not only important in implementing organizational strategies, but they are also important in the implementation process. Several researchers have described the importance of process of human capital creation for improvement of competitiveness (Baker et al, 1997; Paauwe, 2004; MacMillan i Tampoe, 2000, Zubović 2010). Human capital is created in a process of lifelong education and training.

Management policies and practice - Each group of tasks and responsibilities must be accompanied with a spectrum of appropriate management practices and policies. Scientists recognize that different approaches to business systems are often associated with different “loads” of human resource management practices (eg Pil and Mac Duffie 1996). Models of team effectiveness usually represent the factors of organizational context (training, information and reward systems) as key inputs to effective teamwork. In other literature on human resource management, the value of rigorous selection techniques, the uncertainty of earnings, extensive training and development, guarantee for staying at work and other methods of pressure on the workers under harsh criticism. (Eg Pfeffer 1998 and O'Reilly and Pfeffer 2000).

Five elements of organization structure must be well analyzed before implementation of CRM in an organization. Each of five elements contains certain level of interaction between people who are operating in the company. It is crucial that ERP software as integral part of CRM include all these interactions in its structure.

CRM EDUCATION AND TRAINING (E&T) MODEL

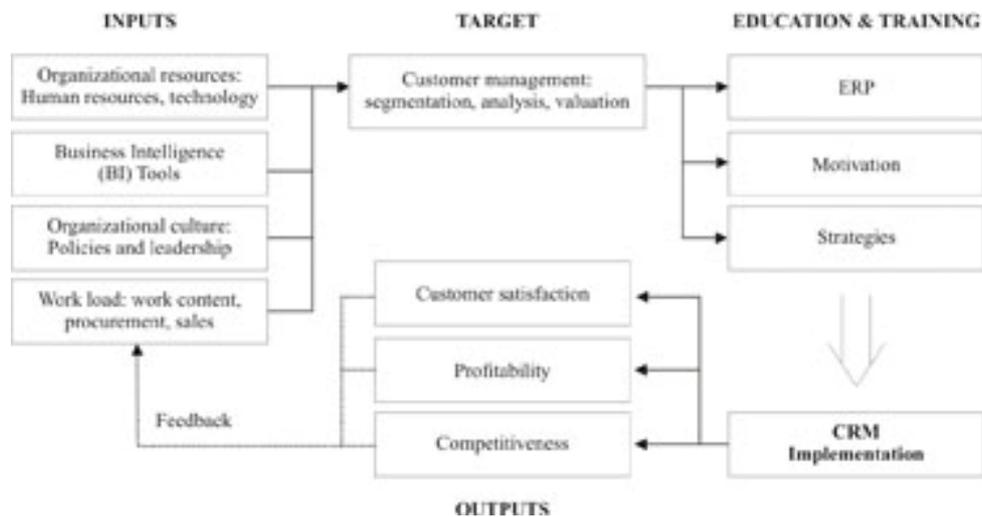
Programming of activities in education and training in an organization include a set of planned activities with a goal to ensure a good preparation for the implementation of training and education (Pržulj 2007, 221). Strategically planned education and training will create more skilled, innovative, productive and loyal employees. In this way, organizations can gain competitive advantage over their less progressive competition. If combined with new technological solutions implemented in software packages such strategic approach can significantly reduce the risk of CRM implementation failure.

The aim of training is to enable all employees to achieve and maintain the skills necessary to perform their role in the new business processes. While the government through public funding of education is in charge of providing new entrants to the labor market with adequate qualifications, for continued training organizations and individuals are responsible. Fitts and Posner (1967) defined a system of three phases for acquiring skills. Phases occur in the following format:

- Cognitive phase in which the individual understands the nature of the work and how it performs
- Associative phase in which the individual associates inputs with the appropriate activities without interference of external environment
- Autonomous phase in which the individual performs tasks independently without control.

Unlike in CRM value chain model presented by Buttle (Graph 3) which only partially focuses on training, CRM E&T Model (Graph 5) has education and training as an important segment of CRM implementation process. In order to reduce risks of CRM failure this model is designed to promote strategically oriented implementation of CRM strategy with special attention to education and training in three key elements: ERP, motivation and strategies. It is a combination of CRM diamond (Graph 2), CRM value chain (Graph 3) and business enterprise organization structure (Graph 4) models, taking in account prerequisites for successful implementation of CRM.

Graph 5: CRM E&T Model



Graph 5 shows the complete process of CRM implementation, which apart technological innovation represents a change in overall organizational behavior and culture. This process is presented as a cycle in which it is necessary analyze all *Inputs* including: organizational resources, a complete system of Business Intelligence, organizational culture and business processes. These inputs are used to promote CRM's primary role - to view customers as a key figure (*Target*), which must be carefully segmented, analyzed and evaluated. As noted above, unlike other models, in this model we included the phase of education and training. A complex system of ERP in any case must not be implemented without quality staff training in its use. Also, it is necessary to conduct training on the motivation of employees for a complete change in the way that CRM is a business.

Sector of HRM must play an essential role in the process of *Education and training*, in order to avoid employees' negative response to the new business

system. For that reason company management together with HRM sector needs to motivate employees and communicate with them how important part of the team they are, and how the innovations in the work design are designed for the benefit of the whole company, by gaining new and retaining old consumers with less efforts, while improving business results. Basic HRM tools in the process of motivation for quality implementation of CRM are: strategic rewards, internal communications and coordination, improved environment, education and training and strengthening of motivation systems. It is also necessary to inform employees about new strategies the company is planning to adopt and create training programs for effective achievement of the objectives and company strategies.

Only after training is completed company should move to implementation of CRM. Such systematic introduction of CRM should result with expected *Outputs* which include: customer satisfaction, increased profitability and improved competitiveness. In this way all three outputs can be achieved simultaneously, with a significantly reduced risk of CRM implementation failure.

Finally the process of CRM should not be viewed as one-time activity, but rather as a continuous process. *Feedback* obtained in analysis of achieved *Outputs* needs to be constantly aligned with company *Inputs* to ensure that CRM can be improved in real time.

CONCLUSION

The basic role of CRM is to integrate company activities through more effective segmentation of target groups, analytical forecasting of market trends, faster response to market changes, profitability analysis of individual customers, ability to direct sales to highly profitable customers, improved quality of services and sales opportunities, longer customer retention, shorter sales cycles and higher profitability of the sale process, synchronization and analysis of information gathered from various sources, improved efficiency and flexibility of operations, intensive development of competitive advantage and company reputation as a strong business partner.

Requirements for creation of high quality CRM models which will include all activities are: customers' satisfaction and loyalty; data protection, business intelligence tools, enterprise resource planning and creation of integrated business systems. As many as 70% of CRM initiatives fail to deliver expected outcomes due to six reasons: Strategic Errors; Implementation Errors; People errors; Process errors; Technology Errors; Customer Management Errors. The first step in reducing the risk of CRM implementation failure is to understand enterprise

organization structure with its key elements - Work scope, Technology, Leadership, Human resources, Management practice and policies. Five elements of organization structure must be well analyzed before implementation of CRM in a company.

