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Milentija Popovića 5-b/II, 11070 Beograd, Republika Srbija, tel: +381 (0) 11 2927 900, fax: +381 (0) 11 2927 970.

Zelena karta: *+381 (0) 11 2927 950.* ***Garantni fond:*** *+381 (0) 11 2927 940.* ***Informacioni centar:*** *+ 381 (0) 11 2927 910.*

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We know that ideas have a more powerful influence when they are connected with bright people. All papers in this edition of *Ekonomika preduzeća* highlight the ideas of noteworthy people. To arrange the papers in logical order, we gave advantage to those covering general issues concerning structural reforms and economic recovery in Serbia. After, but with equal importance, we present the papers covering more specific topics.

In my paper co-written with *I. Vuksanović* we explain the role of politicians in forthcoming economic reforms. While becoming politically closer to the EU, Serbia is also becoming economically more vulnerable. Apart from taking macroeconomic helicopter snapshot of Serbia's economic position, we also deal with microeconomic perspective of reindustrialization strategy. Without good strategist, good strategy remains nothing but a wish list. In our attempt to clarify such a role, we analyze skills and mindset politicians need to possess, tasks and challenges they need to face and win if they are to get Serbia out of the longest and most dangerous economic crisis in its modern history.

In the following paper, *P. Petrović* and *D. Brčerević* prove that the impact of government spending on economic activity in Serbia is not large and that fiscal consolidation would have a very limited impact on the reduction of economic activity. Consistently, the authors caution that the absence of a strong reduction in public spending would inevitably result in public debt crisis and a plunge of GDP.

In his paper, *M. Labus* proposes the strategy for closing highly skilled labor supply gap. The strategy aimed at enabling the human capital in Serbia to meet high standards of innovation and technology based growth is completely in line with necessary reindustrialization strategy. Hence, the role of politicians is crucial once again in envisioning and implementing changes. Also, the author shows how rising total factor productivity supports fiscal consolidation and keeps the debt on sustainable level in the medium run, and boosts economic development in the long run.

The following paper by *D. Šoškić* deals with optimal monetary regime in transition economies. While elaborating how no monetary regime could play the role of one-size-fits-all solution, he analyses good and bad sides of various regimes while situating the role of monetary policy in fostering economic growth somewhere between passionate believers who consider it crucial and institutional economists who point out its irrelevance.

V. Vučković and *S. Vučković* warn of threatening external illiquidity in the light of coming debt repayment in 2017. What matters the most is to avoid dangerous rise of budget deficit, so the authors suggest the set of prudent answers which include new funding solutions, particularly venture capital and venture capital funds.

In their paper, *J. Atanasijević* and *M. Danon* analyze opportunities and risks in the agriculture sector in Serbia with respect to financing. The authors show how present financing options through commercial loans block innovation in irrigation technology that reduces yield volatility and propose different measures aimed at improving the sector's competitiveness.

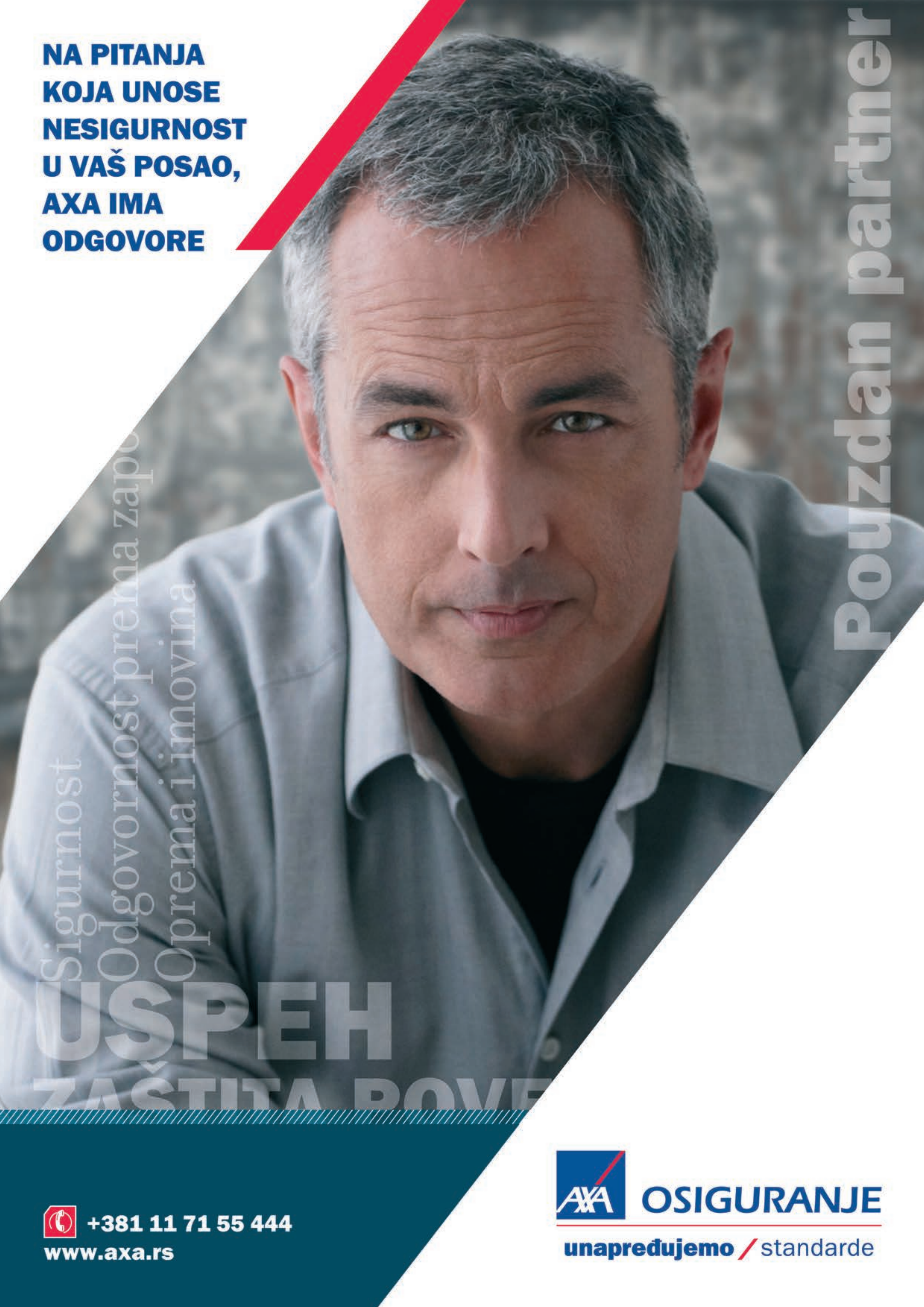
Another paper, coming from *D. Lončar,* deals with framework national strategic planning that encourages its acceptability and applicability on all levels. By exploring various models of strategic planning of relevant international organizations and other countries, the author provides specific suggestions for ameliorating the current model of strategic planning in Serbia.

A. S. Trbovich, *A. Drašković-Malešević*, and *J. Miljković* further broaden the topic of venture capital in Serbia and its role and significance in economic transition. The authors look for the ways Serbia could benefit from various regional initiatives and EU programmes related to SMEs, while adapting at the same time its regulatory framework and providing necessary education for the SMEs sector.

In his paper, *E. Jakopin* analyzes regional inequalities and unbalanced economic growth in Serbia. The author has tackled various aspects of this issue, proving that transitional stagnation and speed of reforms deepened regional inequalities, while the impact of recession provoked problem escalation.

The last paper by *G. Petković, S. Lovreta,* and *R. Pindžo* covers the area of consumer protection in the so-called dynamic packaging of tourism services in online market. The authors provide set of recommendations concerning industrial policies in tourism.

Prof. Dragan Đuričin, Editor in Chief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Dragan Đuričin
University of Belgrade
Faculty of Economics
Department of Business Economics and Management

Iva Vuksanović
University of Belgrade
Faculty of Economics
Department of Business Economics and Management

HOW TO BE AHEAD OF THE CURVE: THE ROLE OF POLITICIANS IN SERBIA'S REINDUSTRIALIZATION

Kako biti ispred trenda: uloga političara u reindustrijalizaciji Srbije

Abstract

The implosion of Yugoslavia and economic sanctions which were imposed to Serbia by international community automatically pushed the country into depression. With 60% drop in output and mega-inflation the economy in 1993 passed through near-death experience. The legacy of depression demonstrates its severity up to these days.

From Serbia's perspective the principal consequences of the implosion of Yugoslavia are as follows: deepening of old structural imbalances, population migration (including brain drain), and substantial damage to institutions (rules, systemic laws, regulatory bodies, prevailing behavior of economic agents, etc.). Epilogue was a long and deep transitional recession. Serbia's economic fact sheet shows that the economy is not sustainable. To escape a low-growth debt trap Serbia needs a spectacular turnaround. Without radical reforms the threat of default could develop into a full-blown crisis. Damage to the economy from a short shutdown is likely to be limited to economic risk. A longer shutdown could be quite harmful and extend to political and geopolitical risks as well.

When you lose confidence, bright people and institutions, turnaround asks for some forces to take the lead in providing a wide range of economic reforms. The role of politicians in that process is unavoidable. But, it is not a trivial task. It is exactly the challenge that makes the triumph of reforms so rewarding. Done well, undertaken with a clear vision and organically, the exercise of reforms becomes a venture that can renew both the economy and political leadership. In that context the key question for Serbia's politicians is: what is the strategy to resurrect the economy and restore its credibility in business community?

Money created by stimulus (or quantitative easing) is not applicable in the case of Serbia because it is not possible to refer to "too big to fail" argument in almost irrelevant and deindustrialized economy. Turnaround is a challenging request for politicians as initiators and facilitators of reforms because they must keep all parts of society in balance while switching toward the new trajectory of economic development.

The very first step in Serbia's reform journey is integration with the EU. For lower income economy like Serbia, compatibility with the EU opens the door to convergence effect. While Serbia is becoming politically closer to the EU, it is also becoming economically more vulnerable. As a consequence, a pressure on political leaders to make structural reforms is increasing.

Economic reforms need conceptually heterogeneous approach. Macroeconomics looks at the economy from a helicopter perspective. But, it is not the only relevant perspective. Business (or microeconomic) perspective also matters. This is especially true when we are in the process of closing the output gap as the main long-term effect of sustained disequilibrium. Exploring the idea exposed in our previous articles [2], [3] and [4] we focus on various aspects of the reindustrialization strategy. The purpose of this paper is shift to another perspective, the analysis of the role of politicians in this process.

What skills and mindsets do politicians need to possess to be initiators and facilitators of reindustrialization? First and foremost, they must be strategists. Their goal is to build something that is not there yet but it is achievable and effective.

Strategy is anchored in a clear and compelling vision (or purpose). National economies should exist for reason. But, vision is not a strategy. Strategy is more than a great idea what to do, more than inspiration or a dream. It is a system of activities, a set of mutually reinforcing components under the umbrella of vision. Success of strategy is not due to a host of one simple activity, but to the implementation of great idea in an intricately woven system of activities that work in concert. It is a way of implementation of *J. Schumpeter's* idea about creative destruction, to be "ahead of the curve".

How is the article structured? Before we elaborate arguments for reindustrialization, we seek to understand past mistakes in former economic policies to avoid repeating them again. The previous aspects will be presented in introduction. Economic revival depends on new vision, on where we are heading. It is the principal point of two successive parts of the article dedicated to structural changes in the global economy and in Serbia, respectively. The fourth part provides proposals for reindustrialization as conceptual platform for economic revival. Before conclusion, the final part clarifies the role of politicians in reindustrialization of Serbia.

Key words: *reforms, reindustrialization, politicians, industrial policy, macroeconomic policies, Serbia*

Sažetak

Raspad Jugoslavije i ekonomske sankcije koje je uvela međunarodna zajednica automatski su gurnuli Srbiju u depresiju. Sa padom proizvodnje od 60% i mega inflacijom Srbija je 1993. godine doživela iskustvo kliničke smrti. Posledice depresije osećaju se do danas.

Iz ugla Srbije, osnovne posledice raspada Jugoslavije su: produbljivanje starih strukturnih neravnoteža, migracija stanovništva (uključujući odliv mozgova) i suštinsko narušavanje institucija (pravila, sistemski zakoni, regulatorna tela, preovlađujuće ponašanje privrednih subjekata i sl.). Epilog je bila duga i duboka tranziciona recesija. Podaci govore da ekonomija Srbije nije održiva. Izlazak iz ovakvog stanja zahteva spektakularni preokret. Bez radikalnih reformi, opasnost od bankrota mogla bi eskalirati u najdublju krizu. Štete od kratkoročnog prekida funkcionisanja privrede verovatno bi bile ograničene na ekonomski rizik. Duži prekid u funkcionisanju mogao bi biti mnogo razorniji i proširio bi se na politički i geopolitički rizik.

Kada se izgubi poverenje, kvalitetni ljudi i institucije, preporod zahteva da određene društvene snage preuzmu vođstvo u sprovođenju svestranih ekonomskih reformi. Uloga političara u tom procesu ne može se zaobići. To nije trivijalan posao. U pitanju je izazov koji može da učini uspeh reformi veoma unosnim. Dobre reforme sa jasnom vizijom i sprovedene na širokoj osnovi, postaju poduhvat koji može obnoviti i ekonomiju i političko vođstvo. U tom kontekstu ključno pitanje postaje: koja strategija može pomoći da se obnove privreda i njen ugled u poslovnoj zajednici?

Politika upumpavanja novca monetarnim stimulansima (ili kvantitativno olakšanje) ne može se primeniti na Srbiju zbog toga što u njenom slučaju ne važi kriterijum "suviše veliki da bi bio likvidiran", a i privreda je deindustrijalizovana. Oporavak je izazovan zahtev za političare kao inicijatore i sprovodioce reformi zbog toga što moraju držati sve delove ekonomije u ravnoteži dok je prevode na novu putanju ekonomskog razvoja.

Nulti korak u reformama u Srbiji predstavlja integracija u EU. Za nerazvijene ekonomije kao što je Srbija, kompatibilnost sa EU otvara vrata delovanju efekta konvergencije. Dok Srbija postaje politički sve bliža EU, ona istovremeno postaje ekonomski ranjivija. Posledično, pritisak na političke lidere da sprovode ekonomske reforme se pojačava.

Ekonomske reforme zahtevaju konceptualno raznovrsniju platformu. Makroekonomija posmatra privredu iz helikopter perspektive. To nije jedina relevantna perspektiva. Poslovna (ili mikroekonomska) perspektiva je takođe bitna. To je posebno važno kada treba zatvoriti output gap kao glavni dugoročan efekat permanentne neravnoteže. Opisujući ideju koji smo razmatrali u našim prethodnim člancima [2], [3] i [4], možemo reći da smo se u njima fokusirali na različite aspekte reindustrijalizacije. Svrha ovog članka je da se pređe na novu perspektivu, ulogu političara u tom procesu.

Koje veštine i mentalitet treba da poseduju političari da bi mogli da iniciraju i sprovode reindustrijalizaciju? Pre svega, oni moraju biti stratezi. Njihov cilj je da stvore nešto što ne postoji ali je unosno i moguće.

Sidro strategije je jasna i nedvosmislena vizija (ili svrha). Svaka nacionalna ekonomija postoji iz određenih razloga. Vizija nije strategija. Strategija je više od ideje šta da se radi, više od inspiracije ili snova. Strategija je sistem aktivnosti, skup međusobno podržavajućih elementa pod kišobranom vizije. Uspeh strategije nije posledica jedne aktivnosti, već primena ideje vodilje u međusobno povezanom sistemu aktivnosti koje skladno funkcionišu. To je način da se primeni *Šumpeterova* ideja "kreativne destrukcije", da se bude ispred trenda.

Kako je strukturiran članak? Pre kratkog elaboriranja glavnih argumenata koji govore u prilog reindustrijalizacije, nastojaćemo da proučimo zablude prethodnih ekonomskih politika kako bi izbegli njihovo ponavljanje. Ovaj problem biće razmatran u uvodu. Ekonomski oporavak zavisi od nove vizije, ili od toga ka čemu stremimo. To je glavno mesto u naredna dva odeljka koji tretiraju strukturne promene u globalnoj privredi i Srbiji, respektivno. Četvrti deo sadrži predloge za reindustrijalizaciju kao koncepcijsku platformu ekonomskog oporavka. Pre zaključka, poslednji deo rasvetliće ulogu političara u reindustrijalizaciji Srbije.

Ključne reči: *reforme, reindustrijalizacija, političari, industrijska politika, makroekonomske politike, Srbija*

Introduction

From the early 1990s Serbia has been faced with crisis because its leadership did not understand the context and leading trends in global politics and economics. During the first decade of transition, this process was slowed down due to geopolitical *status quo*. After political changes in 2000, transition accelerated but the economy remained heavily burdened by the effects of many misconceptions.

Meanwhile, global interactive trends, mainly radical and sometimes even contradictory in nature, led the world to the stage of universal transformative global discontinuity. The turn was triggered primarily by the China's embrace of economic globalization in the late 1970s, to be amplified by the effective reforms in Central and Eastern Europe (CEE) during the 1990s. The global financial crisis 2008- as a wrong man-made policy platform from advanced economies, have introduced new elements in the changing context that have created radically different environment for competition between the states, companies and people around the globe.

The spillover of the 2008- crisis hit all parts of the global economy in one way or another hiking up the overall level of risk. This has been a period not only of economic disasters, but also of political and geopolitical disasters. It has been the period of intellectual disaster too because politicians around the world have failed in their efforts to implement effective anti-crisis policy measures. However, during the crisis some economists have learned a lot about what went wrong and what could be an adequate policy platform.

Namely, the last global crisis has forced politicians, thinkers, scholars and policy makers around the world to reexamine their old beliefs about economic theory and orthodox policy choices concerning "4Us" in terms of *universal* market deregulation (including capital market), *universal* cross-border integration, *universal* state withdrawal from the economy, and *universal* implementation of macroeconomic policy tools such as inflation targeting. Revisionists view in the post-crisis period about adequate policy choices does not mean that what we have learned from free market fundamentalists is completely incorrect. In fact, it suggests that our knowledge is incomplete. Missing ingredient is business (or microeconomic) perspective.

With a deeper sense of understanding of the substance and net effect of global trends, Serbia's political leadership is now looking for its new place in a transforming world. Repositioning is not easy for a country which has not been regionally integrated yet, with significant debt burden, and, most importantly, without clear vision of future development. Being stuck in transition could force Serbia against the will of its citizens. Confusion about the way the system is heading is a sensitive political issue.

Almost a quarter of a century after the beginning of the former system reform triggered by the implosion of Yugoslavia and a gradual transformation of its republics into independent states, their transition toward the capitalism, and, most importantly, accession to the EU, Serbia is still in transition. The breakup of the former state and wars for its heritage were the worst disaster Serbia has ever suffered. During the transition Serbia lost almost 1/3 of its output, almost 1/10 of its population and almost 1/5 of its territory and natural resources.

The most dramatic decline in Serbia during transition was recorded in the real economy, especially in the segment of industrial production. The value of industrial production in the period 1990-2010 shrank by more than 60%, the share of industrial production in GDP fell from 31% to 15%, while the number of industrial workers declined from 1.03 million to 0.30 million. These trends are in stark contrast not only to regional trends, but also to the trends that existed in Serbia prior to transition. Indeed, in the period 1960-1990 the industrial production grew at an average compound rate of 8% and the economy manifested a solid degree of industrialization given that all core industries figured in its structure (e.g. steel, automobiles, basic and fine chemicals, manufacturing, etc.). What followed in the period after 1990 may freely be called deindustrialization. Figure 1 depicts two periods in the development of Serbia's economy: the period of industrialization (1960-1990) and the period of deindustrialization (1990-2010).