In this paper we have combined several different models and created new CRM E&T model which focuses on formulating strategies, motivating employees and implementing advanced ERP systems. Major difference is that this model requires three different types of training to be performed before CRM implementation. CRM E&T model envisages the possibility for improvements, so the feedback is in each new cycle used as input element for the system. Technology and software solutions in the field of CRM are changing rapidly and it is necessary to introduce them into updated model.

We have to point out that modal is not tested in practice, and empirical research on a sample of firms which plan to introduce CRM is necessary in order to compare failure rates.

References

- [1] Baker, B. E., Huselid, M.A., Pickus, P.S., and Spratt, M.F (1997) HR as a source of shareholders value: research and recommendation. Human Resource Management
- [2] Buttle F (2001) The CRM Value Chain, Marketing Business, available on http://www.wtcbrescia.it/upload/0-FButtle_CRMvalchain.pdf
- [3] Chaudhuri, S, Dayal, U (1997), An Overview of Data Warehousing and OLAP Technology, SIGMOD Rec., 26(1)
- [4] Ćirić B (2006) Business Intelligence, Data Status, Belgrade
- [5] Deshmukh A (2006) Digital Accounting – The Effect of the Internet and ERP on Accounting, Idea Group Inc, IRM Press, London, pg
- [6] Drakulić M (1996) Osnovi kompjuterskog prava, Društvo operacionih istraživača Jugoslavije – DOPIS, Belgrade
- [7] Domazet I, Zubović J. (2007) CRM (Customer Relationship Management): A factor of global competitiveness improvement, thematic proceedings Management and marketing under globalization, Faculty of Economics, Belgrade.
- [8] Domazet I. (2010), Integrisane marketing komunikacije, doctoral thesis, Belgrade banking academy, Belgrade
- [9] Eckerson, W (2006), Deploying Dashboards and Scorecards, The Data Warehouseing Institute, www.tdwi.org
- [10] Krigsman M (2009) IT Project failures, available on <http://blogs.zdnet.com/projectfailures/?p=4967> (accessed 30.04.2010)
- [11] Llamas-Alonso, A. I., et al., (2009), Designing a Predictive Performance Measurement and Control System to Maximize CRM Success, Journal of Marketing Channels, Vo. 16/1-41
- [12] Lovreta et al (2010) Menadžment odnosa sa kupcima, Data Status

- [13] MacMillan, H., and Tampoe, M (2000) "Strategic Management: Process, Content and Implementation, Oxford: Oxford University Press.
- [14] Mack O, Mayo M i Khare A. (2005) „A Strategic Approach for Successful CRM: A European Perspective” Problems and Perspectives in Management, 2/2005
- [15] Maričić B (2008) Customer Behavior, Faculty of Economics, University of Belgrade, Čugura, Belgrade
- [16] Newell F (2003) Why CRM Doesn't Work: How to Win by Letting Customers Manage the Relationship, Bloomberg
- [17] Paauwe J (2004) HRM and Performance, Achieving long term viability, Oxford University Press, 2004.
- [18] Payne A, Frow P. "A Strategic Framework for Customer Relationship Management", Journal of Marketing Vol.69, October 2005
- [19] Piccoli G., Information Systems for Managers, John Wiley & Sons, Inc., SAD, 2008
- [20] Ptak C., Schragenheim E (2004) ERP Tools, Techniques and Applications for Integrating the Supply Chain, St. Luise Press, CRC Press LLC, Florida¹
- [21] Rainer K, Turban E (2009), Introduction to Information Systems, Data Status, Belgrade
- [22] Turban, E, Mclean, E, Wetherbe, J. (2003), Information technology for management, Zavod za udžbenike i nastavna sredstva, Belgrade.
- [23] Veljković S (2009) Service Marketing, Faculty of Economics, University of Belgrade, Čugura, Belgrade
- [24] Vujović S (2005) Informacioni sistemi u poslovanju i menadžmentu, Slobomir P University, Republika Srpska, Čugura, Belgrade
- [25] Zubović, Bradić Martinović and Dzopalić (2010) Effective Implementation of e-CRM concept, Polish Journal of Management, #1, Chestochova
- [26] Zubović (2010) Razvoj privrede zasnovan na ulaganjima u ljudske resurse i stranim investicijama, Institute of economic sciences, Belgrade

CHAPTER 24.

POLICY OF SMALL FARMS SUBSIDIZING IN THE FUNCTION OF ECONOMIC AND SOCIAL DEVELOPMENT OF VILLAGES IN SERBIA

Božo Drašković¹

Zoran Rajković²

Duško Bodroža³

Abstract

Before the subsequent process of economic transition from a socialist to a market economy, over 80% of arable agricultural land in Serbia has been in private hands. State and social ownership, before privatization, existed in large agricultural complexes. The right of private ownership of agricultural land was limited to 10 ha in the plains and 20 ha in mountainous areas.

The economic reforms over the past 10 years have led to a process of enlarging properties. Small and medium-sized farms and 10 ha of land present the factor that absorbs a part of rising unemployment caused by privatization and restructuring of social and state-owned enterprises in Serbia. The state economic policy is focused on the subventions of small farms through incentives for the purchase of equipment, seeds, energy, and protection of resources. The increase of economic efficiency of small farms is an important factor of development. The maintaining the level of economic survival of small farms has an important demographic and social function. The demographic is reflected in the sustainable density of population in certain areas of the country. The social function is important from the standpoint of the struggle against poverty and unemployment.

Key words: *farms, incentives, economic efficiency, social efficiency, unemployment, the structure of agricultural production in small farms*

¹ Božo Drašković, Institute of Economic Sciences Belgrade, Serbia

² Zoran Rajković, Institute of Economic Sciences Belgrade, Serbia

³ Duško Bodroža, Institute of Economic Sciences Belgrade, Serbia

INTRODUCTION

The structure of agricultural land ownership in the former Yugoslavia and Serbia, in the second half of twentieth century, and after the Second World War followed by the agrarian reform, was conditioned on the ideological and political of the ruling social government. In accordance with the ideology of social and economic equity, resources in agriculture were divided between the state and private entities. From the new formed agro-industrial complex, the state possessed about 18%, and private household farms had about 82% of all arable land. Thus, although during this period Serbia was a country of communism, a resource of agricultural land was not nationalized. The legislation from this period limited the concentration of agricultural land property ownership, so the farm household could hold up to 10 hectares of land in plan areas, and 20 of hilly and mountainous areas of the country. The private sector in agriculture was limited to primary production and processing for their needs, while state-owned agricultural industry sector organized after the fifties of the twentieth century in the form of self-management enterprises, kept buying the market surplus. The prices of key primary products were in regime of price control, that is, the state prescribed limited purchase prices of wheat and maize. Regardless the price control regime, in function was also the parallel market of agricultural products where prices were formed based on supply and demand principles. The economic state's incentives before the period of reforms that begun in Serbia in 1990, were primarily focused on large social agricultural enterprises, while the primary production private sector benefited from the depressed energy prices and subsidies for agricultural machinery purchase. Between the end of the twentieth century and the first decade of this one, there was a considerable changes of economic policy, and consequently that created the changes of the economic policy agricultural sector. The agricultural primary and processing industry were subjected to the process of privatization, and the way of pricing was predominantly left to market regulation, particularly in the period after the year 2000. Margins on the agricultural land ownership have been abolished. Due to the implementation and development of agricultural practices, the physical volume of agricultural production has increased manifold in the last 50 years.

AVAILABLE NATURAL CAPACITIES AND PRODUCTIVITY TRENDS

Serbia is geographically placed in the climatic area that provides favorable natural conditions for production of essential crops, corn, wheat, barley, sunflower, sugar beet. There are good prerequisites for fruit growing and livestock development.

Serbia has more than 5 million hectares of agricultural land. The ownership organizational structure manifests that family farms own 82% of agricultural land, and only 18%, or 900 hectares possess companies and cooperatives. Considering the fact that the agricultural enterprises are privatized, one part of the agricultural land belongs to these companies, and the other is state-owned. State-owned land is leased to enterprises or businesses.

Table 1: Ownership structure of agricultural land in Serbia

	ha	%
Total	5.097	100%
Agricultural enterprises and cooperatives	900	18%
Family households	4.197	82%

Data source: Statistical Yearbook of Serbia 2009

The agricultural population in Serbia in 1953 counted 2.4 million people, or 70.6% of total population. According to the last census in 2002, the population engaged in agriculture amounted 582 thousand or 22% of the total number⁴.

The production of key crops, wheat, and corn has increased manifold, measured by the production growth per hectare in the period from 1947 to 2005. From 1847 to 1947, the average wheat production per hectare was about 1 ton. The production per hectare has been increasing the way that after the year 1977, the outcome per hectare was more than 3 tons, and now the range is 3 to 4 tons. Maize yield per hectare in 1847 was approximately 1 ton, in 1947 it was around 1.5 tons, in 1977, about 4 tons, reaching in 2005 the average 5 tons per hectare. Every year the average corn inoculation is on 1.2 million hectares, and total realized production is in the range 7 to 7 million tons. The average annual area under wheat comprises 500 to 600 thousand hectares, and the realized production is in the range of 1.8 to 2 million tons.

Of total fruit production, plum takes predominant place, in 2006 the production was 556 thousand tons, or 13.3 kg per tree. The apple takes the second place in production, amounting 240 thousand tons, or 16.4 kg per tree.

In animal husbandry in Serbia, based on data from 2006, counting the number of cattle per head, the most frequent is sheep with 1.5 million, then cow with about 622 thousand animals, and at the end are horses with only 20 thousand heads.

⁴ Two centuries of Serbian development, Statistical review, Belgrade 2008, p 75.

Number of agricultural holdings in Serbia, at the end of the nineteenth century, and the list formed in 1897, amounted to 242.684. The household was very fragmented. About 99.4% households possessed up to 10 hectares of land, and only 0.06% held more than 10 hectares.

The structure of farm households at the beginning of the twenty first century has changes very little from the noticed more than one century ago.

Table 2: Ownership agricultural households structure in Serbia, year 2009

Size of the household	Family households	% share in total number	Households without individual farmers	% share in total number	Households with individual farmers	% share in total number
To 0,5 ha	111.356	14%	103.439	13%	7.917	1%
0,5 to 2 ha	248.901	32%	202.531	26%	46.370	6%
2 to 4 ha	182.782	23%	115.956	15%	66.826	9%
4 to 6 ha	103.626	13%	51.378	7%	52.248	7%
6 to 10 ha	89.094	11%	35.131	5%	53.963	7%
10 to 20 ha	36.772	5%	11.993	2%	24.779	3%
More than 20 ha	6.300	1%	1.736	0%	4.564	1%
Total	778.831	100%	522.164	67%	256.667	33%

Data source: Statistical Yearbook of Serbia 2009

Agricultural family farms, possessing the land of 0.5 to 2 ha make up 46% of all farms. Farms having the land from 2 to 10 hectares per farm comprises 48% of total holdings. Thus, about 94% of households dispose of land to 10 hectares.

According data from 2001, the farmers equipped with the basic machinery shows that in Serbia were 404 thousand tractors and over 25 thousand combines, 35 thousand corn pickers and about 4.5 thousand motor threshing machines.

Agricultural production, hunting, forestry and food industry in 2001 in Serbia, participated in the creation of gross domestic product with 32%, and in the year 2008 with 23.7%. Although agricultural production had an average annual growth of 2.3% in the period 2001-2008, the share of agriculture in GDP formation noticed a decrease in the same time.

From 1960 to 2007, the analysis of historical data referring to industrial production in Serbia pointed out two clearly identified periods:

The first period was from 1960 to 1989, and it can be defined as the period of the rise of industrialization. Measured by base index of industrial production of 100 in 1950, the index of industrial production in pre-transitional year- 1989 was approximately 1600 index points.

The second period from 1990 to 2007 was the period of the great decline and fluctuations in industrial production in the range from below 600-650 index points in 1950. So, in relation to pre-transitional period in 1989, the industrial production declined for about 1,000 index points measured base 100 index points from 1950.

After 2001, the decline of industrial production participation in creation of gross domestic product was also evident.

The economic transition in Serbia caused the de-industrialization. From 1989 to 2001, it was noticed the fall of industrial share in BDP creation, from 44.8 in 1988 to 29% in 2001. This fall in BDP creation share was mainly a result of the disintegration of the former Yugoslav market, the introduction of economic sanctions against FRY and the war events that followed the disintegration of Yugoslavia since 1991. After 2000, instead of stopping the negative trend, the further deterioration of the Serbian industry came on, and its contribution to GDP from 29% in 2001 fell to 20.2 in 2007, manifesting the trend of further decline in the years to come, and finally in 2009 the share of industry was about 17%.⁵

STATE ECONOMIC POLICY AND SUBSIDIES

In the period of the transition process transformation to a market economy in Serbia, there were changes in economic policy in agriculture. It should be noted here that the former Yugoslavia and Serbia as one of the successor states did not have a classic centrally planned socialist economic system. The market was especially expressed in the sector of agricultural production, and property rights over agricultural land were never abrogated. The period of transition and economic sanctions from 1992 to 2000 caused the economic policy in agriculture, which had two goals and aspects. One goal was to provide (in conditions of economic sanctions and isolation of the country) a sufficient quantity of food products at low prices. The second objective was to provide a sufficient quantity of necessary inputs for agricultural production at subsidized prices. Subsidy encompassed petroleum products for agricultural production, seed goods, and mineral fertilizers, as well as protective equipment for agriculture. In the conditions of economic sanctions, the agricultural production has suffered large

⁵ The presented data based on Statistical Reviews of Yugoslavia and Serbia, years 1990, 2004, and 2009.

losses, but in fact, (*de facto*) it accomplished the objectives of the economic policy, and that was to provide sufficient and diversified production for the population in Serbia.

After the economic sanctions, imposed by the international community towards Serbia, starting from 2000, there was a price liberalization of agricultural products, partial liberalization of foreign trade, and a series of incentive measures and subsidies for the development of primary agricultural production and increasing of processing capacity.

For livestock development from budget, the purchase of high-quality breeds of cows for EUR per head, which is just under 8% of the market value of milk cows, is subsidized. To raise the herds of sheep, the subsidy per head is 30 EUR, and for pigs - sows € 30. The total amount of planned budget subsidy for the development of livestock production in Serbia in 2010 amounted about 7 million euros.