After the serial shocks triggered by deindustrialization in the 1990s, in the following years Serbia's economy continually stayed impotent. Also, it almost constantly demonstrated insuficiently strong growth dynamics. Moreover, the global financial crisis 2008- has deepened old fractures of the system. It was a "crisis within the crisis". In spite of economic growth of 3.7% in 3Q 2013, during the last five years Serbia still has not attained the level of 2008 GDP. Impotent economy with notably weak growth dynamics is constantly showing competitive disadvantage and lagging behind the regional competitors. It is, actually, in regression.

The quest for crisis resolution requires a precise diagnosis of the type of crisis and critical success factor for its resolution. Our standpoint has two elements. First, Serbia's crisis is multidimensional rather than simple, radical rather than incremental, structural rather than cyclical. The principal cause of such a crisis is output gap. Second, radical economic reforms are remedy for crisis. Escape from the crisis calls for adopting a systematic approach based on various activities in concert and guided by reindustrialization as the great idea.

Ignoring the crises could widen the gap between Serbia and other economies, both advanced and emerging. A multi-decade spree of wrong privatization, inadequate development model toward the so-called "financialization" instead of reindustrialization, *status quo* in the state sector instead of radical reforms, macroeconomic policy platform focused exclusively on inflation (low and stable) rather than output gap (low and stable), and unsustainable borrowing are coming to an abrupt end. When an economy functions in soft budget constraints (micro and macro) mode, when macro double deficits (current account and budget) constantly appear and when they are financed almost exclusively with debt increase and privatizations proceeds, the risk of downsize scenario is increasing.

Does Serbia matter? Serbia is a microscopic economy. According to the IMF database [18], the share of Serbia in global GDP for 2012 is 0.053% and the projection for 2013 was 0.059%. The economy is weak, not vibrant. Serbia is landlocked country without significant deposits of natural resources and without demographic rent. Also, it is not regionally integrated which is partially a cause of its weak growth dynamics. As a consequence, economic fundamentals are inadequate and the economy is constantly running macro double deficits. A weak and unstable economy has no core advantage, nothing that is strong enough to counter the gravitational pull of universal transformative global discontinuity.

From financial perspective Serbia's economy is on the brink of bankruptcy. From the global perspective, Serbia's economy is irrelevant. If it disappeared today due to default, the world would not be different tomorrow. But from internal perspective, this scenario is not irrelevant, especially for politicians who are the guardians of sovereign state.

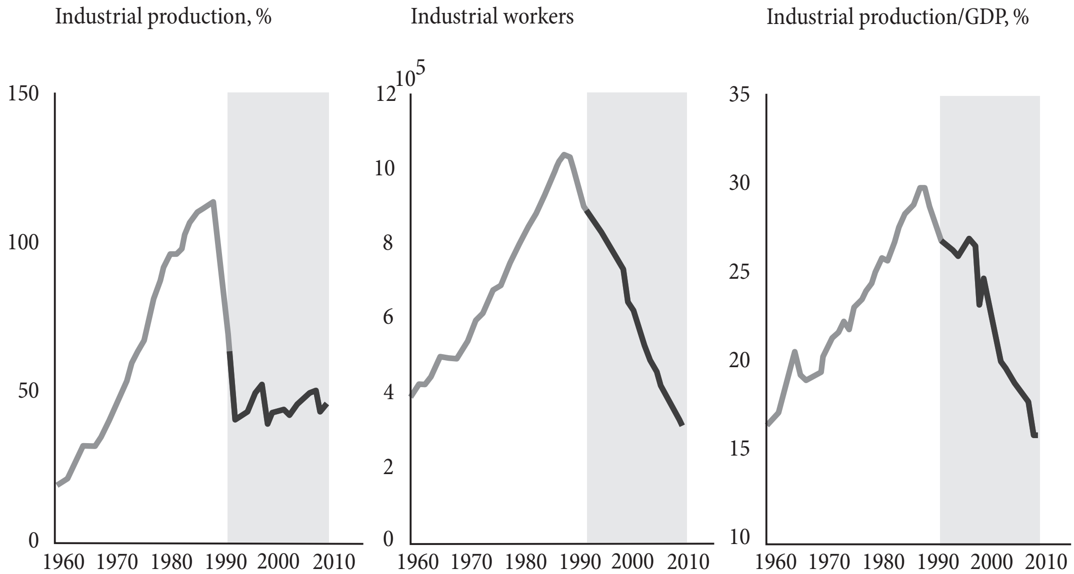
The threat of default places a terrible burden on the shoulders of politicians. After long-term geopolitical and macroeconomic mismanagement, Serbia's politicians are still hostages of short-term problems with an unusually long list of open issues. A quest for solutions requires a global insight, understanding of the context and trends in the global economy and right prioritization of responses. It is a challenging process for politicians because they play a catalytic role in the process of transforming handicaps into opportunities by strengthening civic participation.

Changes in global economy and the EU

First of all, let us start with an analysis of the context on the global level. In the global economy the last two centuries were characterized by the rise of Europe and North America and the decline, sometimes huge, of Asia. Europe was the economic center of the universe, North America was a follower in expansion, and Asia was in regression.

Concretely, in 1813 Europe participated with 20% in global GDP and with 20% in global population. By 1913 Europe catapulted its share of global GDP to 35%

Figure 1: Two economic stages in Serbia: industrialization and deindustrialization



Source: [16, p. 22]

with 20% share in population. In the same year Asia stayed poor and backward participating with 20 percent in global GDP and 50% in population. At the same time the share of North America stayed stable (15% in GDP and 5% in population).

After the World War II the Western world (Europe + North America) was in the driving seat of globalization. Especially Europe was the most progressive part of the world. The largest share in rapidly increasing global output after the World War II Europe attained in the early 1990s.

At the beginning of the 21st century we are experiencing quite the opposite trends. Asia is rising by acquiring a part of Europe's share of global GDP. A massive rise of middle-income earners is a consequence of the capitalization of demographic rent through industrialization which makes these nations wealthier, healthier and living longer lives.

The main characteristic of such a radical turn of the last century was a phenomenon of universal transformative global discontinuity triggered primarily by the China's embrace of economic globalization in the late 1970s. Given that China is the world's most populous country (1.3 billion), its choices in economy, international trade, geopolitics, environment, military etc. will have a major impact on the world. China that has successfully made the transformation in the last thirty years will serve as an inspiration both to its citizens and to other economies.

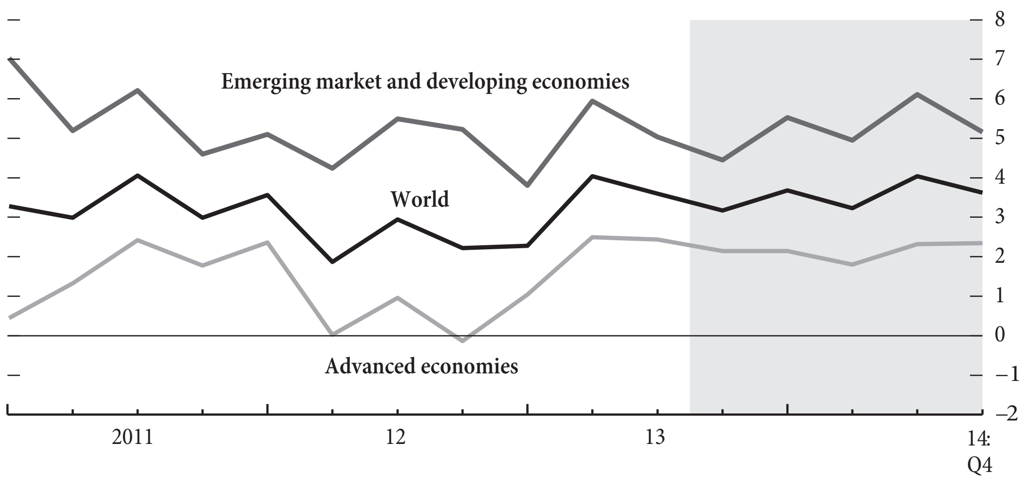
The implosion of the Soviet Union, transition in CEE toward the capitalism and accession to the EU as well as structural reforms in emerging and developing economies such as South Africa, Korea, Brazil, Turkey, etc. supported globalization too. Today, all national economies around the world are pushing toward participation in global markets. We are leaving in a globally integrated world which, in spite of being disruptive, can also be productive.

What was surprising is that the share of Europe in global GDP did not much change in the last two centuries, despite two world wars, revolutions, civil wars and radical reforms like transition. But, at the beginning of the 21st century the EU has already seen very large reduction in its share of global GDP. It is now down to 20%. It is forecasted to drop to 15 percent by 2030. Population share is estimated to drop to 7% by 2050. If downward trend in performance persists, the EU is going to be a "museum of the world".

Following the IMF data base [9, p. 2], we see that in advanced economies the output in 1H 2013 was 2.5%. Growth in core countries of the EU is about 1%. But, the growth in the EU was held back by the very weak economies from its periphery. Emerging markets and developing economies are projected to expand by about 5%. In short, the global growth is in low gear and downside risks persist because old risk factors largely remain and new risk factors have come to the fore. Namely, compared to the previous year, developed economies gained some sluggish speed, while emerging and developing economies have slowed. But, the latter group of countries, however, accounts for the bulk of global growth (see Figure 2). For example, China as the world's second largest economy projects 7.5% growth for 2014.

Asia is going to be the center of the universe. Shift in the balance of power raises a new question about the

Figure 2: Global growth prospects



Source: [10, p. 3]

impact of the emerging world (Asia primarily) on what is happening in Europe. It is quite the opposite in comparison with the question relevant a century ago about the impact of Europe on what was happening in the world. But, like Europe a century ago, Asia is beset with lots of fault lines, turbulences and disputes which could trigger a reverse domino effect. Maybe the provocative question would be: Does Asia 2014 turn into Europe 1914, when turbulence such as assassination in Sarajevo precipitated the world into the global turmoil?

Is Serbia back?

For almost a whole transition period Serbia's economy has been behind the curve. Currently, all components of transition including geopolitical, economic and political are still unfinished. Being stuck in transition prevents convergence effect. By contrast, the EU enabled a great majority of transitional economies from CEE to achieve a robust growth in the context of price stability as the core benefit which conventional structural policies usually provide. In the same period Serbia was in regression due to enormous variety of experiments that did not even tackle the old fractures of the system. In the meantime, some new downside risks have come to the fore, while old risks largely remained.

What happened in 2013? Surprisingly, macroeconomic fundamentals are doing pretty good. The data has beaten the majority of analysts' expectations. Macroeconomic indicators are much better than a year ago. Growth rate for 3Q 2013 was 3.7%. Inflation (CPI base) dropped from 12.2% in 2012 to 4.9% in 2013. In short, recovery in the context of relative price stability is there.

Unfortunately, the previous data shows dual nature of Serbia's economic reality, the shining upside and the complex and unpredictable downside. The progress on the export side is clearly insufficiently strong to offset highly depressed internal demand. Also, in the background, other legacies of the transitional recession still linger and may come back to the fore. A great deal of the recovery is based on export, while jobless rates have increased even more. Jobless recovery is a threat of new relapse of long-term regression. Paradoxically, state sector as the largest contributor to the GDP is most vulnerable. The worst performers are state-owned companies in the sectors with large growth potential (particularly in energy sector, telecommunications, infrastructure and agriculture). The situation is slightly different in the financial sector (state-owned banks and insurance companies), but a general trend is the same.

Can we support the previous qualification with fact sheets? The key macroeconomic indicators for the last twelve years are presented in Table 1. A general impression is that the recovery from transitional recession is gradually progressing, albeit too weakly. In the economy with output gap, the whole period is marked by macro double deficits, high unemployment and growing indebtedness. System with such performances is unsustainable.

Another aspect of unsustainability is the absence of reserves that could be used if some stress factors start to operate. Table 2 provides an overview of vulnerability

Table 1: Serbia's macroeconomic indicators, 2002-2013

Indicators	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Q3 2013
Real GDP growth rate	4.3	2.5	9.3	5.4	3.6	5.4	3.8	-3.5	1.0	1.6	-1.5	3.7
Consumer price inflation, in %	14.8	7.8	13.7	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	4.9
Unemployment rate	13.3	14.6	18.5	20.8	20.9	18.1	13.6	16.1	19.2	23	23.9	20.1
Balance of payments overall, in mil EUR	996	827	343	1,647	4,269	742	-1,687	2,363	-929	1,801	-1,137	-190
Current account balance	-671	-1,347	-2,620	-1,778	-2,356	-5,052	-7,054	-1,910	-1,887	-2,870	-3,155	-1,114
Capital and financial account	1,516	2,305	2,791	3,828	7,566	4,739	7,146	2,034	1,819	2,691	2,872	948
Current account balance, in % of GDP	-4.2	-7.8	-13.8	-8.8	-10.1	-17.7	-21.6	-6.6	-6.7	-9.1	-10.5	-2.0
Budget deficit, in % of GDP	-4.3	-2.4	-0.2	0.7	-1.7	-1.1	-1.9	-3.3	-3.5	-4.1	-5.7	-5.6
Public debt, in % of GDP	72.9	66.9	55.3	52.2	37.7	31.5	29.2	34.7	44.5	48.2	60.0	61.7
External debt, in %	58.7	55.9	49.8	60.1	60.9	60.2	64.6	77.7	85.0	76.7	86.9	81.9
FX reserves, in mil EUR	2,186	2,835	3,104	4,921	9,020	9,634	8,162	10,602	10,002	12,058	10,914	10,444
FDI, net in mil EUR	500	1,194	774	1,250	3,323	1,821	1,824	1,372	860	1,827	232	517
RSD/EUR FX rate (period average)	60.69	65.12	72.69	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	114.18

indicators. It gives insight into the capacity of the economy to mitigate negative effects of various stress factors. Specifically, almost all components of operational performances fall below the reference point, financial performances are weak but gravitate around the reference point, and competitiveness is far below the level of pears (the SEE countries).

Let us drill down into vulnerability data. The first warning sign is transitional output gap. The level of GDP in 2013 (at constant prices) compared to its level in 1989, i.e. the last year before the start of transition, is by 29% lower. In the same period, former transitional economies experienced a significant increase in output level of over 40% on average. Direct consequence of transitional output gap is secular inflationary pressure.

Long-lasting deindustrialization is the main cause of transitional output gap. The 2008- crisis exacerbated that tendency. In last two years the economy is gradually strengthening but the level of industrial production in 2013 remains slightly below 2008. It is well-known that in lower income countries the manufacturing sector is the most important tradable sector. Policy makers must emphasize industrial output if they are interested in balancing current accounts in the long term and maintaining external liquidity in the short term. In high income countries a relatively small manufacturing sector is not so problematic because they have viable service sectors. Moreover, export of services and capital inflow can help balancing current account deficit. Taking a broader view, structural reforms are urgently needed to invigorate the anemic growth potential.

Related problem is output gap, i.e. the level of economic activity which is below its potential level. Output gap is a consequence of high economic risk (unemployment and underemployment). Unemployment rate is high. In 3Q 2013 it dropped to 20.1% from 24.1%. Youth unemployment (15-24 years) is approaching to an unacceptably high level of 50%. Excessively high structural unemployment threatens to create a lost generation. *A. Okun* index (unemployment + inflation) of 25% exceeds by far the reference point. Another indicator of vulnerability is the ratio of active population to dependents. It stands at 1.1 (=1.1/1.0). This ratio has an adverse effect on functioning of the state (pensions, health care, education, science, culture, etc.)

Consequence of output gap is also unsustainable current account. Serbia continually had runaway deficits in the current account because it did not manage to build sufficiently large tradable sector that enables balance in the current account. This part of recovery is still a long way off. Reindustrialization offers a possible way out.

Table 2: Serbia's vulnerability indicators, 3Q 2013

Indicators	Value	Reference point	Type of vulnerability
Transitional output gap	29%	0%	OPERATIONAL
Okun index (inflation + unemployment)	25%	<12%	
Macro deficits			
• Current account	2.0%	<5%	
• Budget	5.6%	<3%	
Dependency index	1.1	>2	
Youth unemployment	50%	<20%	
Indebtedness			FINANCIAL
• Public debt/GDP	61.7%	<45%	
• Foreign debt/GDP	81.9%	<90%	
• Foreign debt/Export	185.8%	<220%	
NPL ratio	21.1%	<10%	
Credit rating			
• S&P	BB-/negative	investment ranking > BB	
• Fitch	BB-/negative	investment ranking > BB	
Export (goods)/GDP	33.7%	>50%	COMPETITIVE
Currency change (3Q2013/3Q2012)			
• Nominal	2.4%	<-5%	
• Real	8.0%	<-3%	
Global competitiveness index	101st of 148	65-SEE average	
Corruption perception index	72nd of 177	59-SEE average	
Ease of doing business	93rd of 189	60-SEE average	
Economic freedom index	95th of 178	62-SEE average	

A serious warning sign comes from export figures (magnitude and pattern). Generally, Serbia's economy is suffering from weak export performance. For 3Q 2013 Export/GDP ratio was 33.7%. Situation is slightly better than in the previous year. Current account deficit dropped from 10.5% in 2012 to 2.0% in 3Q 2013. Current account improvement is a direct consequence of export hike thanks to FIAT project. But the threat of unsustainable growth stays unbeaten. Namely, in the period of anemic growth in an economy with output gap industrial production is shrinking even more than GDP. That said, the other alert in the current account refers to an overall fall of imports. Namely, in recession the level of industrial production is declining rapidly and this usually results in strong reduction of imports. This situation leads to further output gap increase.

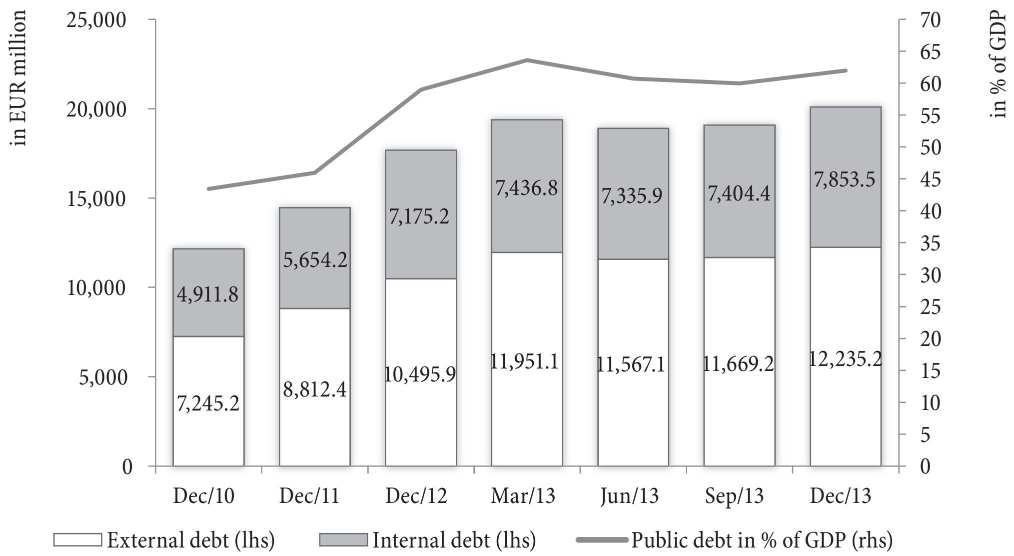
Another warning sign of current account unsustainability is the level of FDI. After FDI plummeted in 2012 to EUR 231.9 million, in 3Q 2013 it slightly recovered reaching the level of EUR 517 million. Notably, it is insufficient for sustainable development. The other side of the coin is sectorial allocation of FDI. Before 2008- crisis there was strong investment in financial sector, wholesale, retail trade and commercial real estate, while too little was invested in manufacturing and infrastructure. By contrast, in emerging countries from CEE a sizable part of investment went into manufacturing and infrastructure [4, p. 294].

Another layer of the onion is indebtedness. Serbia's position as regards the debt level is so far so good. Public debt reached 62% of GDP in 2013. This level of debt substantially exceeds the reference point of 45%. But, the level of total debt of 82% is still below the reference point of 90%.