The financial budget incentives for the development of fruit growing include the planting of perennial woody plants / plums, apples, pears, peaches... / from 0.6 EUR to 12 EUR per seedling and, to raise plantations of berries from 1,250 EUR to 6,000 EUR per hectare planted area.

In Serbia, there are special incentives to maintain the genetic potential of indigenous old cattle breeds - podolian ox and swine – breed- *mangulica* The planned annual budget funds amount about 150 thousand euros and per head it is 40 euros for pigs - mangulice and 350 € for Podolian ox.

In order to take over the part of crop production costs, the government subsidies are implemented for the consumption of diesel fuel, fertilizers, and seeds. The model of these subsidies is based on the fact that it includes only individuals who are holders of registered farms, and who cultivate the land in agricultural production from 0.5 to 100 acres. The subsidies are applied per hectare of planted agricultural land- for the use of mineral fertilizers 50 euros per hectare, for oil products 30 euros per hectare, and for seeds 40 euros per hectare. The total subsidies actually amount 120 euros per hectare.

From 2006 to 2010 the subsidies policy for the raw cow's milk production was aimed at reducing premiums for milk from about 6 euro cents per liter in 2006 to 1.5 euro cents in 2009. The reducing premiums for milk production together with the decline of the purchase price, led to shortages of milk in Serbia in 2010.

The state subsidies in the field of agricultural production, also exist in the sector for providing favorable loans for farmers for purchasing machinery and

equipment for the storage of animal food, equipment for milking and milk storage, construction of facilities for silage and barn building. The amount of individual loan funds is limited from 20 to 70 thousand USD per user. Grant public funds for encouraging the procurement of agricultural machinery and irrigation equipment, given to farmers and individuals, are limited to a particular amount from 2.500 to 5.000 euros.

The economic policy incentives measures in agriculture apply the mechanisms of subsidies loans for agricultural production. The short-term loans are granted in the limit of 500 EUR to 9.000 EUR, with an interest rate of 5% to be paid by the borrower, and the difference to the bank interest rate is taken over and paid by the state.

These loans are mainly used for purchasing raw materials for agricultural production. The incentive economic policy also covers the approving of long-term loans, limited to a range of 5 thousand to 300 thousands Euros per beneficiary. The state, through the Ministry of Agriculture provide 40% of loan funds (with no interest rates), and commercial banks provide 60% of the loan funds with interest of 5% and repayment of loans from 5 to 8 years with a grace period of 1 to 3 years. In 2008, the total state subsidies for agriculture in Serbia amounted about 324 million Euros and in 2009 dropped, and amounted ⁶ approximately 186 million euros.

The special problem in Serbia was manifested in the manufacturing and processing of raw cow's milk. For the first time in last several decades, the year 2010 noticed a milk shortage in the market. This phenomenon is interesting from the point of the misguided economic policies created in 2005/2009; both in the sector of permitted concentration of manufacturing capacities in the hands of large processors, and in the sector of drastic subsidies reduction for the production of raw cow's milk.

The privatization led to competition weakening, because due to incorrectly implemented privatization, the milk factories in major Serbian cities like Kragujevac, Nis, Uzice, Pancevo fell in crisis. These negative trends led to the strengthening of market position of dairies owned by foreign investors in Salford investment fund.

Another aspect of the poor economic policy in this sector lies in ignoring the structure of raw material base production in Serbia. Effectively, it was ignored the

⁶ Calculated on the basis of data of the Bulletin of Public Finance, Ministry of Finance, Belgrade in July 2010

facts that in the total mass of raw milk in Serbia, the dominant were small and fragmented farms, i.e., small family households. The subsidizing policy kept changing, and in the period from 2005 to 2009, permanently was decreasing the state premium amount paid per liter of produced fresh cow's milk.

From the year 2005 and ending to 2008 the premiums for fresh milk delivered for milk processing industry have declined from 4.5 dinars (about 5.5 € cents) for the production in hilly and mountainous area, to 2.40 dinars, for production in plain areas, from 3.8 to 1.5 dinars (1.6 € cents) per liter.

The average annual purchase price of raw milk paid to farmers from 2007 to 2009 fell from € cents 44.17 in 2007 to only 23.85 in 2009.

Due to the low purchase price of row cow's milk in the period 2007-2009, the number of milking cows decreased from 648 thousand to 585 thousand, that is for about 63 thousand in only two years.⁷

SIZE OF AGRICULTURAL LANDS AND SUBSIDIES FOR AGRICULTURE IN EU

The average agricultural land within the European Union is very different. The farmers own from the maximum average of 53.9 hectares in Denmark to the minimum of 2.3 hectares in Romania. It is evident that in the more developed EU countries such as Germany and France, the concentration of agricultural land per user is higher than in the recently associated and less developed EU countries such as Romania and Bulgaria, where the average size of individual agricultural land is 2.3, or 3.9 hectares. Another important feature is that SEE countries notice the fragmentation of individual agricultural land, which in Greece is around 4.7 hectares, while in Serbia amount 6.5 hectares. Fragmented individual lands in these countries are historically conditioned by the fact that these areas were under Ottoman Empire, by mid-nineteen century. After liberation from Turkish rule, the agricultural land was distributed evenly among population, while a concentration of properties has been carrying out very slowly.

The following table represent the data on numbers of agricultural land owners, exploiting agricultural land and the average size of individual agricultural land in several EU countries and Serbia.

⁷ B.Drašković. Z. Rajković, Paper published in *Ekonomika poljoprivrede*, 2010

Table 3: The size of individual agricultural land in EU countries and Serbia

State	Population (1.000) 2008	Number of agricultural land 2003 (1.000)	Used agricultural area 2005 (1.000 ha)	Area per agricultural land (ha)
Greece	11.213	824	3.905	4,7
Netherlands	16.405	85	1.958	23,0
Denmark	5.472	48	2.588	53,9
Germany	82.217	412	16.975	41,2
Austria	8.318	173	2.690	15,5
France	63.983	614	27.490	44,8
Hungary	10.045	773	4.045	5,2
Bulgaria	7.640	665	2.588	3,9
Romania	21.528	4.484	10.337	2,3
Serbia	7.365	787	5.097	6,5
Average area		8.865	77.673	8,8

Source: Eurostat, 2010

Agricultural statistics: Main result - 2006-2007

In Serbia, as well as in the new EU members Bulgaria, Hungary, and Romania in particular, the property is very fragmented. These three EU members record the size of property even below the average in Serbia. Similar property size structure has one of the old EU members, Greece. It is obvious that in the listed countries, including Serbia, the property fragmentation is a result of the way of land inheritance, which has led to such a considerable segmentation. At the same time the sale of agricultural land is of low intensity, consequently, there is no enlargement of the properties, while the individual owners, of which only a small number live exclusively on income derived from agriculture, have a little interest to enlarge the land property. The data available for Serbia show that only 257 thousand properties from the 787 thousand registered, numbered one or more persons whose sole occupation is agriculture. Unlike the five listed countries, in the other analyzed countries, the average property is much higher, ranging from 15 hectares in Austria up to 53.9 in Denmark.

Analyzing the data on subsidies in agriculture for the same group of countries, it was obtained the results given in the table below:

Table 4: Except the subsidies in agriculture (Data for 2009.)

State	Agricultural budget (mil. €)	Subsidies per ha UAA
Greece	3.047	852
Netherlands	1.151	505
Denmark	1.106	434
Germany	6.904	388
Austria	1.327	375
France	9.867	338
Hungary	1.256	116
Bulgaria	663	82
Romania	2.098	76
Serbia	186	38

Source: Eurostat, 2010

Ratko Karolić: Poljoprivredne subvencije u EU, Poljoprivreda info, 2010

The total agricultural budget in EU for 2009 amounted € 56.7 billion. Serbian agricultural budget for the same year was only €186 million. The presented data indicate that the extent of subsidy per hectare of agricultural land in the analyzed EU countries are very different, and varies in a wide range of 76 € in Romania, up to € 852 per hectare in Greece. The volume of subsidies in Serbia is only half of the minimum recorded in the EU, in Romania. Concerning the fact that funds for subsidies from the EU budget are retreated in proportion to the share each member has in the budget formation, it could be expected that the Serbian agriculture, after joining the EU (though at this point, it is very distant and uncertain future), would be in a very difficult situation, if the EU policy of agriculture subsidizing remains as it is now.

When the total budget for incentives in the agricultural industry is divided by the total agricultural area in hectares, the obtained results are presented above. Concerning that Serbia has a selective approach to subsidies pay, and that it applies only to individual producers or registered agricultural properties (not to agricultural enterprises and not to registered, yet existing farms) the results are different subsidies values per hectare of agricultural land. When the analysis considered only data on the number of households receiving subsidies, and the land on their disposition, the obtained results are around € 120 per hectare. However, the more realistic is to regard the total arable land, regardless the fact of

their registration as agricultural producers, and that areas compare with the allocated budgeted incentive funds, then it is only € 38 per hectare.

The influence effects of subsidies amount for agricultural production can be reviewed from several aspects. The first one is related to productivity. Assuming that the soil natural fertility per area unit is identical among the analyzed countries, it was considered the comparative relationship in maize production between France and Serbia. It is supposed that without the application of scientific farming methods, the corn yield per hectare would be to an average of 2 tons. Furthermore, the other suppositions would be the application of agro-technical practices in production and in land preparation, use of identical amounts of fertilizer per hectare, land protection, and identical seeds. Thus, the total investment cost in maize production per hectare, including cultivation, fertilizer, pesticides, and seed and harvesting costs, should be around € 300. Further, the supposition is that the yield per hectare of maize in two countries is identical, 5 tons per hectare.

If the stock market value per kilogram of corn is 10 € cents, then one ton of corn provide to the farmer the revenue of about 100 €, while the total production income per hectare would be 500 €. After deducting the production costs, the farmer's net income would be around 200 €, excluding other taxes.

Now, it could be introduced into the analysis the financial aspects of budget subsidies for maize production per hectare. In France, the subsidies are 338 €, and in Serbia 38 € per hectare. The subsidies cover all supposed material production costs to a French maize producer. Subsidies to corn producers in Serbia cover only 12.66%. Farmer's profit per hectare in France is more than € 500. Because in Serbia, subsidies cover only 12.5% and due to the lack of necessary investment funds, the farmer must take the bank's credits, his future income is burdened by the financing costs. Accordingly, the total farmer's income in Serbia is less than € 200 per hectare. Here it should be noted that in calculation of total expenditure are not included the costs of farmers themselves.

Supposing that in our example, the average French farmer all his average 44.8 hectares use for corn production, and that he sell corn with no investments in reproduction, such as cattle fattening, then the total profit, excluding labor costs, would amount the hectare production and hectare income, to an annual revenue of about € 22,400. Applying the same methods in Serbia, the farmer's annual income out of 6.5 hectares multiplied by € 200 results € 1300, or about 17 times less in relation to the French farmer.

The presented model of comparative economic efficiency analysis in different countries indicates the logical conclusion that the more favorable position have

farmers in countries where the production subsidies are greater. Competitiveness in agricultural production within the countries with lower subsidies is lower. The data presented in above given table lead to conclusion that in the countries located within the EU, are present great differences in agricultural production subsidies per hectare. In that group of countries with low level of subsidies, are included Hungary, Bulgaria, and Romania, where subsidies do not cover the minimum expenses necessary for the production. At the same time the developed EU countries have a subsidies range from a minimum of € 338 per hectare in France, up to a maximum of € 852 in Greece.

From presented model of comparative analysis of the economic efficiency of agricultural producers in different countries, we can conclude that the farmers in countries where they receive higher subsidies for production , have a more favorable position than in countries where the subsidies are lower. The competitiveness in agricultural production in countries with lower subsidies is low.

From the data presented in the above table it can be concluded that in the countries that are located within the EU there are big differences in the subsidies of agricultural production per hectare. The countries with low levels of subsidies are: Hungary, Bulgaria and Romania, where subsidies do not cover the minimum expenses necessary for the production of maize per hectare. At the same time developed countries within the EU have a range of subsidies from a minimum of € 338 per hectare in France to a maximum of € 852 per hectare in Greece.

The high subsidies policy of certain economic areas, such as agriculture within the EU, affect the poor competitiveness of countries that are located within the community, and especially the countries outside the community whose economy depends on imports and exports to EU countries.

CONCLUSION

The farm property in Serbia is fragmented and its size is determined by both historical, geographical factors and the past development , and the inheritance mode , along with the property division. The larger farm complexes of 2 to 5 and more thousands of acres exist in the province of Vojvodina and they are owned by private companies.

The significant tenure consolidation in Central Serbia and its enlargement is limited by economic conditions and cultural characteristics of the population. The economic incentives for agricultural production in Serbia are different, but de

facto insufficient The economic incentives and subsidies and the lack of long-term stable agricultural policy lead to the creation of productive cycles of overproduction of agricultural products with falling prices, which then replace the cycle of production decline in some segments of primary agricultural production, leading to shortages and rising market prices. The system of subsidies in agricultural production in the EU shows the valuable dispersion of incentives from the minimum amount in less developed countries and the new country members to very high in developed countries within the European Union.

The differences in the level of subsidies for agricultural production per hectare between the lowest and highest in the EU amount to 1: 11.21. The ratio between the highest and lowest paid subsidies in the EU countries, and those that are paid out in Serbia is up 22.42: 1, that is, the lowest range of 2:1 as the ratio of subsidies in Romania in relation to subsidies paid in the Serbia. The average size of agricultural holdings is bigger in more developed EU countries, while the concentration of agricultural land in less developed countries is lower, that is, the average agricultural holding is smaller.

References

- [1] Bulletin of Public Finance, Ministry of Finance of Serbia, July 2010
- [2] Post Crisis Model of Economic Growth & Development of Serbia 2011-2020, FREN, Belgrade 2010-1020 www.fren.org.rs
- [3] Statistical Yearbook, Statistical office of the Republic of Serbia, 2009
- [4] Two centuries of Serbian development – statistical review, RSZ, Belgrade, 2008
- [5] Agricultural Statistics: Main Result - 2006-2007, Eurostat, 2010
- [6] Ratko Karolić: Agricultural Subventions in EU (Poljoprivredne subvencije u EU), Agriculture (Poljoprivreda) info, 2010
- [7] Božo Drašković, Zoran Rajković, « Monopoly, government and milk storage in Serbia, Economic of Agriculture
- [8] www.stat.gov.rs
- [9] www.nbs.rs

CHAPTER 25.