A more cautious look at this subject reveals that there is no room for complacency. As presented in Figure 3, the trends in all three categories of debt (internal, external, and public) demonstrate visible deterioration. Compared to 2010, external debt is almost 70% higher today, while internal debt stays at 60% higher level. Along with alarmingly high public debt, such an exposure to expensive debt undoubtedly signals apparent unsustainability of the system, and, most certainly, high probability of default. Thinking that these trends will slow down or come into reverse would be unrealistic, since there are no other sources for maintaining the functioning of economy.

In the last year debt inflow was intensified through tree channels: emission of repo papers and government bonds (new debt is 4.3% of total debt), emission of Eurobonds (new debt is 8.9% of total debt), and credit from Russia (new debt is 1.1% of total debt). Different financing channels have different cost of capital. For repo papers it is 10.64% on RSD nominal value, for euro denominated repo papers and government bonds it is 4.4%, and for central bank Eurobonds it is 5.4%. Intensive debt inflows and relatively high cost of capital raise the question of debt

Figure 3: External, internal and public debt tendencies



Source: Ministry of Finance of the Republic of Serbia; Economic Research of Hypo Alpe-Adria-Bank sustainability. Credibility of the country in terms of debt repayment depends on the difference between growth rate and interest rate. If interest rate is much lower than growth rate, lender is in a risk-free position because for debtors it is easy to repay the loans from their rising income.

In commercial banks the borrowing system is on the brink of collapse because there is a sizable gap in the other direction, not only because the level of cost of debt is unreasonable high, but also because profit is rising more slowly than the cost of borrowing. Consequently, it is a new warning sign indicating that some debt may not be repaid. The level of NPL officially is 21.1%. In reality, it is approaching 1/3 of total gross loans released from the banking sector. It is above the average level in the EU.

The attractiveness of central bank's short term securities has fallen. During 2013 one-week repo rate decreased from 11.5% to 9.5%. Moreover, the interest rates on deposits have been failing primarily due to the fall of prime rate and obligatory reserve.

Large portions of debt inflows went into the government debt. In the segment of private debt a large portion consists primarily of household borrowing. This situation is quite the opposite in comparison with emerging transitional economies from CEE in which private debt dominates over government one, and company debt over household one.

The latest figures for 2013 demonstrate the credit crunch in corporate and household debt which led to final and investment demand squeeze. This fact is in line with the good economic intuition telling that economies with higher level of corporate debt have more negative investment growth during the crisis and that household spending also suffers from the strong decline of household debt.

Additional problem related to investors´ expectations is a high level of dependency (more than 80%) in business transactions on the euro. We still do not know what to do in the countries that are irreversibly dependent on the euro, those that have pegged their FX rate to it (FX correction based on inflation differential, or the difference between inflation in a country in question and the Eurozone).

Looking into structural imbalances we see FX rate as a significant factor. The central bank's policy of FX rate constantly encourages floating rate of domestic currency (RSD) which is not connected with inflation differential. As a consequence, FX rate is significantly overvalued. For example, cumulative inflation in the period 2002-2013 was 198%. In the same period, nominal devaluation of RSD was 91.5%, and real appreciation was 20.4%. Since the introduction of inflation targeting in 1H 2006 respective data is: cumulative inflation 75%, nominal FX rate devaluation 32.2%, and real FX rate appreciation 13.1%. Overvalued FX rate hits profitability of exporters. Also, it increases importers' expectations and erodes the sustainability of current account.

Interestingly, in the last year FX rate appreciated in both terms (2% nominally and 8% really). Namely, RSD has been beneficiary because the money created by stimulus from developed countries has flowed as investors sought out higher returns in emerging markets. But withdrawal could prompt a reverse in those flows and put RSD under the pressure.

By definition, in an economy in which import is greater than export, FX rate serves as an important tool of price control. However, the problem with this policy is the absence of an economic anchor in determining FX rate (inflation differential relative to the Eurozone, for example). Besides, interventions in the foreign exchange market are the manifestation of the voluntarism of the NBS in using currency reserves, which leads to really appreciated RSD.

Economies that have floating FX rate are quite distinct from those that have fixed rates. A fixed FX rate provides investors with a feeling of security because it eliminates the currency risk.

The current state of money and capital markets is also a matter of concern. They are far from a good shape. They are shallow and in retreat. Money and capital markets, as the central nervous system of emerging capitalism, have been perverted and deformed. Bank-centric financial system leads to largely unsustainable current account. The level of capitalization of the Belgrade Stock Exchange is about EUR 7 billion. During 2013 the market capitalization slightly decreased. In the period of rapid privatization 2003-2007 the capital market was in expansion. In that period transitional recession was transformed into brief remission. The policy makers with exclusive focus on inflation (low and stable) instead on output gap (low and stable) lost momentum for reindustrialization. As a consequence, inflation targeting supported by monetary measures pushed the economy back into recession. Global financial crisis 2008- only amplified this tendency.

In the period 2001-2008 Serbia had a high degree of economic openness, especially in the financial sector. In that period domestic financial intermediaries almost disappeared. Recapitalization of the subsidiary banks with capital adequacy problem is the obligation of mother bank, not local regulator and government. The banking crisis in the EU provokes heightened caution because banks are trying to fix their balance sheets and get rid of credits through deleverage.

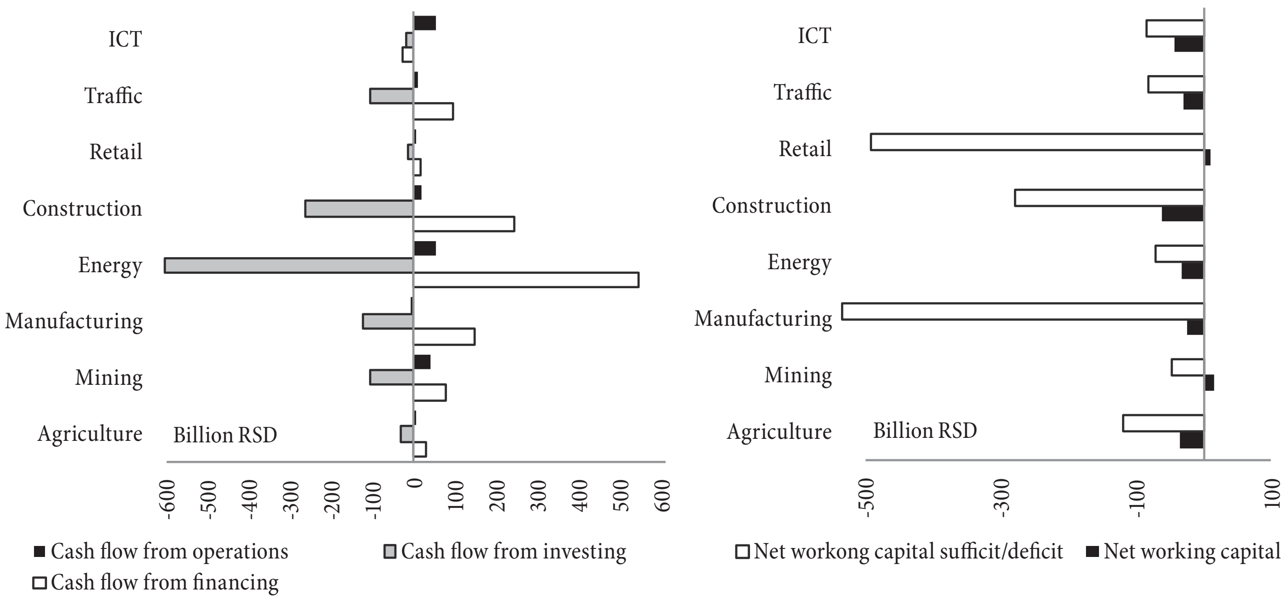
Normally, the corporate sector is net borrower because companies borrow to finance investment. But during the 2008- crisis, as a consequence of demand squeeze, many profit making companies and banks started saving more than investing, reinvesting in surrounding markets or simply transferring the capital out of the country through capital hedge. The withdrawal of capital is significant, both in financial sector and real economy. In that way, capital account further exacerbates the unsustainability of balance of payment.

Unfortunately, the majority of corporate sector is loss making or constantly struggling not to fall into that group. In regular circumstances such situations are the consequence of competitive disadvantage. In Serbia, it is predominantly a result of adverse institutional settings (FX rate and cost of capital) and inadequate economic policies (inflation targeting). The final consequence is permanent illiquidity and lack of suitable financial sources to overcome it. When debt is costly and operations do not produce enough liquid funds, investment activity dies away.

Figure 4 depicts previous claims. It is obvious that the cash flow from operations is insufficient to provide debt repayments and investments. The amount of investment cash outflow matches the financial cash inflow, which means that the only way to finance growth is through borrowing channels. According to [12, pp. 45-8] the net working capital deficit is the reflection in the mirror of illiquidity. All sectors to various extents share the problem of lacking operating assets necessary to service short-term obligations. The result is additional unfavorable borrowing or downsizing which further erodes the competitive position of companies and, at the end of the day, increases the output gap.

Debt increase has been used primarily for monetization of double macro deficits. Therefore, it enabled politicians to enjoy "deficits without tears", buying the time during the political cycle and avoiding the great risks related to structural reforms. In effect, with the new debt the government continually patched a hole in the economy's

Figure 4: Corporate sector liquidity problem



Source: [12, p. 45]

Source: [12, p. 48]

boat. This staggering debt burden increased over the levels that had been proven to be prudent, healthy and sustainable.

So, where is Serbia's economy heading? Instead of swiping growth aimed at closing the output gap, in 1Q 2014 Serbia's economy might face the twilight of debt deflation combined with struggle to restore liquidity (external and internal). The formal start of accession process to the EU at the beginning of 2014 enables Serbia's politicians to refocus themselves from geopolitical and political issues to economic reforms. Economy is a driving force in political development. Sustainable growth is the most efficient way to navigate different financial and political stress factors.

Reindustrialization strategy: The great idea for turnaround

One policy implication of the previous analysis could be the shift from economic growth based on FDI towards the economic growth based on the industrial policies formulated for priority sectors of the economy. The most pressing task at the moment is to stimulate reindustrialization as a remedy for serious current account and liquidity problems. An absolute must is to create a viable tradable sector with anti-import and export goals.

But, industrial policies have a bad reputation in the circles of economics scholars from the West. They are viewed mainly as a problematic choice because they lead to misallocation of resources and encourage corruption. Mainstream economic doctrines (Keynesian encourage fiscal state, monetarists, and proponents of supply-side economics) share a similar view about arbitrary choice of industrial policy. Also, they had deep predilections about any anti-crisis program ("let the markets take care of themselves") treating the role of industrial policies in sustainable development as marginal compared to market forces. Eventually, when the Wall Street (financial sector) is in trouble policy makers could unwillingly prescribe, in the name of the Main Street (predominantly manufacturing and infrastructure) prosperity, active financial measures (bailout, financial support, fiscal stimulus, quantitative easing, etc.).

Nowadays there is almost a universal acknowledgement in mainstream economics that the crisis 2008- cannot be overcome by undertaking the measures that were its direct causes (deregulation, deindustrialization, securitization, and outsourcing), and that the momentum to conceptualize new economic policy platform must be maintained. When market forces fail, government comes in to pick up the pieces.

Moreover, there is firm evidence that some economies have achieved sustainable growth by implementing industrial policies [17]. Emerging and developing economies successfully direct investments towards the tradable sectors, capitalizing on comparative advantage (in the earlier stages of economic development) or competitive advantage (in the later stages of economic development). Our proposals of the reindustrialization strategy presented in [4] are conceived bearing in mind a positive experience with industrial policies in the emerging economies like BRICS[1] and "next 11"[2] .

In new approach, instead of inflation (low and stable) as a dominant tenet of economic policy, some other tenets should also be taken into consideration including output gap (low and stable), sustainable employment, GDP structure (emphasis on the real economy), price parity of other types of assets (first of all, FX rate), and establishment of dynamic equilibrium between the real economy and financial sector (instead of insisting exclusively on financial system stability). In order to successfully achieve the extended list of tenets, the central bank will have to renounce a part of its independence. Namely, the new structure of tenets requires a close cooperation between the central bank and the government. Also, the new conceptual platform of economic policy is conceived as a combination of industrial policies and new macroeconomic policies that are based on the automatic stabilizers, especially in monetary and fiscal spheres. As a result, industrial polices lead, and macroeconomic policies follow.

As far as problem of bad governance is concerned, in the current stage of accession process to the EU it is reasonable for Serbia to combine three elements: (i) the EU support

1 BRICS – Brazil, Russia, India, China and South Africa

2 Next 11 – Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey, South Korea and Vietnam

in setting up an effective strategy of reindustrialization inspired by the EU technological platforms, (ii) making the disbursement of the EU funds conditional on the progress in implementation of the reindustrialization strategy, (iii) and efficient governance of industrial policy portfolio on a sector-by-sector basis.

In a time of slow and fragile recovery in the EU, Serbia's economy will have to rely more on domestic demand. However, the latest fractures in the financial system (NPL hike, primarily) make the launch of sizable investment in the private sector almost unfeasible. On the other hand, in current circumstances international financial markets are very sensitive and governments do not have much leeway to raise money for big projects in state-owned enterprises. Therefore, financial strategy of the government in the following period should be fairly conservative and cautious. Joint-ventures with strategic partners in priority sectors, concessions (BOT versions) in the sectors where Serbia has comparative and/or competitive advantages and public-private-partnership in utilities seem like feasible alternatives for financing reindustrialization.

Reindustrialization means not only rebalancing growth away from demand towards investment. It also introduces a radical change in conducting hard economic policies. Appropriate policy mix and the pace of adjustments are determined by the level of output gap, nature of vulnerability, inflation pressure, central bank credibility, and room for fiscal policy maneuvering. Specifically, Serbia has some policy priorities. First, FX rate should better respond to macroeconomic fundamentals and competitiveness and provide a strong nominal anchor. Second, it is necessary to match income and expenditure (the principle of hard budget constraints) by implementing austerity measures on the expenditure side, at the same time eliminating output gap by increasing investment spending, which, in turn, fuels the revenue growth. These processes are interrelated. Namely, in maintaining liquidity (external and internal), apart from cost reduction, the expansion of the production of tradable goods and services is the best way to reduce import and increase export, and consequently, to achieve net positive effect on current account and repay the outstanding debt. Third, prudential actions should be taken to safeguard financial stability, bearing in mind legacy risks from former credit boom (level of NPL) and new risks from capital outflow.

The ultimate goal of reindustrialization strategy is to increase density of relevant economic subjects. In the global world sustainability and prosperity of each economy depend on density of relevant economic subjects even more than on institutional settings and strategy of industry leaders. The economy in which the prosperity is associated with tabloid media, gambling, plastic surgery and similar businesses cannot be sustainable.

In new policy platform FDI is not considered as a basis for sustainable development, since in the medium term it adversely affects growth due to the effects of transfer pricing, profit repatriation and potential gap in case of exit strategy. It is hard to think of any other solution that can replace missing FDI with industrial policies. New financial arrangements should enable investment without further increase in debt. The arrangements that meet the previous criterion are: (i) joint ventures up to 50 percent of ownership for foreign partner (no casting vote JV), primarily in the sectors where Serbia has comparative advantage (energy, ICT and manufactoring), (ii) concessions, with a special emphasis on the types of arrangements such as build-operate-transfer (BOT) in infrastructure, metallurgy, transportation, logistics, and tourism, and (iii) private-public-partnerships (PPP) in utility companies and public services. A particular focus should be put on financing by sovereign wealth funds (SWF) from the countries with immense foreign currency reserves. Today's global investment arena is marked by a dominant role of SWF over FDI.

Reindustrialization includes developing and implementing strong industrial policies, supported by specific measures. Each priority sector deserves industrial policy with specific measures. For example, the key measures in the energy sector are as follows: full-cost pricing, feed-in tariffs corrections, selection of strategic partners, establishing corporate governance in state-owned companies, and introduction of stimuli for the development of new energy and efficiency technologies. As far as pricing policy is concerned, the convergence of electricity price towards the EU average would automatically cause an increase in value of state-owned company Electric Power Industry of Serbia (EPS).

To illustrate the previous point we made *ad hoc* valuation of EPS based on publicly available data and documents. The valuation is performed by using two period DCF method. To get as conservative as possible valuation we used the following assumptions: (i) projection period 2013-2022[3], (ii) electricity consumption is expected to grow at average 0.9% rate p.a., (iii) electricity price forecast is taken from U.S Energy Information Administration, (iv) all certain and predictable investment projects for the projection period are included, (v) cost of equity and debt-to-equity estimates are based on *Damodaran's* database, (vi) cost of debt is based on NBS official interest rates for nonfinancial sector, (vii) operating margin and net working capital are projected to pass through two sub-periods (median level and approaching to industrial average), (viii) for terminal period growth rate is projected at 1.2% and cost of capital at 11%.

Ad hoc valuation of EPS is presented in Figure 5. The company value is EUR 3.5 billion (according to the current value of company debt, equity value approaches EUR 3 billion). Hypothetically, if strategic partner intends to reach 50% ownership it should increase the equity by exactly the same amount. This amount is almost five times higher than the amount of FDI in 2013.

The role of politicians on the road ahead

There are three different characterizations of the role of politicians in Serbia's economic future. The author of the first one is a famous professor of economics *Lj. Madžar*[4], whereas the second one comes from a book of well-known economic journalist *M. Brkić*[5]. The third one, by colleagues of ours, is presented in the strategy of reindustrialization [4].

Our characterization is based on addressing the question: Whose job is to find a solution to the possible default of Serbia? In our view, it is a job of politicians. Let us reiterate that almost each new government in Serbia had a near-death experience. Risk of default creates a situation where potential flashpoints are so many and are likely to grow. Many relevant people could be involved in finding exit strategy. But whether that strategy is available and where it is heading is primarily a responsibility of politicians.

For a long time Serbia has been living below the trend. Fractures of the system from the past are so powerful and destructive that the shift from "as-is" towards "to-be" situation requires strategic shift. Exit strategy enables the economy to be not only in harmony with global settings, but also to be ahead of the local trends.

What skills and mindsets do politicians need to possess to be strategists? That is, first and foremost, strategic sense. In connected and mutually interdependent world, strategic sense is the core competence of modern politicians. The implosion of Yugoslavia is an example that it takes forty five years to build a confidence in one national economy and five minutes to ruin it, all because politicians made some bad choices. But to avoid an eerie sense of *déjà vu* considering the former state and its position in global politics and economy, the idea that a small and open economy might drive or heavily influence the external world or even its own performance should be definitely put out of modern politicians' minds. These days a success of a national economy depends predominantly on the context and competitive forces beyond control of local political leadership. Strategic audit matters a lot. Politicians as proactive leaders and believers in the power of politics (as the art of possible) need to focus on what they can control, while ignoring or underestimating what they cannot. The integration into the EU and implementation of radical economic reforms should be at the top of the agenda of Serbia's politicians.

The previous reflection may be seen as eureka moment. It is the fundamental lesson of a paramount importance for politicians in Serbia. For ensuring a great positioning they must, first of all, understand the context and trends. The way they respond to them makes the strategy. That means if they fail to grasp the importance of core movements, their strategy is based on luck and

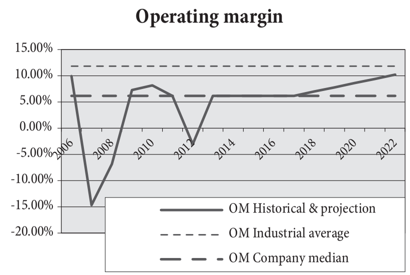
3 We started with the year 2013 since there were no financial statements available at the moment of valuation so that it was not possible to include this year in historical performance.