CORPORATE SOCIAL RESPONSIBILITY AS A TOOL FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH

Bojana Radovanović¹

Filip Brković²

Slavica Stevanović³

Abstract

The recently adopted Strategy for the economic and social development of the EU - Europe Strategy 2020, recognizes the concept of the Corporate Social Responsibility (CSR) as one of the tools for the achievement of a smart, sustainable and inclusive growth. Although the integration of CSR concept into business strategies is made on voluntary bases, governments, civil sector, media and academia have an important role in its promotion. The aim of this paper is to analyse the role that CSR plays in the socio-economic development focusing on Serbia. While the Government perceives the importance of CSR for Serbian socio-economic development, it is noticeable that pressure on companies to undertake socially responsible activities made by media, NGOs, consumers and business partners is not remarkable. In addition, the business community still does not have enough CSR initiatives that would be both beneficial to the community and profitable for companies. The paper argues that education on CSR of the managers and the broader public is essential in raising the awareness of the benefits that CSR offer. Consequently, it would lead towards the wider implementation of CSR in Serbia.

Key words: *Europe 2020, Corporate Social Responsibility (CSR), stakeholder theory, Serbia*

¹ Bojana Radovanovic, Institute of Economic Sciences, Belgrade, Serbia

² Filip Brkovic, Galenika a.d., Belgrade, Serbia

³ Slavica Stevanovic, Institute of Economic Sciences, Belgrade, Serbia

INTRODUCTION

The recent economic crisis has shown some of the basic weaknesses of the European economy. The European GDP fell by 4% in 2009, the industrial production dropped back to the levels of the 1990s and 23 million people - or 10% of the active population - are now unemployed [2]. Furthermore, the public finances have been severely affected, with deficits at 7% of GDP on average and debt levels at over 80% of GDP [2]. In addition, the growth potential has been halved during the crisis [2]. In order to overcome the devastating effect of the economic crisis, as well as to make strong foundations for the economic and social development in the future, the *European Commission* has delivered the strategy: *Europe 2020*. The European Council has adopted this strategy in Jun 2010.

Europe 2020 introduces three key priorities of growth. It has to be *smart, sustainable and inclusive*. *Smart growth* means strengthening knowledge and innovation as driving forces of the future growth, which requires improving the quality of the education, strengthening the research performance, promoting innovation and knowledge transfer, making full use of information and communication technologies and ensuring that innovative ideas can be turned into new products and services that create growth. In addition, *sustainable growth* means building a resource efficient, sustainable and competitive economy, development of the new processes and technologies, and reinforcing the competitive advantages of businesses. Finally, *inclusive growth* means empowering people through high levels of employment, investing in skills, fighting poverty and modernising labour markets, introducing training and social protection systems to help people anticipate and manage change.

The concept of Corporate Social Responsibility (CSR) has been seen by the *Europe 2020* as one of the tools for ensuring all three priorities. In particular, CSR is seen as a necessary counterpart to the drive for a more competitive Europe since it can make a significant contribution towards sustainability and competitiveness, and also it is a key element in ensuring long term employee and consumer trust. [2] Therefore, raising corporate social responsibility among the business community will be among the measures for ensuring *smart, sustainable and inclusive growth* of the European Union.

The countries like Serbia, which strive to become EU members, should base their socio-economic development on the good EU practices. The corporate social responsibility is one of them. The aim of this paper is to analyse the role of the CSR in the socio-economic development focusing on Serbia. In order to show how it could serve as a tool for *smart, sustainable and inclusive growth* in the

European Union, as well as for Serbian socio-economic development, the definition of this concept, its theoretical background and the economic implication of its implementation are going to be discussed in the first section. In the second section, the state of corporate social responsibility in Serbia will be analysed. Finally, within the concluding remarks, the paper will give suggestions how to develop CSR activities in Serbia.

THE CONCEPT OF CORPORATE SOCIAL RESPONSIBILITY AND ITS IMPLICATIONS

Although *corporate social responsibility* has become the mainstream of daily business discourse since 1990s, there is no universal definition of this concept. The reason for this lays in its voluntary nature, where companies are supposed to interpret *responsible behaviour* in their own way. However, the CSR has been lately in the focus of attention of both scientific and broader audience and therefore, different organizations and institutions have offered various definitions. *The World Business Council for Sustainable Development* defines CSR as the “continuing commitment by business to behave ethically and contribute to economic development, while improving the quality of life of the workforce and their families as well as of the local community and society at large” [21]. The *European Commission’s* definition of CSR is “A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” [18]. *International Financial Corporation* defines corporate social responsibility as the following: “Corporate social responsibility is the commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development” [19].

The international community has recognised the importance of the responsible activities performed by companies for the social and economic development. The United Nations has formed the *Global Compact* – “the strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption” [20]. The Global Compact is a strategic platform for participants to advance their commitments to sustainability and corporate citizenship. It is a policy framework for the development, implementation, and disclosure of sustainability principles and practices.

To sum up, corporate social responsibility is the way that companies manage their economical, social and ecological influence and their relations with the interest

groups (stakeholders)⁴ on a voluntary basis. This term implies both what companies do with their profit and how they generate it. It also implies corporate contribution to sustainable development – the development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” [16]. In addition, socially responsible activities benefit interest groups, but also they have positive effects on the companies themselves. Finally, although the integration of the CSR concept into business strategies is made on voluntary bases, governments and international community, as well as civil sector, have a crucial role in the promotion of this concept.

Although the definitions of the CSR gave an insight into the concept, there is still a need for a deeper understanding of *the responsibilities* of business organisations. The question is: *What are companies responsible for?* In other words: *What is their purpose in a society?* Two main answers can be found in the literature. One is given by the classical theory of companies’ social responsibility – *stockholder (shareholder) theory*, which claims that companies are responsible towards their owners (stockholders/shareholders) and that companies’ purpose is to make profit. The other is offered by *stakeholder theory*, which argues that companies ought to behave responsibly towards their stakeholders and that the purpose which companies’ serve in a society is to harmonize different stakeholders’ interests. A brief outline of the arguments of both theories will be presented in the passages that follow.