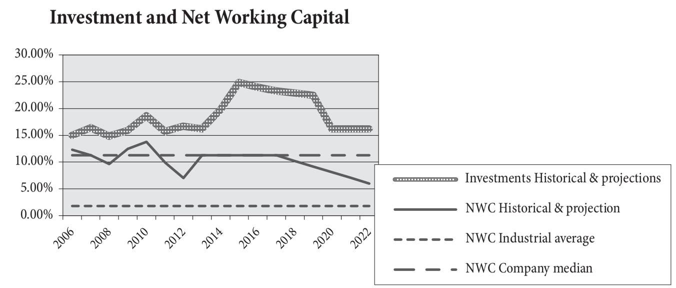
4 Agents authorized to formulate public policy which provides institutional shifts or steady and persistent tendencies of change that increase the level of business optimism and spur up the animal spirit [11, p. 169]

5 Accountability for the achievement of social tenets [1]

Figure 5: EPS *ad hoc* valuation

Projection period	
Consumption growth rate	0.9%
Amortization	5%
Effective tax rate	10.05%





Terminal value	
Growth rate	1.00%
Cost of capital	10.00%

All values in EUR

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Terminal value	**Company value**
NOPLAT	106,209,836	111,971,044	117,830,153	122,199,893	124,299,782	142,228,569	159,424,661	177,357,646	196,416,409	215,469,624		
Amortization	420,882,950	433,894,610	453,001,007	478,947,171	505,747,372	533,184,518	560,927,748	588,884,479	607,300,772	625,862,853		
Investment	-260,233,197	-382,127,933	-518,923,279	-536,004,032	-548,742,904	-554,864,598	-559,134,628	-368,325,865	-371,241,610	-375,810,306		
NWC Change	-107,165,389	-11,701,873	-11,900,726	-8,875,594	-4,265,187	-2,975,071	-1,178,341	-2,031,496	-3,183,161	129,697,992		
FCF	159,694,200	152,035,848	40,007,156	56,267,439	77,039,063	117,573,417	160,039,440	395,884,763	429,292,410	595,220,163	6,134,411,882	
Discounted cash flow	159,694,200	135,306,853	31,687,302	39,662,357	48,328,817	65,641,440	79,518,793	175,059,359	168,944,302	208,469,136	2,398,093,563	**3,510,406,121**

Cost of capital = 13.6%*0.67 + 7.72%(1-0.10)*0.33 = 12.3%

Cost of equity = 15%

Interest rate = 7.72%(1-0.10)=6.9%

Weights: E=0.33, D=0.67

Risk free rate=7%

Beta = 0.67 X Market premium = 12%

Unlevered beta= 0.47 D/E=0.49

Source: Authors' calculation

hope. But, even if they understand context and trends, the trick is to find a way to deal with them in the most effective way. Understanding the context is followed by skillful positioning, deliberate efforts to counter negative forces or exploit favorable ones, or even a timely exit.

In the modern world it is more important to whom you are connected than who you are. Accordingly, there are gains to be made for an economy from additional integration. The accession to the EU is a good vision for Serbia. The EU is reasonable destination, among other things, because most of Serbia's exports go there.

Currently the EU is in regression stage. It has already seen a significant reduction in its share of the world's GDP. It is now down to 20%. There is a forecast saying that it will shrink to 15% by 2030. For Serbia's economy it is also of interest to start doing business with faraway countries rather than to focus exclusively on the EU and the former Yugoslav republics. Consequently, some politicians should not be antagonized by other politicians when looking to emerging economies such as Russia, China, Korea, Golf states, Nigeria, etc.

More integration creates a need for more opening. The new challenge for Serbia's economy is how to improve its chances of penetrating the new markets that are growing at faster pace than those on which it has been traditionally focused. A current level of integration in the global economy is not final [7]. This is, maybe, an opportunity for new geopolitical deals.

Also, leadership matters. Desired result of leadership is the vision, something that is not already there. Vision and advantage could be used in conjunction with each other. Strategy focuses on capitalization on comparative advantage or development of competitive advantage. Comparative advantage is based on natural resources, labor, position rent (near to market), etc. Competitive advantage is a long-run sustainable advantage, one that accumulates such a powerful lead over competitors based on innovation that no one can catch up.

Strategic sense and leadership are inseparable. Step into the shoes of leading politicians of trend-setting countries such as the U.S., Germany, Russia, China or troublemaker ones such as Italy, Greece, Spain and Ukraine. For right positioning you must have strategic sense in terms of global view, imagination and foresight. Also, you must be inspired by the change imperative. Leader is someone who understands the context and prevailing trends but does not accept reality as it is and has capacity to create and cultivate an original vision for repositioning.

Vision is important manifestation of leadership. Vision is a clear sense of why economy matters. Every single activity of strategy is aligned with vision, so all of them and related resources must work in concert to support this vision. Namely, implementation is important for turning vision into reality.

Defining a sound and distinctive vision which enables sustainable development is essential for Serbia. It is the politicians' way to stake a claim. With it, the other subjects have earned the right to play, to take part in the game. But winning the game requires more.

Some people believe that the exclusive task of politicians consists of thinking and charming other people with their visions. Equally important task of politicians is implementation of vision, setting an agenda and putting in place the system to carry it out.

A primary task of a leader is to direct attention. To do so, leader must cultivate a triad of awareness - focusing of himself, focusing on others, and focusing on the world [8, p. 52]. Inward focus and focus on others help leaders cultivate emotional intelligence. Outward focus can improve leaders' ability to formulate great vision.

Vision is where performance differences start. Nothing else is more important to the survival and success of Serbia's economy than why it exists (to support welfare state or to enable sustainable growth), and what otherwise unmet needs (on internal and global markets) it intends to fulfill. According to [13, p. 50], vision is about choice, and real choice contains, both positive ("we do this") and negative ("by implication, then, we don't do something else") elements. In the reindustrialization strategy the vision is defined for priority sectors (with comparative and competitive advantages). From the perspective of "positive" element, hard budget constraint (macro and micro) in providing finance policy in country with such debt burden makes sense. Looking for strategic partners in state-owned network technologies and natural monopolies also makes sense. "Negative" element in this process would be, for example, offering more than 50% ownership to strategic partner.

Thinking of strategy as a system of activities driven by vision underscores the point. It is the bridge between lofty ideas and action. Every politician in Serbia must ask themselves whether his or her strategy is based on a clearly defined vision to escape default and backed by a set of mutually reinforcing activities. If not, it is the time to build a new strategy for survival.

Anchored by compelling vision, strategy is actually a campaign of national economy in the marketplace (global and local), the domain in which it competes, how it competes, and what it wants to achieve. Reindustrialization strategy is strongly dependent on industrial policies for priority sectors. Priority sectors are tradable sectors that serve to anti-import and export goals.

Strategy is a roadmap. It needs continuous, not intermittent, leadership. The strategist is the one who must shepherd this ongoing process, who must stand watch, identify and weight, decide and move, time and time again. The strategist is the one who must decline certain opportunities and pursue others.

The strategy of reindustrialization is a system of activities that underlies Serbia's economy competitiveness and uniqueness. It is the system of activities that evolves, moves, and changes throughout three parallel processes: fiscal consolidation, elimination of output gap, and industrial development [4].

Great strategies and politicians that capture them set direction, establish priorities and guide activities. They help communicate strategy externally. It is also a matter that influences perception about economy and its credit rating as well as the way to attract investors.

In strategy formulation a clear priority list is important. Excellence comes from well-defined efforts. The first step in the implementation is translating great idea into the system of actions, where efforts are aligned and mutually reinforcing. Also, good metrics make sense. Global performance measures like growth rate of GDP and vulnerability indicators like the level of NPL indicate whether strategy is working, but the key performance drivers, tailored to reindustrialization strategy, such as export growth of high-ends, reduction of youth unemployment rate, are better indication where strategy is directed to. They break big aspiration into specific, measurable goals, and guide behavior toward what matters.

Strategy must tackle balancing interests. According to [15, pp. 139-140], balance means a "fragile integrity". Politicians cannot remove unmanageable chances from human life. But, they can leave the unmanageable chances while going from more confident to less confident wisdom. By doing that, politician cultivates flexible responsiveness, rather than rigid harness. This requires shift from absolutism (including enlighten absolutism) to democracy by letting go of a range for control and being open to rethinking and refashioning the elements of strategy through holistic process.

Implementation of the previous concept in Serbia is burdened by some prejudices. We know from the history of our nation that when we are in regression stage, we tend to look at those who have different strategy (offensive or defensive) and think that they must be responsible for what is happening to us. When exist a nebulous enemy, we should worry about resolution.

As a consequence, politicians who are following a spirit of nation are too reluctant about reforms. Serbia desperately needs politicians with reform mindset, true believers in the future, ready to take the risk and write the pages of history by making brave decisions. Instead of politicians that do politicking, Serbia needs strategists with the vision who have understood the position of Serbia in modern history, and, more importantly, have the idea how to participate in it.

People should not be trapped by the myth of super-politicians. The myth of super-politicians arises from the sense of omnipotence, the belief that no situation is too complex or too unpredictable to be brought under control of politician. This tendency is almost regularly followed by the dramatization of problem and glorification of the role of politicians. Double macro deficits? Great! New labor law? Wonderful! Restructuring of public sector? Terrific! Corrupted high level politicians? Fantastic! Seemingly, there is nothing of system's fractures and fault lines that could not be overcome or turn into advantage by politicians. This is the myth of the super-politicians in full force.

Advisors providing valuable perspectives and data can help politicians develop crafting strategy. But, in the end, it is the politician who bears the responsibility for setting the country's course and making the choices day after day that continuously refine that course. In the absence of the evolution of leading politicians' competence even the wisdom of international advisors with reputation for brilliance is not sufficient to improve the rating of the economy with bad reputation.

The engagement of super-politicians backed up by super-advisors in finding solutions for almost unsolvable problems may be the reason for returning to politicking, or simulated activism in the implementation of reforms. Also, it may be an alibi for unconventional solutions out of good economic intuition. This fault line could blame democratic process. In an extreme case it could lead to absolutism (almost certainly) or, eventually, to enlighten absolutism (with smaller probability).

Each strategy for economic revival, including reindustrialization, is a politically unprofitable venture not only because the effects are uncertain, but also because it occurs in the time horizon that is longer than the usual political cycle. Even more, it supposes that there are enough politicians with strategic sense, unstoppable energy and spot-on sense of style, which for economic turnaround of Serbia is not enough. According to [13, p. 131], the reason is the existence of profound paradox many strategists must manage: stay on the track and reinvent yourself. Namely, leading strategy is nonstop responsibility. Only sustainable strategy is the one that anticipates change. The only way to solve this problem is engagement of institutions and expertise in finding sustainable solutions. In short, to serve as conceptual platform for economic revival, strategy of reindustrialization should be prepared under the lead of the Government, and adopted by the Parliament.

Whatever they do, politicians should not underestimate the power of context and leading forces. Also, they must concentrate on the creation of feasible strategy that matters, by creating an economy that could be sustainable in their mindset.

Mindset is important. But mind setting is critical. Reindustrialization strategy emphasizes a few things that politicians could do to change current mindset and align it better with the imperatives of the future economic development.

First, whatever they do, politicians should promote the sense of reality. What Serbia really needs, it is realism instead of empty rhetoric. Our mindset might have something to do with perception, how vulnerable our economy really is. Right diagnosis is the first step in promoting optimism. Napoleon put it this way "Define reality, give hope". If you accept previous, it follows that the place to start is inside us. We need to change our mindset before we negotiate the EU accession road map, establish new institutional settings and economic policy measures which foster reindustrialization.

Sense of reality is important for goal setting. *S. Milosevic's* vision for Serbia as "Switzerland of the Balkan" in the early 1990s and *Z. Djindjic's* vision of post-industrial society one decade later have evolved in the meantime into "transitional Greece" (IMF) and "by-the-way economy" (Anonymous), respectively. Statements of the great majority of Serbia's politicians are not anchored in reality, being mostly without strategic sense, generic by nature, and uninspiring for relevant people (technocrats). Anchored by clear and compelling purpose, politicians in Serbia must leave their background and empower themselves by expertise of knowledgeable people and relevant institutions.

Second, politicians must be aware of the choices they are making. They need to start with the facts about the EU when they begin to negotiate the integration process. In economic policy choice the key issue is the compatibility argument. If you are in the accession process to the EU, you must have some monetary and fiscal alignments (for example, stable and competitive FX rate). Also, technological development should be complementary with the EU technological platforms. This is really important.

In today's 18-country Eurozone approaching toward the banking union the main pillars of economic policy platform are as follows: global market integration through regulatory set-up, financial market regulation, active role of the European Central Bank in consolidation and stability of financial system, and more active role of the state in inclusive economic development (primarily in technological development). In new context, for approaching to the EU the inflation targeting is not enough.

But integration is not panacea for our structural imbalances. Without understanding of the principal causes of crisis, vulnerability of our position and feasible solutions, politicians just engage themselves in stereotyping and exaggeration. That usually does not help at all. Attempting to do too many things at once makes it difficult to do any of them well.

Third, they must be solution providers. Unspecified view is not trucking solution. Speaking about reforms politicians eagerly tell you the "what" but forget the "how" – the critical activities and resources that enable the economy to realize its comparative and competitive advantages. It is by looking at the "how" that ordinary people gain confidence in what politicians are doing. The strategy, moreover, is not about writing a statement that sounds good. It is writing a statement that is good, that really captures future and which is feasible.

The shortage of technocratic elite, particularly in natural monopolies and network technologies, is a matter of fact. Few state-owned companies from these sectors are explicit about the future goals. In what markets will they operate? To what extent and how quickly can they grow? How will they differentiate themselves?

Solutions depend on circumstances. If you are from a small country with a lot of emigrants, you should think of your diaspora as a valuable asset. For example, the top people from ICT industry have spent significant time living and working in the US and Canada. What seems to be missing is that these repatriates could be used for strategic purposes as cross-border connectors and deal makers, not as the sources of funds and/or top level politicians.

Fourth, politicians must relieve themselves of balkanization syndrome. They must be integrator, not disintegrator. Balkanization syndrome is key explanatory element of national culture in Serbia. Political party balkanization is not exception to the rule. Particularly, balkanization is evident in its full capacity in coalition government. For example, the main political parties from the last government offered extremely different views about the role of the state in the economic future of Serbia. On the one hand, there is a strong intention that the state should continue to provide a platform for social protection. Unfortunately, this view drives the economy into conundrum because double deficits after double deficits in the long period of time are in contradiction not only to sustainability of welfare state, but also to sustainability of any other development models. On the other hand, there was strong intention from other partner that the state as transformative leader is the only way for economic revival and sustainable development. But the latter view, requires not only a political consensus, but also a comprehensive program of reforms.

Fifth, politicians must increase the level of transparency. Relevant people and institutions have the right to understand key decisions and be involved in decision making process. In that context, transparency is not simply sending and receiving, nor exchanging data and opinions. Namely, transparency forces politicians to listen. In connection with the previous is the elimination of the arrogance without substance usually coming from the top level of state bureaucracy. What politicians should be trying to do is to inspire the people who are interested in implementing systematic view in building viable, feasible and resilient economic policy platform complementary with the EU we are striving rather than tearing down the present one.

A lot of work in neurology and behavioral sciences suggests that what really transforms people is networking, or having personal interactions rather than just reading about other people's standpoints and trying to understand them.

Reform mind setting provides that reform process passes smoothly and with minimum resistance. On the other hand, politicians have to embrace the role of catalysts of reform. Namely, politicians should act as a magnet for people ready to involve in implementation of necessary reforms. Politicians are responsible for agglomeration of relevant people into reform teams in a way that creates critical mass of expertise and enthusiasm that enable industrial policies formulation and implementation for tradable sectors.

As a consequence, we should not go on with the previous way anymore when defining economic policy platform. Also, no trade-offs in new policy. You cannot be everything to everybody, although a lot of weak strategies and strategy statements implicitly claim to be that. It simply doesn't work. To avoid the previous approach, industrial policies must be defined for priority sectors and with the great sense for details. Neoliberal doctrine and its supporters could be no more an alibi for inactive government in the field of economy as well as platform for fully independent central bank.

Conclusion

If we exclude Kosovo issue, probably the most frequent subject matter for top Serbia's politicians in the period between two Kopaonik forums was fair and equal treatment of all citizens. Standard wisdom says that a cosmopolitan politician is somebody who treats all people equally, irrespective of whether they are entrepreneurs, workers, pensioners or unemployed people.

We thought it would be interesting to look at the manifestation of constant bias of Serbia's politicians toward employees in the state sector and pensioners. The whole discussion about equality treatment strikes as a missing point after the question: What is going on with people most relevant for economic revival such as entrepreneurs, thinkers, scholars, and unemployed youngsters? The previous leads to semi-philosophical reflection. Politicians cannot carry out only what the majority of people wish for, but also what is viable for the country's future in the process of its reshaping through entrepreneurship, education and employment.

Reform-minded climate largely depends on strategists and their readiness to first and foremost consider the consequences of political decisions, giving priority to the return on investment (ROI) over the return on voters (ROV). Time horizon of strategists is much longer than horizon of standard political cycle in Serbia. Weak reform mindset and focus on short-term issues are typical of frequent election countries. From the introduction of multi-party democracy in 1990, Serbia has passed through ten elections and seven of them were premature.

Instead of politicians that do politicking, Serbia desperately needs strategists with the clear and feasible vision for sustainable economic development. No matter how solid is their political support, or how equitable their motives, if they do not get economic reforms right, everything else they do is at risk.

In an economy with double macro deficits, continuous issuing of debt instruments is not sustainable. It cannot eternally compensate for the output gap and fault lines in economic policy. Also, it is politically counterproductive that the deficits made by one generation are constantly debt-financed and thus transferred to the next generations and/or re-inflated, i.e. lead to redistribution in the same generation between those who save and those who spend more than they could.

The future of our future must be brighter than the time we are facing today. The exit strategy from crisis should not propose redistribution of wealth and factors of production, but rather value creation. It will not be easy because we must simultaneously eliminate the burden from the past and adapt our economy to the nexus of transformative global discontinuity challenges.

Reindustrialization as a possible way out from transitional recession should be seen as critical not only from economic, but also from political perspective. The economy is the foundation of a society. Experience shows that sustainable economic development and political stability at this level of economic development are based on the real economy and industrial development.

Naturally, the implementation of reindustrialization requires a more complex economic policy platform that would create new level playing field for the handshake between the government's visible hand (industrial policies for tradable sectors and automatic stabilizers in monetary and fiscal spheres) and invisible hand of the market providing efficient selection environment for all economic agents. In new context entrepreneurs can flourish and they are not penalized for failure but can actually learn from it.

Our proposal is an attempt to restore balance between market and government with greater transparency and accountability, with short-run actions consistent with long-run vision, without irreversibility and asymmetries. Reindustrialization is a more dynamic and more sanguine way for deepening domestic market and penetrating external market niches. It unlocks opportunities for sustainable growth.

Reindustrialization is a way to solve the crisis of confidence by enabling Serbia to successfully return to industrial economy development model. Without this, economics in Serbia will keep the status of "gismo science", a toy in the hands of politicians.

Do we have bright economists? Yes and no. Probably, yes. Do we have strategists? We have to see.

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Dragan Đuričin

is a Full Professor at the Faculty of Economics, University of Belgrade. He teaches courses on Strategic Management and Project Management (graduate studies), Business Strategy and Strategic Finance (postgraduate studies), and Economics of Strategy (doctoral studies). He wrote a dozen of books in the fields of strategic management, project management, and economic transition. He was a visiting professor at the University of Venice as well as a fellow of Fulbright Foundation. He is the editor in chief of Ekonomika preduzeća. He is the executive chairman of the Kopaonik Business Forum and cofounder of the SEE Management Forum. He has been working for Deloitte for almost two decades, and since 2007 he has held the position of chairman of Deloitte Serbia. He is also a member of the Council for Economic Recovery of the Government of the Republic of Serbia. He was president of the Serbian Association of Economists for fifteen years. He was a member of the Economic Council of the Government of the Republic of Serbia. He is/was a member of the board of directors in several organizations such as Metalac, Sintelon (Tarkett), Apatinska pivara (Molson Coors), Imlek (Danube foods), Hypo Alpe Adria Bank, Messer Tehnogas and Cardiovascular Institute of Dedinje.