According to *stockholder (shareholder) theory*, the primary responsibility of companies is the one towards owners (stockholders/shareholders). Companies’ purpose is to maximize their welfare. Milton Friedman [16: 59] argues that profit increase, made while respecting “basic rules of societies”⁵, is the only *social responsibility* of companies. As the representatives of stockholders, managers have the legal and moral obligation to make decisions that lead to shareholders’ financial benefits. He believes that the requirement for companies to participate in achieving “social goals” (after they have paid taxes) would be an unnecessary burden for companies which management cannot be competent for solving social problems. Under the conditions of the free market economy, the biggest responsibility of a company is a profitable business, which leads to *the greatest good for a society*. [8: 44]

⁴ Interest group or stakeholder is everyone who affects or can be affected by a corporation’s actions. In particular, Freeman states six main interest groups: consumers, suppliers, shareholders, managers, local community, employees. [4: 66]

⁵ “Basic rules of societies” are both rules embodied in law and those embodied in ethic custom. [5: 61]

On the other hand, R. Edward Freeman [4: 67] thinks that not only owners, but also customers, suppliers, managers, employees and local community have a certain “stake” in a company - they all take some risks. For example, employees risk their jobs and livelihoods; they invest in their work and in return expect a salary, security and meaningful assignments. According to this theory, when setting the goals, the interests of stakeholders *should be* taken into the consideration as well. They must not be treated *only* as an instrument for achieving goals such as profit maximisation. In other words, there are ethical grounds for requesting social responsibility from companies, which are based on Kantian ethics. According to Kantian ethics, in particular his practical imperative, an individual should act to treat humanity in oneself and others as an end-in-itself and never only as a mean [7: 54]. In addition, the duties of gratitude and citizenship, as well as the responsibilities of power require for companies to be socially responsible. [1: 96] Finally, and probably most importantly, there are numerous examples showing that profit maximization does not always lead towards beneficial outcomes for societies, while the classical theory claims the opposite. In a struggle for profit maximisation, companies endanger natural environment, disobey human rights, exploit cheap labour, etc. In other words, this approach cannot be defended by the utilitarian ethics as its proponents were trying to do - it does not lead to the *greatest benefit for greatest number of people*. [9: 5]

While focusing on its ethical aspects, it is important to stress that stakeholder theory does not minimize the importance of the economic aspects of the CSR implementation. It points out that the survival and success of companies are enabled when its activities are *balanced* with the societal interests since the interests of communities and business are *interdependent*. [11: 7] The theory also emphasises that good relationships with interest groups are very important for company’s competitiveness and long-term success [3]. Corporate social responsibility has been actually seen as *a mean* for securing the long-term financial results [11]. When the carefully selected socially responsible activities are integrated into business strategy and adequately communicated to the consumers and broader audience (particularly through so-called non-traditional market communication channels such as direct marketing or Public Relations), they become the effective competitive differentiator by influencing on building strong brand identities [10]. The relationship between the strong brand and the consumers’ loyalty is well known, as well as its influence on companies’ sales and profits. In addition, the responsible activities towards the natural environment, such as for example energy conservation, waste minimisation and recycling, can significantly decrease companies’ operational costs. Moreover, nowadays the reputation is essential for market success and the CSR is a way for ensuring companies’ good reputation among the consumers and the public. Finally, the

CSR may influence macro-level competitiveness by helping to build greater trust in enterprises as a group [3].

In short, on the one hand, there are ethical grounds for demanding responsible behaviour from companies, on the other, integration of the CSR into business strategy can significantly influence on both – business success and the socio-economic development of the country. Now, we will turn to the current situation in Serbia regarding implementation of the CSR.

THE STATE OF CORPORATE SOCIAL RESPONSIBILITY IN SERBIA

Within this section, the place of the CSR for achievement of the social and economic goals seen by the policy makers will be outlined first. Furthermore, the role of media, civil sector and academia for the promotion of this concept in Serbia will be examined. In the end, the CSR practices of companies, which operate at the Serbian market will be analyzed.

The Serbian Government has adopted the *Strategy for the development and promotion of the corporate social responsibility in the period 2010 – 2015* in July 2010. The aim of this document is to analyze the understanding and the implementation of the CSR among the companies that perform their activities at the Serbian market, as well as to promote this concept based on the EU practices and standards in order to foster sustainable and inclusive socio-economic development of the country. Furthermore, Serbian Government sets a particular role of the CSR in the achievement of the goals set by the *National strategy for sustainable development in the period 2008 – 2017*, the *Strategy for cleaner production* and by the *National youth strategy*. Finally, the big companies are not the only ones, which should integrate socially responsible activities into their business strategies, but it should be done by small and medium-sized enterprises (SMEs) as well, as it is outlined within the *Strategy for development of competitive and innovative small and medium-sized enterprises 2008 – 2013*.

The National strategy for sustainable development defines sustainable development as a goal oriented, long-term and synergetic process that affects all aspects of life (economic, social, environmental and institutional) at all levels. According to this document, the role of the CSR is of a particular importance for the achievement of the sustainable socio-economic development. In addition, the cleaner production is a part of the sustainable development concept, as seen by the *Strategy for cleaner production*. This is primarily related to the industry and industrial pollution. Key industries and individual companies should introduce significant changes in order to achieve the needs of the future generations.

Therefore, as a part of the integrated CSR concept, the cleaner production should be a long-term policy of the companies. *National youth strategy* points out that the implementation of the CSR is one of the ways that leads to solving the problem of unemployment and informal work of Serbian youth. In addition, it is a way of improving the quality of the employment contracts. Therefore, by introducing responsible activities that are focused on young people, companies could prepare them for their future careers, giving them the necessary work experience.

As it is outlined within the *Strategy for the development and promotion of the corporate social responsibility in the period 2010 – 2015*, CSR is a tool for poverty reduction and social inclusion. The document points out that there are numerous ways in which the State could influence the CSR framework for the benefit of the deprived. To mention some, encouragement of the market fragmentation and development of the informal markets, promotion of inclusive products, or products which allow poor people to participate in economic activities.

Apart from the crucial role that the State plays in the promotion and encouragement of the CSR activities, academia, civil sector, media, business and professional associations, also play an important role in the development of the CSR. Firstly, the academia is necessary for the creation and dissemination of the knowledge related to the CSR concept. However, the academia still have only a modest impact on CSR promotion and knowledge creation in Serbia, since subjects on corporate social responsibility are not a part of curricula in most of the higher educational institutions [15].

In addition, the civil sector plays a significant role in the CSR promotion as well as in indicating the irresponsible activities performed by companies. While there are NGOs involved in promoting the CSR in Serbia, some of them still lack the necessary skills to engage in dialogue with business and business associations. Initiatives of civil society in promoting CSR are often seen as short-term and inconsistent. On the other hand, civil society is insufficiently engaged in the education of the other stakeholders involved in CSR practices. They should suggest to companies how to structure their CSR activities and support them in development of organized dialogue with employees and engaging stakeholders [15].

Moreover, Media can contribute significantly by building awareness of the need for the CSR. They can also highlight examples of the good CSR practices that can inspire other companies to follow these examples and can also put pressure on companies that behave irresponsibly towards the natural environment and society.

Since the Republic of Serbia is in the initial phase of implementing the CSR principles into business strategies and daily operations, the role of the Media is essential. Given their power to influence the public opinion and encourage the introduction of changes, the media can provide an incentive to promote the CSR. by representing and defending the public interest in the field of the CSR. Although the occasional reports on the CSR activities are provided by the Media in Serbia, they are more a part of the companies' market communication, than the initiative for the CSR promotion done by the journalist.

In addition, consumers by choosing product express not only their preferences regarding the products' characteristics, but also their attitude towards companies' behaviour and could put pressure on companies to behave in accordance to the social responsibility. However, Serbian consumers continue to focus mainly on the price of goods and services when making their purchasing decision, while considerations of the CSR is not settled sufficiently. They do not put a pressure on the companies to behave responsibly. The knowledge regarding the CSR concept, as well as the power that consumer associations have in requiring responsible behaviour is lacking.