Iva Vuksanović

is a Teaching Assistant at the Faculty of Economics, University of Belgrade. She received her master degree in Strategic Financial Management in 2009 from the Faculty of Economics, University of Belgrade. Currently, she is a doctoral student in the field of risk management in the energy sector. She is the editorial coordinator of Ekonomika preduzeća. She also works as a research associate at Centre for Scientific Research of the Faculty of Economics. Her other interests refer to risk management, corporate governance and compensation policy. She wrote numerous papers related to the previous topics.

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Pavle Petrović
University of Belgrade
Faculty of Economics
Department for Statistics and Mathematics
Fiscal Council, Republic of Serbia

Danko Brčerević
Fiscal Council
Republic of Serbia

FISCAL CONSOLIDATION: PRECONDITION FOR GROWTH

Fiskalna konsolidacija: preduslov za rast

Abstract

The fiscal multiplier shows to what extent fiscal consolidation (reduction of public expenditure) slows down economic activity. In extreme cases, large fiscal multiplier may lead to significant reductions in GDP and public revenues after fiscal consolidation – so much so that, instead of the expected reduction, it results in an increase of the public debt-to-GDP ratio and a deterioration of the fiscal position of the country. We have shown that fiscal multipliers in Serbia are much lower than in developed European countries – they are almost insignificant in the period of expansion, and may reach 0.5-0.6 in times of crisis. Therefore, in Serbia, fiscal consolidation would exercise lower negative impact on economic activity and, undoubtedly, improve the health of the public finances. Moreover, although fiscal policy in Serbia was far less prudent than in other countries in the region (considerably larger fiscal deficit and a much faster increase in public debt), the decline in economic activity was not mitigated, hence also pointing to low fiscal multipliers. On the other hand, the expansionary fiscal policy makes the public debt crisis threat quite probable in Serbia. Therefore, fiscal consolidation in Serbia is not only economically desirable, but it is also now the only option that Serbia has.

Key words: *fiscal consolidation, fiscal multipliers, critical fiscal multiplier, public debt*

Sažetak

Fiskalni multiplikator pokazuje koliko fiskalna konsolidacija (smanjenje javnih rashoda) usporava privrednu aktivnost. U ekstremnim slučajevima, veliki fiskalni multiplikator može da dovede do znatnog umanjenja BDP-a i javnih prihoda nakon fiskalne konsolidacije – toliko da umesto očekivanog smanjenja učešća javnog duga u BDP-u dođe do njegovog povećanja i pogoršanja fiskalne pozicije zemlje. Pokazali smo da su fiskalni multiplikatori u Srbiji znatno niži nego u razvijenim evropskim zemljama – gotovo su beznačajni u vremenu ekspanzije, a u vremenu krize mogu da dostignu 0,5-0,6. Dakle, fiskalna konsolidacija bi u Srbiji imala manji uticaj na privrednu aktivnost i nesporno bi poboljšala zdravlje javnih finansija. Dodatnu potvrdu malog uticaja državne potrošnje na rast nalazimo i u kretanjima fiskalnih i ekonomskih indikatora u prethodnih pet godina. I pored toga što je fiskalna politika u Srbiji bila daleko manje odgovorna nego u drugim zemljama regiona (osetno veći fiskalni deficit i mnogo brži rast javnog duga), pad privredne aktivnosti nije bio manji. Sa druge strane ekspanzivna fiskalna politika je dovela do toga da mogućnost izbijanja krize javnog duga u Srbiji postane realna opasnost. Stoga, fiskalna konsolidacija u Srbiji je ne samo ekonomski opravdana već trenutno i nema alternativu.

Ključne reči: *fiskalna konsolidacija, fiskalni multiplikatori, kritični fiskalni multiplikator, javni dug*

Introduction

There is no single answer to the question of what drives high and sustainable economic growth. Government spending is only one of many factors that have some impact on economic growth. This paper offers some economic analysis and the survey results which show that in Serbia the impact of government spending on economic activity is not large. Therefore, its considerable decrease (fiscal consolidation) would have a very limited impact on the reduction of economic activity. On the other hand, absence of a strong reduction in public spending would inevitably result in public debt crisis and a plunge of GDP. This is why fiscal consolidation is currently the only possible and economically feasible fiscal policy in Serbia – even in the conditions of slow growth or stagnation.

In the past five years, Serbia had expansive rather than restrictive fiscal policy. Despite the odd austerity measures such as limiting pension and public sector salaries rise, as well as tax rate increases, the true character of fiscal policy was reflected in the overall trends of fiscal deficit and public debt – and these increased in Serbia. The explanation for this partly lies in increased government spending for covering losses of public and state-owned enterprises and banks, which cancelled the above mentioned savings achieved. The interventions in the banking sector alone cost the country more than 800 million euros, and approximately same amount government guarantees for borrowings of public utility Srbijagas (which represents an implicit subsidy and the actual government expenditure).

Expansive fiscal policy, however, did not solve the problems in the economy nor did it spur economic growth. Regional analysis (the first section) shows that, in the past five years, the average fiscal deficit in Serbia was higher by 1.5% of GDP than in the region, and the debt to GDP ratio grew almost twice as fast than in comparable countries. According to the rate of GDP growth achieved in the previous five years, however, Serbia was quite an average country in the region. Therefore, fiscal policy in Serbia could be evaluated as less prudent than in other countries in the region, and by no means as a thoughtful economic policy response to the crisis.

On the other hand, expansionary fiscal policy resulted in a situation that Serbia is now seriously threatened by a public debt crisis. The size of public debt of more than 63% of GDP and its growth of over 30 percentage points of GDP in just five years indicate that the continuation of unchanged fiscal policy is unsustainable. In 2014, the annual appropriations of funds for interest payments on the debt will amount to around one billion euros – representing their increase by more than five times compared to 2008. The increasing government borrowing to finance the structural deficit, but also for servicing previous debts is unsustainable in the medium term.

To reverse these trends and avoid a public debt crisis, we must make a shift in the following years – implement fiscal consolidation, and sharply cut public expenditure and the deficit. Even that, however, will not be sufficient to reduce the debt to GDP ratio and avoid the crisis if the problems in the banking sector and the performance in public and state-owned enterprises are not resolved as well.

Significant reduction of fiscal deficit in the EU, however, initiated numerous debates about whether excessive fiscal tightening may be counterproductive in times of recession and slow economic growth. Namely, the reduction in public expenditure (or increasing public revenues), has a certain influence on the reduction of economic growth, which in some countries (such as Greece, for example) in the end may result in an increase, not a reduction in the debt to GDP ratio after austerity. In these cases, fiscal consolidation is said to be self-defeating, since it produces opposite effects to those intended.

We have however shown that this cannot be the case in Serbia (the second section). The standard measure that shows how changes in government spending affect GDP is the fiscal multiplier. Although there isn't accurate econometric estimate of fiscal multipliers for Serbia, there are a number of studies that lend opportunity to assess the size of the multipliers in the country with similar characteristics as Serbia. Therefore, we can say with considerable certainty, that the fiscal multipliers for Serbia are significantly lower than those for the EU countries and that in times of economic expansion they probably range between 0 and 0.2, and may reach 0.5-

0.6 in times of crisis. The relatively low fiscal multipliers explain why expansionary fiscal policy in Serbia did not bring faster economic growth in the past.

Analysis, thus, shows that fiscal consolidation in Serbia would undoubtedly improve the health of its public finances and have a limited impact on economic growth. Therefore, the best and most powerful economic policy response to slow economic growth and a number of problems that the Serbian economy is facing should not be sought in the level of public expenditure nor in the amount of tax rates. The truly supportive measures for growth would be those related to the improvement of business environment, reforms (which have been a subject of talks for years, but have never been implemented) and the attraction of foreign direct investment – and there is empirical evidence for this. In Serbia, government expenditure can best contribute to economic growth by preventing public debt crisis and ensuing collapse of output and that means cutting expenditure.

Fiscal policy and economic growth in Serbia and the region in the period of 2009-2013

The escalation of the global economic crisis has significantly affected the Southeast Europe region, which resulted in the contraction of economic activities with strong growth of unemployment, increase in the fiscal deficit and public debt growth. Serbia was no exception in this respect, and some trends were more pronounced than in other countries in the region. In order to analyse the regional context of fiscal policy and achieved economic growth in Serbia, we have taken a sample of countries that, we consider, can be useful in describing regional trends. Apart from Serbia, this sample also comprises its neighbouring countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Macedonia, Montenegro, and Romania (the Region). The observed indicators for these countries were their economic growth, fiscal deficit and public debt growth since 2009.

After 2009, all the countries of the region faced the same or nearly the same issues as Serbia. The decline in economic activity and particularly pronounced decline in public revenues[1] resulted in a large increase in the fiscal deficit and public debt. Reactions to the deteriorating fiscal trends, however, were different in individual countries. We wished to explore how fiscal policy in Serbia differed from that in the region and if possibly different fiscal policy making had an impact on economic growth.

The analysis of regional data indicates that, in the past five years, Serbia led less prudent fiscal policy as compared to other observed countries. In the past five years, Serbia had significantly higher fiscal deficit and considerably faster growth of the public debt than other countries in the region. Serbia did limit the rise of pensions and public sector salaries and it also rose some taxes rates (VAT, income tax), but other countries had even more aggressive adjustment of public finances. Perhaps somewhat extreme, but certainly an indicative example is Romania, which increased the VAT rate from 19 to 24%, reduced public sector salaries by 25%, froze pensions and reduced some of the rights and appropriations of funds for unemployment and child benefits. Furthermore, Serbia also had an escalation of other problems related to the poor performance of public enterprises and local banks which contributed to the fact that the national debt grew much faster than in any of the neighbouring countries.

At the onset of the crisis (2009), Serbia had an arrangement with the IMF; therefore, in the period of 2009-2010, it realized a smaller fiscal deficit compared to other countries in the region. After that, the trends in Serbia diverged from those in other countries in the region, as the deficit in Serbia grew, while in most other countries it dropped significantly.

The regional analysis showed that despite significantly higher fiscal deficit and much faster growth of public debt, GDP growth in Serbia was similar to that in other comparable countries in the region. This suggests that, if observed separately, government spending in Serbia probably does not have as big an impact on economic activity, such as for example is the case in developed countries – which will be explained in more detail in the following parts. Therefore, it is economically justified for Serbia to significantly increase fiscal tightening in the

1 As a result of the change of the growth model that in the pre-crisis period relied on domestic demand which generates abundant tax revenues

coming years, since it is already lagging considerably behind other countries in the region in terms of the implementation of such measures.

Trends in economic activity in Serbia and in the region in the period of 2009-2013

Trends in economic activity in the countries of the region were estimated based on the average GDP growth in the five-year period of 2009-2013. Despite the slightly higher average growth rates of GDP, economic growth of Serbia was not significantly different from that in other countries of the region. Table 1 shows average GDP growth in Serbia and other countries of the region.

Table 1: Serbia and the region, average GDP growth rates, 2009-2013

	Average GDP growth rates in the period of 2009-2013 (%)
Albania	2.6
Bosnia and Herzegovina	-0.2
Bulgaria	-0.4
Croatia	-2.4
Hungary	-1.1
FYR Macedonia	1.4
Montenegro	0.2
Romania	-0.6
Serbia	-0.1
Regional average (weighted)	-0.6

Source: IMF World Economic Outlook (9), data for Serbia Statistical Office of the Republic of Serbia

The table shows that, in the observed period, the average growth rate in Serbia was -0.1%, and that three countries had higher, while four countries had lower economic growth than Serbia, whereas Bosnia and Herzegovina had approximately the same growth as Serbia. The realized weighted average growth of the entire region was slightly lower than in Serbia and amounted to -0.6%. The difference in growth of 0.5 percentage points, however, is significant only in the long term, and in a period of several years, it can be changed by adding one or two years and is not considered to be significant.

A more detailed analysis, on the other hand, also indicates that the trend of economic growth in Serbia was nevertheless average compared to other observed countries and that, in terms of economic activity, Serbia did not have much better experience than the region. Namely, the higher growth (i.e. smaller decline in economic activity) in Serbia can almost completely be explained by exogenous factors, which include the investment and the launch of production at Fiat Automobiles Serbia. Over the past five years, about 2% of the realised GDP in Serbia was the result of the investment and net exports of this company, which increased the average rate of GDP growth by about 0.4 percentage points.

The projections of GDP growth for 2014 are slightly lower in Serbia than in other countries in the region. According to the EBRD projections of January 2014, it is expected that, in 2014, all the countries in the region, save Croatia, will have a higher rate of GDP growth than Serbia. If we included the forecast for 2014 into the existing data for the period of 2009-2013, over the extended period, the average growth rate of Serbia would become even closer to the regional. Therefore, it could easily be concluded, given the arguments outlined in the previous paragraph, that from 2009, the trend of GDP in Serbia was essentially at the level of the regional average, and that it might even be that it was slightly lower.

Trends in fiscal deficit in Serbia and in the region in the period of 2009-2013

In contrast to economic growth, according to which Serbia was no different from other countries in the region, in the observed five-year period, Serbia's fiscal deficit was noticeably higher than in all other observed countries. Similarly to the previous part, Table 2 shows average fiscal deficits in the period of 2009-2013 for Serbia and other countries in the region.

Table 2: Serbia and the region, average fiscal deficit, 2009-2013

	Average fiscal deficit in the period of 2009-2013 (% GDP)
Albania	-4.8
Bosnia and Herzegovina	-3.3
Bulgaria	-1.8
Croatia	-4.6
Hungary	-1.9
FYR Macedonia	-3.1
Montenegro	-4.4
Romania	-4.6
Serbia	-5.3
Regional average	-3.8

Source: IMF World Economic Outlook (9), data for Serbia Ministry of Finance of the Republic of Serbia

Table 2 shows that, in the five-year period, the average deficit in Serbia amounted to 5.3% of GDP and was higher than in all other observed countries. Compared to the regional average, fiscal deficit in Serbia was significantly higher and the difference was 1.5% of GDP.

As with the analysis of the trends in GDP, we have analysed data on fiscal deficit to a more detailed level, taking into account the methodological and other factors that could affect the conclusion of the analysis. The definition of fiscal deficit in Serbia is particularly subject to different interpretations depending on how state intervention "below the line" is treated.[2] In other countries, we have also analysed the impact of certain one-off factors on their average deficit during the observed period.[3] In addition to all that, we have also varied different assumptions for calculating the average value of the regional deficit (weighted and unweighted average)[4]. All the analyses have shown that the fiscal deficit in Serbia was significantly higher than in all other observed countries and that the measure of this deviation is around 1.5% of GDP on average per year.

It is important to note that Serbia is also one of the few countries in the region in which, with some oscillations, fiscal deficit increased since the crisis began. Thus, in 2009, Serbian fiscal deficit amounting to 4.5% of GDP was lower than the average in the region. The trend after 2009 was that fiscal deficit in Serbia grew, while in most other countries (Hungary, Romania) it dropped strongly due to the implementation of various programs of fiscal consolidation (from 2009 to 2013, Romania reduced its deficit by as much as 5 percentage points of GDP).

Trends in public debt in Serbia and the region in the period of 2009-2013

The third macroeconomic indicator for Serbia that we have analysed in further detail in the regional context is the public debt. According to this indicator, Serbia was by far the worst in the region (at the wider region level, only Slovenia had a similar increase). The reason for this deviation lies in larger fiscal deficit, but also a large increase in the public debt apart from the deficit – to finance the inefficient operations of public and state-owned enterprises and ruined banks. Table 3 shows the change in the debt to GDP ratio in Serbia and the region in the period of 2009-2013.

Table 3: Serbia and the region, increase of public debt from 3 December 2008 to 31 December 2013

	Changes in public debt from 2008 to 2013*) (% GDP)
Albania	10.1
Bosnia and Herzegovina	11.1
Bulgaria	0.6
Croatia	28.5
Hungary	6.8
FYR Macedonia	14.8
Montenegro	26.5
Romania	24.5
Serbia	32.5
Serbia (comparative methodology)	31
Regional average	17.4

*) End of period
Source: IMF World Economic Outlook (9), data for Serbia Fiscal Council of the Republic of Serbia

Table 3 clearly shows that the increase of public debt in Serbia was by far the highest compared to all other countries in the region. Compared to the regional average, in the period of 2009-2013, public debt growth in Serbia was almost twice as high, and stood at 32.5 percentage points of GDP compared to 17.4 percentage points of GDP.

Part of this difference (about 1.5 percentage points of GDP) can be attributed to methodological factors. Serbia, unlike other countries in the region, has a conservative methodology for calculating public debt, which initially includes all of the issued government guarantees for debts of other legal entities. In other countries, guarantees are included in the public debt only if activated (the EU methodology) [6]. The largest portion of the guarantees that the Serbian government has issued since 2009, however, have already been activated (Srbijagas, JAT, Galenika,

2 Our intention was to remove any suspicion that methodological factors are the reason why fiscal deficit in Serbia was significantly higher than in other observed countries. It was one of the reasons why we used the data from the Ministry of Finance on the deficit for Serbia, which in some cases indicate lower deficit than the IMF methodology (2013).

3 For example, in 2011, Hungary had one-time fiscal surplus of over 4% of GDP due to the nationalization of private pension funds.

4 In contrast to the economic growth of the region, which we calculated as the weighted average of the growth of individual countries, an appropriate measure for the deficit is the non-weighted average, because it in itself already takes into account the level of GDP of individual countries (deficit is measured as a percentage of GDP).

Zelezara Smederevo) – thus, they would be included in Serbia's public debt by both methodologies. Only a small portion of the guarantees that the government has issued since 2009 in the amount of about 450 million euros (about 1.5% of GDP), have been paid off independently by the companies that took the loans (EPS, Fiat Automobiles Serbia, the Air Traffic Control) – and these are loans that would not be included in the public debt in other countries in the region. Therefore, the Table 3 has an additional row which includes calculated increase in public debt in Serbia since 2009 if Serbia used the same methodology for calculating public debt as the rest of the observed countries.[5]

Another exogenous reason due to which public debt in the region could increase more slowly than in Serbia are the changes in real exchange rates. Namely, Serbia and all other countries in the region mainly borrowed in euros or dollars. If the currencies of the countries in the region had had substantial real depreciation or real appreciation – it would have led to a change in the debt to GDP ratio irrespective of all other factors. Available data[6], however, indicate that this did not happen either in Serbia or in the region. From 2009, Hungarian currency lost about 5% of its real value, the currencies of Romania, Bulgaria, Serbia, and Bosnia and Herzegovina remained almost unchanged in real terms, and the Croatian kuna and Macedonian denar had a real appreciation by about 2%. Only Montenegro had somewhat greater real appreciation of about 5%.

Although there are some factors that could affect the changes in public debt (government deposits, privatization), it can be argued with great certainty that the real reason for the more rapid increase of public debt in Serbia compared to the region lies in less responsible fiscal policy making. As already shown in the previous section (Table 2), in the observed five-year period, Serbia had a significantly larger fiscal deficit in relation to other countries in the region. Larger fiscal deficit in general increases borrowing of the government in order to finance it – and, consequently, leads to a more rapid increase of public debt. Fiscal deficit alone, however, could not account for all the differences in the increase of Serbia's public debt in relation to the remainder of the region. Namely, on average the fiscal deficit of Serbia was higher by 1.5 percentage points of GDP compared to other countries observed (Table 2) – which means that on this ground, in the past five years, Serbia's public debt could have risen by about 7.5 percentage points of GDP faster than that in the region.[7] However, in the observed period, public debt in Serbia increased by as much as 14 percentage points of GDP faster than in the region (comparable methodology) – which is why we have further investigated the causes of this strong increase.

Basic causes of the increase of public debt in Serbia in the period of 2009-2013

As shown in the previous part of the paper, a significant portion of the extremely high growth of public debt in Serbia cannot be explained solely by the high fiscal deficit. Based on actual fiscal deficit in the past five years, the debt to GDP ratio in Serbia could have increased by about 25 percentage points.[8] The actual increase in public debt would, however, have to be somewhat lower than that, since, in the past five years, Serbia had about 730 mln euros revenues from privatization (sales of NIS, etc.), so the government did not have to borrow funds in this amount. It follows that, from 2009, almost 10 percentage points of the increase in the public debt of Serbia (about 30% of the total increase) originated independently of the fiscal deficit.

Table 4 shows a detailed quantification and ranking of all the causes of the strong increase of public debt in Serbia over the past five years. Some of them will be analysed separately further on in the paper.

First, we are going to explain the one-off and objective factors that contributed to the change in the debt to GDP ratio in the past five years, these being changes in deposits and exchange rate changes. In the late 2013, by means of issuing euro-bonds, the government borrowed in the amount of USD 1 billion. Since this money could not be spent in

5 It is possible that, in the near future, public debts of Croatia and Montenegro will increase due to assuming the debts of shipyards and the Aluminium Plant Podgorica.

6 The data for the EU member states were taken from Eurostat, and for other countries the data of their central banks. We have found no available data for Albania.

7 The calculation is greatly simplified, but it is approximately accurate.

8 A detailed calculation has been used in this calculation.

Table 4: Serbia, reasons for increase in public debt from 31 December 2008 to 31 December 2013

	Reasons for public debt increase from 31 December 2008 (p.p. GDP)
Fiscal deficit	25.3
Issued government guarantees for borrowings	4.3
Off budget state interventions (ruined banks, settling defaults, recapitalisation)	2.5
Changes in government deposits	2.5
Changes in exchange rate	0.8
Revenues from privatisation	-2.2
Total increase December 2008 - December 2013	32.5

Source: The author's estimate based on the data from the Ministry of Finance of the Republic of Serbia

the last month of 2013, the year ended with unusually high deposits of the state, estimated at around EUR 1.2 billion. Although we do not have accurate information about the actual status of the deposit of the state at the end of 2008 (nor for 2013), we estimate that the change in the deposit contributed to the observed increase in the debt to GDP ratio with around 2.5 percentage points (since in 2008, there must have been several hundred million euros in deposits).

The largest part of Serbia's public debt (about 80%) was denominated in foreign currencies, and GDP is realised in dinars. Therefore, real exchange rate changes result in changes in the debt to GDP ratio. The real depreciation of the dinar from end of 2008 until end of 2013, however, was only about 1%, meaning that it increased the public debt in Serbia by about 0.8 percentage points. Therefore, changes in the dinar exchange rates[9] and deposits of the state did contribute to somewhat faster growth of public debt in the past five years, but their impact was lower (exchange rate) and temporary (deposits).[10]

Apart from financing deficit, a significant part of the explanation for the growth of the public debt of Serbia in the past five years are government expenditures for funding inefficient operations of public and state-owned enterprises and ruined banks. Compared to the end of 2008, the share of issued government guarantees in GDP increased by 4.3 percentage points of GDP and other "below the line" interventions increased the public debt by 2.5 percentage points of GDP (Table 4). Converted to nominal values, this corresponds to an increase in public debt by more than EUR 2.2 billion on these bases.

From 2009, there was a rapid expansion in the issuance of government guarantees on borrowings of legal entities (primarily public and state-owned enterprises – the majority of them for Srbijagas). According to the current definition of public debt in Serbia, all issued government guarantees are included in the public debt. From 2009, the share of the guaranteed debt increased by 4.3 percentage points, which, in most cases, were implicit government subsidies that were used to finance inefficient operations of public and state-owned enterprises (Srbijagas, Zelezara Smederevo, JAT, Galenika). The fact that the issuance of these guarantees really represents actual government expenditure was proven in 2013 and in 2014 when the guarantees were activated and the state took upon itself the obligation of servicing this debt.

In some other instances, the state directly borrowed to help its inefficient public enterprises, and also to solve problems at different levels of government, and it was not reflected in the deficit. These transactions were recorded "below the line", which, to put it simply, means that they increased public debt, and did not increase the deficit. Thus, for example, during 2009, the state borrowed 21.1 billion dinars [12] so that Public Enterprise "Roads of Serbia" could service their arrears to suppliers[11]. Similarly, in early 2013, the state took over the liabilities of the health care institutions and local self-governments as well.

The government had an additional expenditure for covering the losses made by the ruined banks. Before

9 For reasons of simplification, we only observed a change in the exchange rate against the euro, but it should be noted that a certain portion of the public debt is indexed in dollars, so the calculation is not entirely accurate.

10 Similar conclusion can be found in [10].

11 Roads of Serbia were included in the consolidated state although it is a public enterprise. Paying off their arrears in 2009 was not booked as a deficit item (nor were arrears repayments for the health care system and Environmental Protection Fund a few years later for that matter either)

closing Agrobanka, PBB, and RBV, the government had several unsuccessful attempts of recapitalization, and then the expenditure for returning the deposits of the closed banks.[12] It is interesting to note that a portion of the expenditures incurred for closing the banks have still not formally affected the public debt, but it will happen in 2014. The portion of the expenditure was funded by the Deposit Insurance Agency. Therefore, the Deposit Insurance Agency lost its funding, so that in 2014, it will recapitalize and borrow (with government guarantees) about 350 million euros, which will increase public debt in 2014.

In addition to all of the above, over the past five years, there were other government interventions that increased public debt, but not the deficit as well. Thus, during the 2012, the government borrowed the amount of 100 million euros to recapitalize Komercijalna banka. It is possible that there were some other expenses and government interventions that were not recorded as deficit, but such an analysis would require additional research.

Challenges and feasibility of implementing fiscal consolidation in Serbia

At the end of 2013, the debt to GDP ratio of 63.7 % (estimated by the Fiscal Council) and its rapid growth by over 30 percentage points of GDP in just five years indicate that the continuation of unchanged fiscal policy is unsustainable. In 2014, the annual appropriations for the payment of interest on the debt alone will be around one billion euros - representing an increase by more than five times compared to 2008. In response to the worsening fiscal flows, low economic growth and the absence of reform, credit agencies have lowered credit rating for Serbia, which makes new government borrowing more expensive and increases caution among investors when investing in government securities.[13] If investors completely lost confidence in the ability of Serbia to repay its debts (which will inevitably happen at some point should these fiscal trends continue), the government would not have enough funds to service its liabilities, which would result in a public debt crisis – a plunge of GDP (by more than 5%), loss of value of the local currency, high inflation and a big drop in living standards.

Despite the obvious need for a shift in fiscal policy, public opinion (even that of economists) often is that restrictive fiscal policy does more harm than good to Serbia and that it deepens the problems. Restrictive fiscal policy implies the tax rate increases and restricting the raises of pensions and salaries (which were the main measures to reduce the deficit used in the previous years). However, simultaneous increase in other government expenditures, as a rule, is not considered in the same context. Trends in the overall deficit reflect the synthetic nature of fiscal policy, and as the deficit grows, this is no longer restrictive, but expansive fiscal policy. In particular, we would like to draw attention to the enormous fiscal problems and expenditures that arise due to poor performance of public and state-owned enterprises and banks. In 2014, these expenses will, for example, be twice the size of all the savings that will be achieved by introducing the solidarity tax and the increase in the lower VAT rate – which best illustrates the fact that the savings (which are criticized) in fact was not even achieved, if we consider all the revenues and expenditures. With this in mind, it is obvious that without straightening the operations of state-owned enterprises and banks, any implementation of fiscal consolidation in the coming years is unlikely to succeed.

The question is whether the controversies in the global professional community caused by the implementation of fiscal consolidation in times of crisis and slow growth could even apply to Serbia. The wrongly interpreted echo of these discussions could be recognized in the local public as well in the platitude: "austerity or growth". However, neither are austerity and growth two mutually excluding concepts, nor does Serbia have much choice with the current state of public finances. For Serbia, it could rather be said "austerity as a prerequisite for growth", because without austerity, public debt crisis and a sharp drop in economic activity are imminent. Despite this quite obvious relation, it is our opinion that the causal link between reducing public spending and the impact that

12 During the closing of Universal Bank, for the first time the government paid off insured deposits only (EUR 50000), and before that, it paid off all deposits.

13 The latest decrease was in January 2014, when Fitch credit agency lowered credit rating for Serbia from B+ to BB-

it has on the public debt and economic activity deserve a thorough and sound analysis.

Justification of fiscal consolidation in Serbia – Is fiscal consolidation self-defeating?

Under pressure from the rapid growth of public debt almost all EU countries have launched programs of fiscal consolidation. The goal of these consolidations is first to slow down and then to reverse the rising trajectory of debt to GDP ratio. Significant reduction of fiscal deficit in the EU, however, initiated numerous debates about whether excessive fiscal tightening may be counterproductive in times of recession and slow economic growth. Namely, the reduction in public expenditure (or increasing public revenues), has a certain influence on the reduction of economic growth, which in some countries (such as Greece, for example) in the end may result in an increase, not a reduction in the debt to GDP ratio after austerity. In these cases, fiscal consolidation is said to be self-defeating, since it produces opposite effects to those intended.

Since Serbia is facing similar, if not greater, problems of high and rapidly growing public debt, we have analysed whether the implementation of fiscal consolidation in Serbia can be self-defeating. We have shown that even in case of stagnation of economic growth in the coming years (zero growth rate), a reduction in fiscal deficit undoubtedly has a positive impact on the reduction of the debt to GDP ratio - and that, in this respect, there is no alternative for austerity.

The dynamic functions between deficit, debt and GDP can be derived from a simple identity set: public debt at the end of the year is equal to the debt at the end of the previous year plus the deficit in the current year. [14]

$$\text{Debt} = \text{Deficit} + \text{Debt}_{-1} \qquad (1)$$

where symbol „-1“ denotes the level of debt at the end of previous year. To get the value as a percentage of GDP, we have divided both sides of the equation by GDP. Some more exact equation would imply that the deficit is further cut into primary deficit and real interest rate expenditures, but for the purposes of this analysis, it is not necessary. Other analyses of self-defeating effects of fiscal consolidation also use this correct, but somewhat simplified formula [7].

$$\text{Debt/GDP} = \text{Deficit/GDP} + (\text{GDP}_{-1}/\text{GDP})(\text{Debt}_{-1}/\text{GDP}_{-1}) \qquad (2)$$

It is obvious that $\text{GDP}_{-1}/\text{GDP}$ is in fact inverted growth rate which can also be represented as $1/(1+g)$, where g is GDP growth rate in percentage. Now the relation is decomposed to basic factors affecting the change in the debt to GDP ratio.

$$\text{Debt/GDP} = \text{Deficit/GDP} + (\text{Debt}_{-1}/\text{GDP}_{-1})/(1+g) \qquad (3)$$

The debt to GDP ratio depends on the size of fiscal deficit, debt to GDP ratio at the end of the previous year and the rate of economic growth (Gross 2011).

It is now necessary to examine what happens to the debt to GDP ratio if the government implements fiscal consolidation, i.e. reduces public expenditure. It is not so easy to calculate the impact of austerity on the reduction of public debt, as it may seem at first glance, since the reduction of public expenditure has multirole effects on the deficit and GDP.

First, lower public expenditures decrease fiscal deficit and thus directly reduce the growth of public debt. Namely, fiscal deficit is the first summand in equation (3), and its increase/decrease is reflected in the size of public debt.

Second, a reduction in public expenditure results in a reduction of GDP, which, in equation (3) is the denominator of debt (Debt/GDP). Smaller denominator (GDP) means that, on this basis, a reduction in government spending results in an increase of debt to GDP ratio.

Third, the reduction in GDP caused by reductions in government spending will also reduce government revenues (automatic stabilizer) – which will reduce the effects austerity has on reducing the deficit.[15] According to equation (3), increased deficit leads to an increase in the debt to GDP ratio.

From these relations, we can see that the critical factor that makes the difference between a successful fiscal

14 Serbia's public debt grows independently of the deficit mainly due to the issuance of government guarantees on borrowings by public enterprises, but that part of the increase in public debt does not belong to this analysis. Also, for now, we will ignore the possible change in the exchange rate, privatization and other.

15 Empirical evaluations of automatic stabilizers in Serbia are 0.33 to 0.36 (Arsić at al 2012). To simplify the matter, but approximately accurately, we can assume that the tax revenues to GDP ratio will remain constant when the GDP changes (in Serbia, this share is approximately 35%). This means that with a reduction of GDP by 1%, public revenues decrease by 0.35% of GDP.

consolidation and a self-defeating fiscal consolidation is the impact reduced public expenditure has on GDP. Namely, if the impact of reducing public expenditure on GDP is high, then the debt/GDP ratio will grow due to lower GDP, and lower GDP will also result in lower revenues and nullify a substantial portion of the effects of austerity measures. If the impact of reducing public expenditure on GDP is lower, the dominant influence on the change in the debt to GDP ratio will be achieved through the reduction of deficit and the ratio will decline.

The standard indicator which shows how much GDP is reduced with a change in public expenditure is the fiscal multiplier. The fiscal multiplier tells us by how much GDP will change when government expenditure changes by a certain amount. For example, if a reduction in government spending of 100 dinars results in a decrease of GDP by 50 dinars – the fiscal multiplier is 0.5.

Back to equation (3) now. At the end of the 2013, the public debt ratio amounted to 63.7% of GDP.[16] Let us assume, conservatively, that in 2014, the rate of GDP growth in Serbia will be equal to zero and that the Government decides to implement fiscal consolidation measures (austerity) of 1% of GDP during the year. The question we are asking is: what is the critical fiscal multiplier for Serbia that would, under these conditions, result in increased debt to GDP ratio instead of the expected reduction (the limit after which there is self-defeating fiscal consolidation)?

Calculations show that in this case the critical value of the fiscal multiplier that would bring Serbia self-defeating fiscal consolidation is 1.01 (which is, for example, much less than the critical fiscal multiplier for Greece, it being less than 0.5).

This is obtained from the following:

$$Debt/GDP - Debt^*/BDP^* > 0 \qquad (4)$$

where* means values of debt and GDP after reducing public expenditure by 1% of GDP. Therefore, this inequality requires that fiscal consolidation is not self-defeating, because the debt to GDP ratio that would be achieved without austerity is greater than that which would be achieved after austerity.

16 For reasons of conservativism, we have included guaranteed debts of companies that will almost certainly pay off their own liabilities (EPS, Fiat, APEX, the EIB loans, etc.).

A combination of this relation and equation (3) produces the following:

$$(Deficit/GDP + (Debt_{-1}/GDP_{-1})/(1+g)) - (Deficit^*/GDP^* + (Debt_{-1}/GDP_{-1})/(1+g^*)) > 0 \qquad (5)$$

And the deficit after austerity can also be expressed as follows:

$$Deficit^* = Deficit - \Delta\ Deficit \qquad (6)$$

Where, due to lower orders of magnitude, Deficit/GDP* ≈ Deficit/GDP. Now, the new equation is as follows:

$$(Debt_{-1}/GDP_{-1})/(1+g)) + \Delta\ Deficit/GDP - (Debt_{-1}/GDP_{-1})/(1+g^*)) > 0 \qquad (7)$$

Further on, g^* and Δ Deficit may be expressed as a function of reductions in government spending and hence derive the critical value of the fiscal multiplier for Serbia (when the above inequality is equal to zero). We are not intending to do this at this point, because the formula becomes too large.

However, we are going to show that the above inequality with critical fiscal multiplier of 1.01 satisfies this inequality (produces a value of zero). Reducing expenditure by 1% of GDP, with this value of the fiscal multiplier, would lead to a lower growth rate *g* by 1.01 percentage points, and since in our example the initial growth rate is zero, the value of g^* becomes -1.01%. The value of Δ *Deficit* with fiscal deficit of 1.01 and reduced public expenditure by 1% of GDP amounts to 0.646% of GDP.[17] Now, the above formula produces the following values:

$$0{,}637 + 0{,}00646 - 0{,}637 / (1 - 0{,}0101) = 0 \qquad (8)$$

Thus if Serbia had a higher fiscal multiplier than 1.01 i.e. if the reduction in public expenditure by 1% of GDP results in GDP lower by 1.01%, fiscal consolidation would be self-defeating. Otherwise, if the fiscal multiplier is less than 1.01 - a reduction in government spending also lowers debt to GDP ratio. Since the fiscal multiplier for Serbia is not greater than 0.5 to 0.6, as we are going to demonstrate in the next part of the paper, in Serbia austerity undoubtedly improves the health of its public finances.

Let us recall, nevertheless, once again that the critical value of the fiscal multiplier was calculated with zero growth rate. In the next three years, the expected average growth rate for Serbia is 1.6%, and in that case,

17 Δ Deficit = expenditure reduction – stabilizer * (g – g') * GDP

the critical fiscal multiplier would be even higher, which is then far above the actual fiscal multiplier in Serbia.

What are the fiscal multipliers in Serbia?

There is no such thing as *the multiplier*, as it varies with its determinants, e.g. the exchange rate regime, size and openness of economy, expansion and downturn etc. Hence it is not easy to come out with accurate estimate of fiscal multipliers. However, there are a number of studies on the size of fiscal multipliers which provide a basis for assessing the possible value of multipliers in a country with similar characteristics as Serbia. Therefore, we can say with considerable certainty, that the fiscal multipliers for Serbia are significantly lower than those for the EU countries and that in times of economic expansion they probably range between 0 and 0.2, and may reach 0.5-0.6 in times of crisis.

The latest research of the size of fiscal multipliers for 10 new EU member states[18] [1] was particularly useful for determining the approximate size of fiscal multipliers in Serbia. Based on a sample of Central and Eastern European countries, this paper confirms a number of theoretical predictions and empirical findings on the size of fiscal multipliers and the impact that they have on factors such as the size and openness of the economy, the exchange rate regime, the recession, etc. – which we are going to compare with Serbia. This study also covers separately the period of current Great Recession, hence coming out with multiplier estimates that are relevant for assessing the effects of fiscal consolidation in Serbia during current crisis.

Small and more open economies have a lower size of fiscal multiplier. Economic theory predicts, and empirical evidence supports these predictions [8], that greater economic openness leads to a lower fiscal multiplier. In more open economies, the change in government expenditure will transfer more onto imports and less on the increase in purchases of local products and hence reduce fiscal multiplier. In large economies, however, after an increase in imports, there is also a certain increase in exports, so fiscal multiplier does not reduce so much with the openness of economy as in small open economies. According to all the criteria, Serbia is a small and open economy,[19] and the fiscal multiplier for both criteria is low.

Developed countries have higher fiscal multipliers than developing countries. A possible reason for this result (which is confirmed in empirical research) is greater confidence that markets have in developed than in developing countries, and they do not "punish" them even when their deficits and public debt is relatively high. The link between the development of a country and its fiscal multiplier is implicitly confirmed by *Arsić*, *Nojković*, and *Petrović* [1] because the sizes of fiscal multipliers obtained for the EU10 countries are lower than those in developed countries and higher than those in developing countries. According to this criterion, Serbia would probably have lower fiscal multipliers than the EU10 countries.

High public debt lowers fiscal multipliers. *Ilzetzki et al.* [8] identified public debt of 60% of GDP as the limit after which fiscal multipliers lower. In countries where public debt is permanently above this limit, fiscal multipliers are lower independently of all other factors. Serbia exceeded this limit during 2013, and the growth of the public debt will inevitably continue for at least the next three years (until 2016), and it will therefore have lower fiscal multipliers in the coming years.