Furthermore, business and professional associations are crucial for raising awareness among its members. Several associations have conducted the activities addressing the CSR issues in Serbia. In particular, *Serbian Chamber of Commerce* is a very prominent player in promoting the CSR and it has been active in this field since 2003, initiating a number of projects and achieving many partnerships. Moreover, *the Republic of Serbia has adopted United Nations Global Compact* in 2007. Nowadays, the United Nations Global Compact Serbia has a semiformal structure and functions through the activities of the Steering Committee (consisting of five members), the Secretariat and the five working groups: Social inclusion and persons with disabilities; fight against corruption; corporate social responsibility in the banking and finance; support the development of the Strategy; and environment. Furthermore, *Business Leaders Forum Serbia* was established in 2008 with a mission to stimulate the development of the CSR practices in Serbian business sector. Finally, an on-line database of Serbian companies' good CSR practices has been established within the internet site of the *Serbian Investment and Export Promotion Agency*.

While the Government perceives the importance of the CSR for Serbian socio-economic development, it is noticeable that pressure on companies to undertake socially responsible activities made by media, NGOs, consumers and business partners is not remarkable. As a result, the number of companies operating in Serbia that have incorporated the concepts and practices of the CSR as an integral part of their business strategy is still relatively low [15]. Only a small number of

companies have introduced the position of the CSR manager in their organizational structure. The picture is slowly changing, as a number of multinational corporations operating in the region have their branches in Belgrade, which provides the inflow of foreign knowledge and experience in the CSR.

Among the socially responsible activities that companies operating at the Serbian market practice, humanitarian activities and sponsorship of cultural and sport events prevail, while the introduction of standards related to the CSR, then the partnership with local governments, employee participation in decision-making and programmes that would stimulate entrepreneurship, employment and development of individuals within socially vulnerable groups are less frequent [15]. While most companies establish a dialogue with its employees, it is still not a common practice for companies to enter into a structured dialogue with another stakeholder. In addition, a number of companies still consider that CSR is only a tool for public relations and not the long-term commitment. The activities that have in focus vulnerable groups such as children, elderly people, unemployed, Roma population, etc, are marginal. The lack of awareness and commitment to responsible behaviour is even higher among the SMEs.

However, it is noticeable that most of the companies have introduced the international standards regarding the safety at the working place and environmental protection [15]. The weakest point is still the reporting of aspects of the business and the impact on the natural and social environment. Most of the companies still do not provide such reports, while companies that make efforts in this area rarely use internationally recognized standards or systems.

Companies operating in Serbia still do not fully distinguish CSR from corporate philanthropy and legal compliance. As a result, engagement in activities related to supporting charities and sport and cultural events prevail, while the development of the long-term programmes has been rarely made. The integration of the CSR into the business strategies is lacking in most of the cases. In short, the business community still does not have enough CSR initiatives that would be both beneficial for the community and profitable for companies.

CONCLUDING REMARKS

This paper has pointed out that corporate social responsibility is an adequate tool for reaching smart, sustainable and inclusive growth, as it is pointed out within the Europe 2020, as well as sustainable and inclusive socio – economic development in countries such as Serbia. It can be argued that not only companies have an ethical obligation to behave responsibly towards the stakeholders, but

also such behaviour has a positive impact on their business success. Although the integration of the CSR concept into business strategies is made on the voluntary bases, there is a significant role played by the governments, civil sector, media and academia in the promotion of this concept.

Serbia, as a country that strives to become an EU member in the future, is adopting good practices and standards of the Union. In this manner, Serbian Government perceives the importance of the CSR for Serbian socio-economic development and it has adopted the *Strategy for the development and promotion of the corporate social responsibility in the period 2010 – 2015*. However, it is noticeable that the pressure on companies to undertake socially responsible activities made by media, NGOs, consumers, and business partners is not remarkable. Although there are certain practices that could be considered as socially responsible, the integration of the CSR into the business strategies of the companies and their long-term commitment to serving the goals of the communities is rare. Moreover, it is noticeable that companies usually do not have the awareness of the benefits that CSR offers for the brand identity and their financial success.

Therefore, all the interest groups should undertake the activities that promote CSR among the business community, as well as actions that raise awareness of the importance of this concept for the society as whole. Since the main obstacle for the CSR implementation is the lack of proper understanding of this concept and its benefits, the education on the CSR is essential. The role of the academia, civil sector and business associations is crucial for the achievement of this goal. The higher educational institutions must improve their curricula by including the CSR as an important subject, especially in the field of business administration, economics, public administration, law and studies on environmental protection. In addition, civil society and business associations should organise trainings and seminars on the CSR for managers, and for the broader audience. On the one hand, the managers would acquire the necessary knowledge and skills on the CSR, and on the other the consumers, journalist and the public would become more aware of companies responsibilities and the possibilities that the CSR offers for the development of the community. As a result, media and consumer associations would put more pressure on companies to behave responsible. The state has a particular role in stimulating CSR through rewarding the socially responsible behaviour and through public-private partnerships in addressing the needs of the society.

References

- [1] Bowe, N., "New Directions in Corporate Social Responsibility", in: *Ethical Theory and Business*, Prentice Hall/Pearson, 2004
- [2] European Commission: *Europe 2020 - A European Strategy for Smart, Sustainable and Inclusive Growth*, 2010
- [3] European Commission: *European Competitiveness Report*, 2008
- [4] Freeman R. E., "A Stakeholder Theory of the Modern Corporation", printed in *Ethical Theory and Business*, Prentice Hall/Pearson, 2004
- [5] Friedman, M., "The Social Responsibility of Business Is to Increase Its Profits", printed in *Ethical Theory and Business*, Prentice Hall/Pearson, 2004
- [6] Jones, J., Pollitt, M., Bek, D., "Multinationals in their Communities: A Social Capital Approach to Corporate Citizenship Projects", Palgrave Macmillan, 2007
- [7] Kant, I., "Groundwork of the Metaphysic of Morals", Dereta, 2004
- [8] Levitt, T., "The Dangers of Corporate Social Responsibility", *Harvard Business Review*, Sep.-Oct. 1958
- [9] Mill, J.S., "Utilitarianism", Hackett Publishing Company, Inc, 2001
- [10] Organisation for Economic Cooperation and Development: *Informing Consumers on CSR in International Trade*, Workshop on Informing Consumers about Corporate Social Responsibility in Production and International Trade, Rotterdam, The Netherlands, 2006.
- [11] Porter, M., Kramer, M., "Strategy and society: the link between competitive advantage and corporate social responsibility", *Harvard Business Review*, 2006
- [12] Serbian Government: *National strategy for sustainable development*, 2007
- [13] Serbian Government: *National youth strategy*, 2007
- [14] Serbian Government: *Strategy for cleaner production*, 2008
- [15] Serbian Government: *Strategy for the development and promotion of the corporate social responsibility in the period 2010 – 2015*, 2008
- [16] United Nations: *Report of the World Commission on Environment and Development*, General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12
- [17] http://ec.europa.eu/enterprise/policies/sustainable-business/corporate-social-responsibility/index_en.htm
- [18] <http://ec.europa.eu/social/main.jsp?catId=331&langId=en>
- [19] <http://www.ifc.org>
- [20] <http://www.unglobalcompact.org/AboutTheGC/index.html>
- [21] <http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=MTE00Q>