Flexible exchange rate regime and accompanying inflation targeting decrease fiscal multipliers. The plausible reason for the great difference in the size of fiscal multipliers that are obtained for the countries with fixed exchange rate and those with flexible exchange rate is different monetary policy that is typically pursued across different exchange rate regimes. Countries with fixed exchange rates and free capital flows practically do not have the freedom of independent monetary policy making. On the other hand, countries with flexible exchange rates, as a rule have accommodating monetary policy and increase interest rates after a fiscal stimulus, thus reducing the fiscal multiplier. Empirical evidence strongly supports this hypothesis. In the a sample of EU10 countries [1]

18 The sample included the following countries: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

19 The usual criterion of openness of an economy is the trading volume (imports and exports) that exceeds 60% of GDP. For Serbia, the trading volume in the 2013 was about 100% of GDP.

under flexible exchange rates fiscal multipliers are low and statistically insignificantly different from zero, while under fixed exchange rates they are above one.

In times of crisis, fiscal multipliers rise significantly. The responses that private consumption has to a change in government spending increases substantially in the times of crisis, and that can be explained by the rise in the number of households that spend all their revenues, and companies that are credit constrained. Therefore, in times of crisis, their consumption is more dependent on government stimulus. A stronger response of private consumption to changes in government spending increases fiscal multipliers. There is indirect evidence that in times of crisis, monetary policy becomes somewhat looser even in countries with flexible exchange rate and inflation targeting, which then allows for an increase in fiscal multipliers [1]. In the case of Serbia, it should be noted that even in times of crisis it maintained quite tight monetary policy, which is why we expect this increase to probably be considerably lower than in other countries.

Revenue fiscal multipliers are lower than expenditure multipliers. We, however, did not even consider revenue multipliers to be relevant for the case of Serbia, since fiscal consolidation will have to primarily be implemented at the expenditure side rather than the revenue side of the budget. There are several reasons for this. The recent tax rates increase did not leave much room for a further increase of budget revenues, the government expenditure is oversized in Serbia relative to comparable countries, and a successful fiscal consolidation is implemented by reducing expenditures rather than by increasing revenues. Table 5 shows basic values of fiscal multipliers obtained for the EU10 countries

Table 5 shows that, for the whole observed period, the value of (maximum) annual fiscal multiplier for the overall sample of countries was 0.58. However, there is a great difference resulting from a difference in the exchange rate regimes in individual countries. For countries with flexible exchange rate regimes, fiscal multiplier is almost negligible, and for countries with fixed exchange rate regime, it is around 1.74. In times of recession, fiscal multiplier increased by about three times in the overall sample, from 0.48 to 1.51. Sample size for the crisis period does not allowed reliable estimation of multipliers under fixed and flexible regime respectively. However, we implicitly and roughly assess that, in times of crisis, fiscal multipliers for the EU10 countries with flexible exchange rate could be around 1.

As already demonstrated, Serbia shares common features with the group of countries from the survey with lower fiscal multipliers (a small open economy and flexible exchange rate). However, due to higher public debt and slightly lower level of development, Serbia would have to have even lower fiscal multipliers. Therefore, we tentatively estimate that fiscal multiplier in Serbia will be almost negligible in times of expansion (0-0.2), and that in times of crisis, it can increase to 0.5-0.6 at most.

There is also some anecdotal evidence to suggest that the fiscal multiplier for Serbia is relatively low (even in times of crisis). This can be concluded based on the data presented in the first section as well. There, we have, in fact, shown that despite less responsible fiscal policy (considerably higher fiscal deficit and public debt growth) compared to other countries in the region – Serbia did not have higher economic growth. Also, in some recent relevant analyses (Merrill Lynch 2014), fiscal multiplier used for Serbia in 2014 and 2015 is 0.6. Although there is no detailed explanation how this multiplier is estimated, it is entirely consistent with our findings.

The effects of fiscal consolidation and fiscal multipliers on public debt trajectory

In Serbia, fiscal consolidation or great cuts in government spending and the deficit would, in the medium term, first stop the increase, and then reduce the public debt to GDP ratio. The negative impact on economic growth in Serbia, which fiscal consolidation may have, is not a good enough excuse for its delay – because the alternative is crisis. This

Table 5: EU10 – An overview of annual fiscal multipliers

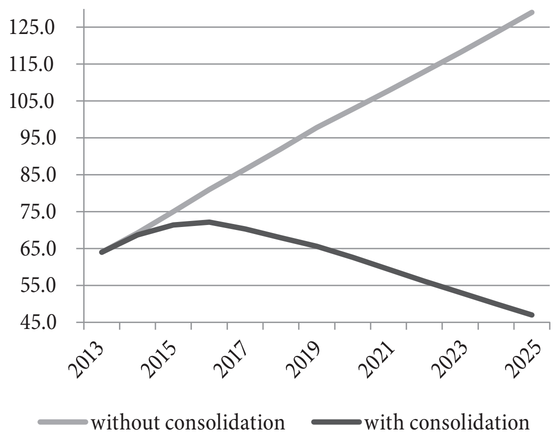
	Overall sample	Fixed exchange rate	Flexible exchange rate	Recession	Expansion
Maximum cumulative multiplier	0.58	1.74	0.13	1.51	0.48

Source: [1]

section illustrates possible trends of public debt in the coming years, with and without fiscal consolidation, as well as what impact different fiscal multipliers may have on the trajectory of public debt. It is evident that even with extremely high fiscal multipliers (which certainly do not apply to Serbia), fiscal consolidation turnaround public debt to GDP ratio trajectory i.e. from increasing trend to decreasing one.

Figure 1 shows trends in public debt with and without fiscal consolidation. We would like to note that the graph is illustrative and cannot be fully trusted to show the correct value of public debt in the coming years. Namely, the public debt to GDP ratio is influenced by numerous factors that are unpredictable, such as: the dinar exchange rate, future interest rates, possible privatizations, economic growth rates, as well as the rate of fiscal consolidation which would be pursued. Yet, the graph is completely reliably in terms of the direction of the debt trajectories with and without fiscal consolidation.

Figure 1: Serbia – Public debt to GDP ratio with and without fiscal consolidation



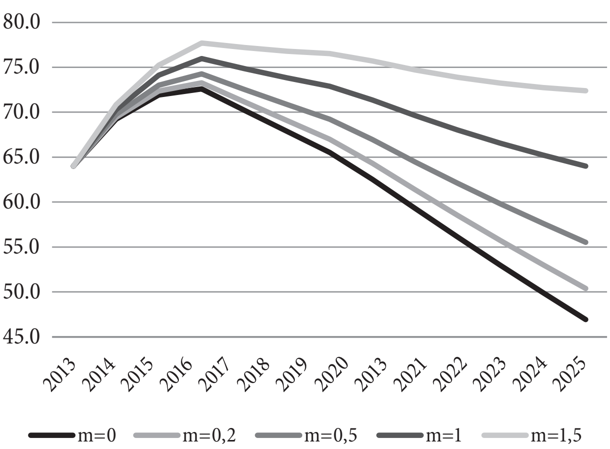
Source: the author's estimate base on the data from the Ministry of Finance

In the first scenario, without fiscal consolidation, we assumed that the primary deficit[20] in the coming years will remain unchanged and that it will be around 3% of GDP (slightly lower than that expected in 2014). In the second scenario (fiscal consolidation) we assumed savings of around 0.5% of GDP in 2014 and further reduction in the primary deficit by about 1.5% of GDP per year until 2017.

The graph shows that the public debt will inevitably grow until 2017 – in both cases. Without fiscal consolidation, however, it is impossible to stop the growth of the public debt to GDP ratio even after 2017, despite high rates of economic growth (higher than 4%). Namely, if the primary deficit remains unchanged and the appropriations for interest rates continue to grow, this means that the total deficit shall grow. Higher total deficit increases public debt, which then increases appropriations for interest rates, i.e. debt becomes self-generating. Although Figure 1 shows an increase in public debt without fiscal consolidation that significantly exceeds 100% of GDP, it is clear that in Serbia crisis would occur much sooner.

Figure 2 shows how different fiscal multipliers would influence the trajectory of public debt if consolidation is implemented. The larger fiscal multiplier, by definition, hinders the implementation of fiscal consolidation. Figure 2 shown trajectories of the public debt to GDP ratio with different sizes of fiscal multipliers from m = 0 to m = 1.5.

Figure 2: Serbia – Fiscal multipliers and public debt to GDP ratio



Source: the author's estimate base on the data from the Ministry of Finance

Even with the extreme values of fiscal multipliers that certainly do not apply to Serbia (1.5) in the medium term, fiscal consolidation would stop the growth of public debt to GDP ratio. Since fiscal multipliers for Serbia are relatively low (0.5-0.6 in times of crisis, and 0-0.2 in times of expansion), in the long term, the trajectory of public debt would probably be close to the trajectory that corresponds to the line m = 0.2 in Figure 2.

Although given the current state of public finances in Serbia, fiscal consolidation is necessary in order to

20 Deficit without appropriations for interest rates

avoid crisis, its impact on economic growth should not be ignored (but by no means exaggerated). This is especially true in terms of stagnation or recession, because fiscal multipliers are higher then, but the same goes for the sensitivity of investors to low growth rates as well. For multi-year fiscal adjustment, which Serbia is facing, it is possible to determine the acceptable pace of fiscal consolidation, which would be a combination of the largest deficit reduction with minimum negative impact on economic growth. In such cases, countries with low credibility, such as Serbia, would benefit greatly from entering into a multi-year arrangement with the IMF.

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Pavle Petrović

Professor of Economics at University of Belgrade where he lectures Econometrics and Macroeconomics. Main interests are empirical research in macroeconomics and macroeconomic policy: fiscal and monetary. He published in international journals such as: Journal of Money Credit and Banking, Journal of Development Economics, Journal of Comparative Economics, Journal of Macroeconomics, Journal of International Money and Finance, Cambridge Journal of Economics, etc. and refereed for most of them. Visiting fellow at Harvard, Princeton and Cornell Universities. Served as the chief editor of Quarterly Monitor of Economic Trends and Policies in Serbia, (2007 – 2011), a publication that regularly addresses fiscal policy and reform in Serbia. Co-founder and director of CES Mecon (1992-1999.) a think-tank, where he led projects on macro-stabilization and reforms in transition. He was the President of National Bank of Serbia Council (2003-2004), and assistant finance minister in government of Serbia (2001-2002). He is the president of the Fiscal Council since 2011.

Danko Brčerević

From 2005 until 2008, Danko Brčerević has worked as a Researcher at the Center for Advanced Economic Studies (CEVES) and at the Foundation for the Advancement of Economics (FREN), Faculty of Economics, Belgrade University. Since October 2005 he has been a Regular columnist of the Economic Activities section and one of the editors of The Quarterly Monitor of Economic Trends and Policies in Serbia, FREN's publication. In 2008 he was engaged as the Coordinator of the Economic Development and European Integration Department, at the Deputy Prime Minister's Office for European Integration, Government of the Republic of Serbia, where in 2010 he was Head of Sustainable Development Unit. In 2011 he started working at the Fiscal Council of the Republic of Serbia as a Special Advisor.

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Miroljub Labus
University of Belgrade
Faculty of Law
Department of Law and Economics

FISCAL CONSOLIDATION AND TOTAL FACTOR PRODUCTIVITY

Fiskalna konsolidacija i ukupna faktorska produktivnost

Abstract

Fiscal consolidation is a necessary means to contain rising public debt, but it will not provide growth and employment over the mid-term and must be much harsher than usually expected. Rising total factor productivity should complement this policy. In a DSGE framework, by using our QUEST_SERBIA model, we illustrate how these two policies work and what effects they may have on maintaining Serbia's public debt at a sustainable level.

Improvements in total factor productivity were modeled by using an example of a labor-augmenting technological progress. The present labor market restructuring debate addresses wage and labor-to-employer rigidities. This will not contribute much to improving human capital and upgrading it to the standards of growth based on innovation and technological progress. We propose a complementary policy of closing highly skilled labor supply gaps. The role of government is crucial in triggering such a policy change, which is broadly in line with efforts to design the reindustrialization policy aiming at promoting development in Serbia. This policy does not call for billons of euros for investments, but for modernization of the public education system.

Key words: *fiscal consolidation, total factor productivity, DSGE, Serbian economy*

Sažetak

Fiskalna konsolidacija je nužna da bi se javni dug održao na podnošljivom nivou, ali ona neće sama po sebi pokrenuti rast i zaposlenost na srednji rok i moraće da bude mnogo oštrija nego što se uobičajeno pretpostavlja. Povećanje ukupne faktorske produktivnosti bi moralo da dopuni ovu politiku. U okviru DSGE modela, odnosno našeg modela QUEST_SERBIA, pokazali smo kako ove dve ekonomske politike deluju i kako bi mogle da utiču na zadržavanje javnog duga na planiranom nivou.

Porast ukupne faktorske produktivnosti ilustrovan je preko radno intenzivnog tehnološkog progresa. Tekuća rasprava o restrukturiranju tržišta rada je fokusirana na rigidnost plata i regulacije zapošljavanja i otpuštanja radnika. Ne sporeći nužnost ovakvih promena, ta politika neće poboljšati ljudski kapital, što je neophodno da bi se zadovoljili standardi razvoja zasnovanog na inovacijama i tehnološkom progresu. Predložena je dopunska politika koja bi imala za cilj da eliminiše strukturne jazove u ponudi visokokvalifikovanog rada za šta je neophodna ozbiljna promena u visokoobrazovnom sistemu zemlje. Uloga države je ključna u promeni poslovnog ambijenta koji bi podržavao moderni razvoj. Takva politika bi mogla da se tumači kao značajan deo nove politike reindustrijalizacije zemlje koja ima za cilj ubrzanje privrednog razvoja u Srbiji. Ona ne bi zahtevala milijarde investicija, nego adaptaciju javnog obrazovnog sistema.

Ključne reči: *fiskalna konsolidacija, ukupna produktivnost faktora, DSGE model, srpska privreda*

JEL classification: E17, E63, F41

Introduction

There are always important and urgent issues, and the tendency to switch the order of priority between them in favor of current needs. In the Serbian economic context, the important issue is related to fiscal consolidation and the worrying level of public debt. The urgent issue is set in motion by proposals to cure the fiscal deficit by restructuring the labor market. More time has been spent discussing the labor law and its provisions on firing and hiring workers than on reversing the trend of the country's indebtedness. The two issues are interconnected and should be addressed jointly and with appropriate timing by a sound economic policy. Additionally, priorities in the labor market restructuring should be revised in order to support growth based on innovation and technological progress.

This paper is based on theory and praxis. The part corresponding to theory is represented by the QUEST_SERBIA model, which is a Dynamic Stochastic General Equilibrium (DSGE) model of the Serbian economy. It belongs to the family of QUEST models used by the European Commission to simulate various structural, fiscal and monetary policy issues. [1] The part relating to praxis is based on our experience in doing business consultancy in Serbia.[2] The Serbian economy needs to restructure the labor market, but in a different way from the one which currently attracts public attention and raises many controversies. Our principal position is the following:

1. Successful private companies drive GDP growth in Serbia. Promoting growth means supporting growth leaders, not restructuring failed companies dropped out of privatization or loss-making SOEs.
2. The best way to support growth leaders is to lift obstacles to a sound business environment, which includes a well-functioning labor market.
3. The labor market rigidities in Serbia are a less severe problem than the labor market's structural imbalances. There is high unemployment, but successful private companies have problems in hiring top quality management and a highly skilled work force. Hiring and firing of workers, wage negotiation costs and minimum wage regulation are of secondary importance.
4. In order to contribute to improving the business climate, the government should survey the labor market, identify professional skills' bottlenecks, anticipate the future labor demand development (looking at the advanced market economies) and set forth curriculum changes in the public education system to meet development needs based on innovation and technological progress.
5. A more flexible labor market will not hurt the business environment, but by itself it will not promote innovation and the rise of total factor productivity.

The proposed policy measures address the supply side of the economy and will contribute to improving total factor productivity. The cost of public borrowing is not below 5 percent. There is a simple mathematical principle which states that the average GDP growth rate over the mid-term should also be at least 5 percent. Otherwise, the debt-to-GDP ratio will rise even with no net public borrowing. Such a high growth rate is beyond reach without a substantial rise of the total factor productivity. Future structural reforms should therefore not only reduce public spending, but also improve total factor productivity and GDP growth. The higher GDP growth, the lower debt-to-GDP ratio[3]. This is a missing link in current thinking about fiscal consolidation. We consider lifting of structural

1 This model is developed for the Ministry of Finance of the Republic of Serbia in order to improve its forecasting and policy simulation capacity. The work is financially supported by the World Bank office in Belgrade and the USAID program in Serbia. We thank Milica Labus, Jan i'nt Veld, Werner Roeger, Dušan Vujović, Dragan Djuričin, Ivan Vujalić, Srboljub Antić, Miladin Kovačević, Boris Begović and Siniša Milošević for their very valuable comments, suggestions and assistance. The paper represents the author's contribution to the research project "Development of the Serbian legal system and its harmonization with the EU law – legal, economic, political and sociological aspects 2013" at the University of Belgrade, Faculty of Law.

2 We mostly consult successful companies in Serbia, not loss-making firms or state-owned enterprises (SOEs), and this fact may frame our views. We work in part as macroeconomic adviser to the PricewaterhouseCoopers (PwC) office in Belgrade. The views in the paper are our views and do not necessarily reflect views of the PwC. See http://www.pwc.rs/en/news/10-minutes.jhtml.

3 Using panel VAR analysis and data on 20 developed economies for a very long period of time, *Lof* and *Malinen* [4] have found that there is: "...no statistically significant long-run effect of debt on economic growth, for any elevated level of debt... GDP growth, on the other hand, is found to have a statistically significant negative effect on sovereign debt. This implies that the negative long-run correlation between the sovereign debt and GDP growth is mainly driven by the negative effect of economic growth on sovereign debt".

imbalances in the labor market as a vital part of the broadly defined policy of reindustrialization in Serbia aiming at promotion future development.

We will proceed in this paper as follows. Part II underlines the basic characteristics of a DSGE model that originated in the QUEST family and indicates how the QUEST_SERBIA model is modified to capture fundamentals of Serbian macroeconomics. Part III defines the policy framework that will be used for policy simulations aiming at stabilizing public debt. Part IV reports results of the fiscal consolidation scenario, while part V reports similar results for the total factor productivity scenario. Part VI explains how the latter scenario may be implemented through a labor market restructuring. Part VII concludes, pointing out the role of government in promoting structural reforms in Serbia.

QUEST_SERBIA: Basics

We call our model the QUEST_SERBIA DSGE model of Serbia's economy. It is based on the European Commission's QUEST III model. QUEST III is a global macroeconomic model developed for macroeconomic policy analysis and research. As a member of the class of new-Keynesian DSGE models, QUEST has rigorous microeconomic foundations derived from utility and profit optimization and includes frictions in goods, labor and capital markets. *Ratto et al.* [5] provide a detailed exposition of the core version of the QUEST III model using the euro area data from Q1Y1978 to Q4Y2007 and Bayesian estimation techniques. We strongly suggest to the readers that they read this paper. Extensions are described in *Roeger* and *in't Veld* [6], *Roeger* and *in't Veld* [7], *in't Veld et al.* [1], and *Vogel* [9].

With empirically plausible estimation and calibration the Serbian model is able to fit the main features of the macroeconomic time series in Serbia in the period between Q1Y2003 and Q3Y2013. Figure 1 illustrates the basic structure of the model. [4] The QUEST_SERBIA model does not distinguish between tradable and non-tradable production sectors due to the lack of appropriate data. The model adopts hypotheses that tradables and non-tradables are treated as perfect substitutes in consumption and investment demand.

Output is produced by profit maximizing monopolistically competitive firms, using Cobb Douglas technology with private and government capital, corrected for the capacity utilization rate, and labor input augmented by technological progress. The production function is defined in terms of growth rates instead of the factors of production levels. Goods and labor markets are subject to nominal and real rigidities. Goods and capital markets are internationally integrated. Capital is perfectly mobile, so that uncovered interest parity (UIP) holds.

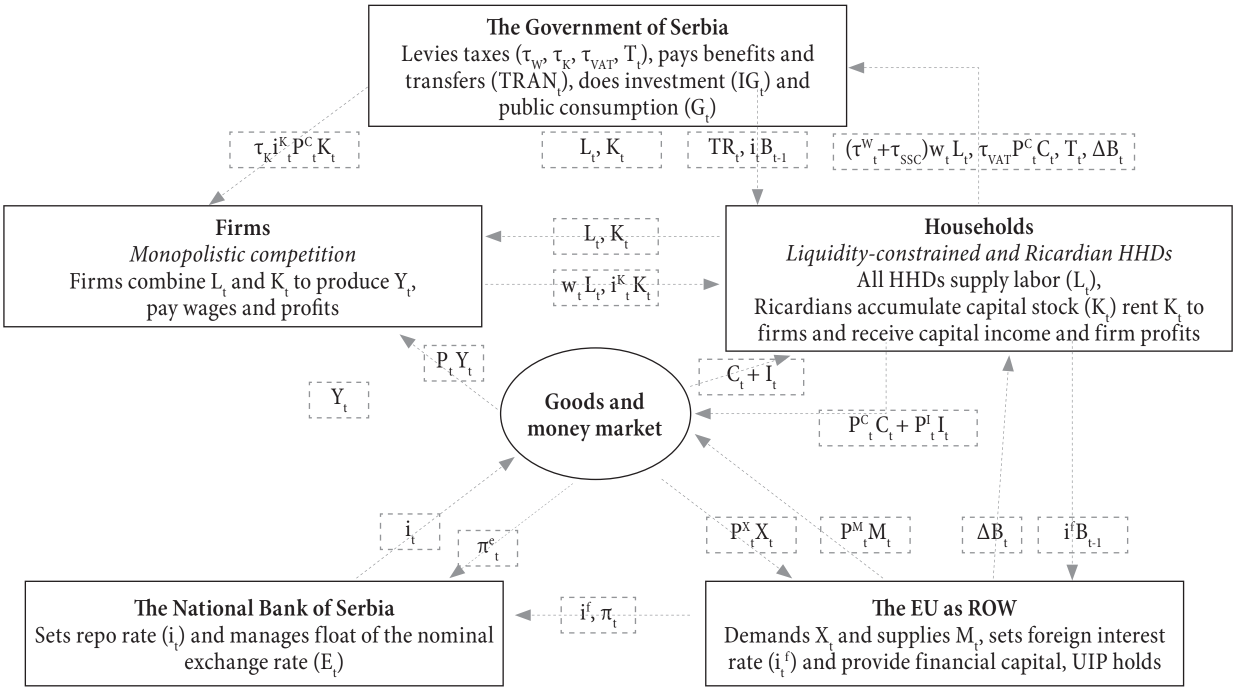
Households make savings, consumption, and labor supply decisions. There are two different types of households: financially unconstrained (Ricardian) households, which can optimize only facing an intertemporal budget constraint, and liquidity-constrained households, which do not have access to financial markets and in each period consume their entire disposable income. Ricardian households maximize expected utility over an infinite period of time subject to the budget constraint, which embraces consumption and investment expenditures, financial investments in real money balances, domestic and foreign bonds, labor and capital income, including labor and capital adjustment costs.

Within a process of collective bargaining the trade union acts as an agent of households and maximizes a joint utility function of the Ricardian and liquidity constrained households. The wage rule is set in a sophisticated way reflecting the marginal utility of leisure and the marginal utility of consumption (the ratio of which defines the reservation wage rate), the real wage of both types of households, wage adjustment costs, real wage rigidity and a mark-up over the marginal product of labor.

The government is subject to an intertemporal budget constraint. On the expenditure side the model distinguishes among government consumption, government investment and transfers (further disaggregated into unemployment benefits and pension transfers). On the revenue side, the model distinguishes taxes from consumption, labor and capital. Tax revenues are linked to their corresponding tax bases, via linear tax rates, and are sensitive to business cycle fluctuations. There is a debt rule which forces the

4 The figure is adapted for the Serbia's case from *Vogel* [9, p. 5].

Figure 1: Basic structure of the QUEST_SERBIA model



adjustment of taxes and expenditure such that a certain defined debt target is reached.

To summarize, households, firms and the government make decisions which are consistent with their intertemporal budget constraints and first-order conditions of their respective optimal positions.

QUEST_SERBIA follows the main lines of the QUEST III model's platform with some substantial differences. In our model there are two regions: domestic economy and foreign economy**,** where the euro zone is treated as the rest of the world. Differences are due to distinct properties of the Serbian economy from the EU economic area. The Serbian economy is a small open market economy, which is imperfectly integrated into the wider international market. Contrary to this, the EU economy is a large open economy with full mobility of capital, goods and financial assets. Differences in size and adjustment costs due to imperfect international integration must be taken into account in defining steady-state properties of the Serbian economy. We underline the following four fundamental specifics of the QUEST_SERBIA model**:**

1. There is no full mobility of financial capital across borders and households that save income and invest in domestic and foreign bonds face no pressure to adjust their intertemporal preferences. Therefore, the real interest rate in Serbia is permanently above the EU real interest rate. Additionally, the real interest rate convergence cannot be detected over past ten years. This means that the rate of time preference in Serbia is permanently lower than in the EU. In terms of utility, domestic households value present income over future income much more than their counterparts in the EU. Quite differently, QUEST III assumes that steady state domestic and foreign rates of time preference are equal. We cannot do this. Hence, there is a permanent gap between domestic and foreign rates of time preference.
2. There is also no perfect mobility of goods across borders. Due to transaction costs, domestic inflation is permanently higher than foreign inflation. In the steady state these differences are destined to vanish if purchasing power parity holds. However, this does not hold in Serbia and QUEST_SERBIA had to respect this fact. Therefore, even in the steady state the rate of inflation in Serbia is higher than in the EU. QUEST III, on the other hand, assumes zero difference between these two rates.
3. QUEST III states the trade balance is zero in the long run. The Serbian case is quite the opposite; it is hard to assume that the Serbian economy will

balance exports and imports over next ten years. The steady state value of the trade balance will be negative. The only doubt is how negative it will be.

4. Finally, the Serbian economy is a small economy bound to grow much faster than large mature economies in the world, including the EU. There is no doubt that we need somehow to model the convergence process in which steady state GDP rate of growth in Serbia must be higher than the GDP steady state rate of growth of the euro zone.

These four fundamental distinct properties of the Serbian economy were taken into account by modifying original QUEST III model codes. The next two specifics are more technical than fundamental**:**

5. The data set underlying QUEST III model is much richer than our data set. The European Commission originally estimated the model using quarterly data for the period between Q1Y1978 and Q4Y2007, which uses 149 data points. In our case, we use only 42 data points and estimate the model from Q1Y2003 to Q2Y2013.
6. Parameters are modified to the macroeconomic framework of the Serbian economy. In some cases, we used the same initial values as in QUEST III. Since these parameters are overridden by the Bayesian estimation, a possible initial bias is substantially reduced if not completely eliminated. For instance, the parameter reflecting cost due to sluggish wage adjustment is set by QUEST III at the rather high level of 12.07. However, the estimated value for Serbia is 0.0049. This case illustrates the different behavior the two labor markets under the similar model set up.[5]

Policy modeling

We follow the QUEST III modeling approach that fiscal and monetary policy is partly rule-based and partly discretionary. Therefore, public expenditure and revenue partially depend on the policy targets and partially respond to business cycle conditions. Transfer payments are indexed to wages and follow their cyclical fluctuations. However, there is a non-cyclical part of transfer payments that is set by the government and reflects its generosity in providing for non-employment benefits and the public pension fund. Fiscal revenue due to personal income tax is also divided into a fixed part and a cyclically adjusted part. Lump-sum taxes are a surrogate for public borrowing due to higher than expected public debt. If the model was opened for financial transactions, the government would borrow the difference between the target and actual debt. Otherwise, the balance should be restored by rising lump-sum taxes. Therefore, these taxes serve as a proxy for public borrowing.

Public debt (B^G_t) is a complex function which does not evolve over time in a simple way. It takes into account several factors: (i) the long-run target for the debt-to-GDP ratio, (ii) the fiscal policy that sets not only proportional tax rates, but also targets for long-run government consumption and investment, (iii) fluctuations of the output gap due to the corresponding stage of the business cycle, (iv) the transfer system which provides income for unemployed, retired and disabled people, acting as an automatic stabilizer, (v) the monetary policy that governs interest rates and effects expected inflation rate, (vi) relative prices of consumption and investment goods, (vii) the long-run natural rate of population growth, (viii) distribution of personal and corporate incomes into wages and profits, and finally (ix) the inherited level of the public debt accumulated up to the present time. Public debt evolves over time according to equation (1):

$$\frac{B^G_t}{P_t Y_t} = (1 + r_t - g_t - g^{pop}) \cdot \frac{B^G_{t-1}}{P_{t-1} \cdot Y_{t-1}} + \frac{P^C_t \cdot G_t}{P_t \cdot Y_t} + \frac{P^I_t \cdot I^G_t}{P_t \cdot Y_t} + TRAN^W_t \frac{W_t \cdot L_t}{P_t \cdot Y_t} - (TAX^W_t + tax^{SSC}) \cdot \frac{W_t \cdot L_t}{P_t \cdot Y_t} - tax^{pf} \cdot \left(1 - \frac{W_t \cdot L_t}{P_t \cdot Y_t}\right) - tax^{VAT} \cdot \frac{P^C_t \cdot C_t}{P_t \cdot Y_t} - \frac{TAX^{LS}_t}{P_t \cdot Y_t} \qquad (1)$$

where r_t stands for the real interest rate; g_t and g^{pop}_t for the GDP growth rate and natural growth rate of population; Y_t, G_t, I^G_t, and C_t are output level, government consumption, government investment and private consumption, respectively; W_t and L_t are the average wage rate and employment level; P_t, P^C_t and P^I_t are GDP, consumption and investment deflators; linear tax rates are tax^{SSC}, tax^{pf}

5 Data for Q3Y2013 were released in December 2013, but are not included in the model since they redefined all macroeconomic series due to a switch of the base year from 2005 to 2010.

and tax^{VAT} for social security contributions, corporate income tax and value-added tax; and $TRAN^{W}_{t}$, TAX^{W}_{t} and TAX^{LS}_{t} are transfers, personal income tax and lump-sum tax that evolve according to the business cycle.

We skip corresponding equations for endogenous variables called for by equation (1) and recommend the reader consult the original paper of *Ratto et al.* [5]. This time we only need to indicate that public consumption and public investment also have two parts. The first part is time invariant and represents fiscal policy priorities set by long-run targets on the government consumption share in GDP and the government investment share in GDP. The second part reflects the state of the business cycle and is subject to cyclical fluctuations. We assume that the government sets fiscal targets and adapts all related fiscal instruments, not explicitly declared in the model, to achieve these policy goals. Therefore, the government has a great degree of influence over fiscal matters, but does not control them entirely. The consequence is that public debt may not correspond completely to the path set by the fiscal policy. This discrepancy appears as a result of many other market factors that contribute to forming general equilibrium in the economy or restoring it after some exogenous shocks.

Let us reiterate that fiscal matters are not under full control of the fiscal authority. On top of that is monetary policy pursued by the National Bank of Serbia (NBS). This policy may be, or may not be, in full accord with the fiscal policy. The reason for this ambiguity is simple. By law, the only goal of the NBS is to stabilize prices at any costs. High inflationary expectations trigger an even higher increase in the repo interest rate. According to Fisher's equation (2) on the real interest rate, this will raise r_t in equation (1) and push up the public debt. If purchasing power parity does not hold, as it is the case in Serbia, and the real exchange rate appreciates, the public debt in foreign exchange terms will rise as well. Therefore, the monetary policy might have the unintended effect of worsening the public debt problem.

$$r_t = i_t + \pi_{t+1} \tag{2}$$

There is, however, another unintended effect that might go from fiscal to monetary policy and fire back to public debt. Let us start with a Taylor-based rule of the monetary policy, where i_t is the nominal interest rate (equal to the repo interest rate); (1/β-1) is the real interest rate that depends on the rate of time preference β, π^{target} is the target inflation rate and $\zeta^{\pi^{target}}$ the target inflation rate that evolves under uncertain conditions (since central banks tend to change inflation targets); π^{C}_{t+1} is expected inflation; $\tilde{y}_t$ and $g_t^{\tilde{y}}$ are the output gap and its rate of change; g_t^{BG} is the rate of change of public debt; ζ^{i}_{t} is the monetary shock that evolves according to a first-order autoregressive process; i_{lag} is the smoothness parameter which reflects monetary policy's aversion to dramatically changing interest rates; φ_π is the inflation aversion parameter; and $\varphi_{\tilde{y}}$ and $\varphi_g^{\tilde{y}}$ are output stabilization parameters:

$$\mathrm{i}_t = i_{lag} \cdot \mathrm{i}_{t-1} + (1 - i_{lag}) \cdot \left[\left(\frac{1}{\beta} - 1\right) + \pi^{target} + \varphi_\pi \cdot (\pi^{C}_{t+1} - \zeta^{\pi target}) + \varphi_{\tilde{y}} \cdot \ln(\tilde{y}_{t-1}) + \varphi_{g^{\tilde{y}}} \cdot g_t^{\tilde{y}}\right] + \varphi_{BG} \cdot g_t^{BG} + \zeta^{i}_{t} \tag{3}$$

We modified the QUEST III monetary rule and added the term $\varphi_{BG} \cdot g_t^{BG}$, where g_t^{BG} is the rate of public debt change. Public borrowing crowds out financial funds from the private sector, but additionally it drives up demand for loans and pushes up the interest rate. Public borrowing has an "autoimmunity" defect. It increases the cost of borrowing in order to meet the higher demand for public financing and, in turn, further increases the public debt, not recognizing negative feedback effect. It raises the interest rate and triggers the national bank to upwardly revise its repo interest rate. In the next release of QUEST_SERBIA, we will include financial flows in the model and separate financial assets into the dinar denominated part and the euro denominated part, with corresponding interest rates. In this case, the Taylor rule will only reflect interest rate dynamics in the dinar terms.

The NBS does not set target inflation as a stochastic process and does not recognize output gap as a part of the Taylor rule. Of course, the feedback effect of public borrowing on the interest rate is also ignored. On the top of that, the exchange rate policy is left completely ambiguous.

The QUEST III model does not include a feedback effect of the public debt on the interest rate, as we already indicated, but it recognizes the effect of net foreign assets (NFA) change on the nominal exchange rate dynamics through a modified version of a standard UIP condition.

We kept this setting and changed the reaction parameter to reflect Serbian macroeconomics. However, for the time being, we did not fully adjust this equation to Serbian circumstances, since this needs a broader data base and a new set of variables and equations to encompass NFA components, most notably net factor income from abroad and net capital inflows. Without this adjustment, the model-based NFA time series is negative almost all the time.

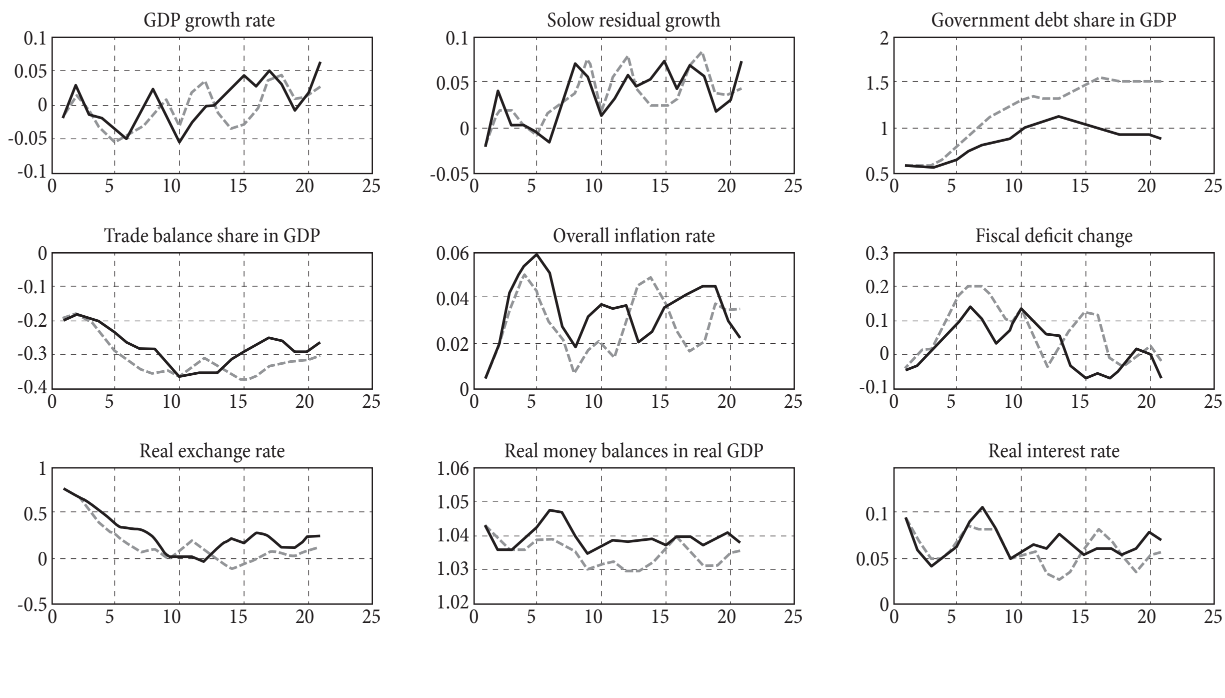
Fiscal consolidation

The government of Serbia tried to consolidate fiscal deficit last year and contain the rising public debt, which was approaching 60 percent of GDP. Personal income tax was reduced, but compensated with an increase in social security contributions. These measures are aiming at lowering transfer payments to the pension fund and limiting the rise of local government revenues and expenditures. Value added tax was also upwardly adjusted. Some subsidies were cut and public salaries were additionally taxed. NBS, on the other hand, slightly reduced the repo interest rate to 9.5 percent even though inflation substantially declined to 2.5% in December 2013. A further cut in the repo rate is not envisaged, as explained, due to relatively high inflationary expectations.

We model this policy as it goes, i.e. we set steady state fiscal parameters of the model at the level reached at the end of the historic period of empirical macroeconomic time series (Q2Y2013). We call this scenario the baseline or unchanged policy scenario and forecast macroeconomic series for the next 20 quarters without any change of the fiscal parameters. Results of the simulation are reported in Figure 2 as dotted lines[6]. The fiscal adjustment is scheduled on the both the revenue and expenditure sides of the public debt. On the revenue side, VAT tax rate is increased by 10 percentage points. The share of VAT revenue in GDP is increased from 0.1249 to 0.1375. On the expenditure side, public consumption and transfer payments are also reduced by 10 percentage points. The share of public consumption in GDP is decreased from 0.2067 to 0.1860, while the ratio of transfer payments to the wage bill is reduced from 0.2384 to 0.2146. In Figure

6 *Vogel* [9, pp. 21-23] simulated fiscal consolidation for the euro area-wide economy. He presented two separate scenarios: one for 5 percentage-point expenditure-based reduction of public debt to GDP and one for 5 percentage-point revenue-based reduction of public debt to GDP. His reported results show a more smooth adjustment of the main macroeconomic variables than our results. We suspect that he has averaged out shocks taking into account only the uncertainty about parameters. Our figures, however, represent both the uncertainty about parameters and shocks. Since shocks show a high cyclical pattern, there must be more volatility in out figures than in *Vogel*'s figures.

Figure 2: Fiscal consolidation – Baseline scenario (dotted lines) and alternative scenario (solid lines)



2 only joint effects of the policy measures are reported. Of course, the individual effects are different. Generally speaking, a tax increase has a smaller impact on the public debt reduction than expenditure cuts.

The period's average debt-to-GDP ratio is 120 percent and the quarterly GDP growth rate is negative -0.6 percent. It is obvious that such fiscal policy is not sustainable. The debt-to-GDP ratio is permanently increasing and has reached the point of saturation in the 15th quarter at the enormous 150 percent level. The corresponding GDP growth rates are declining with two incidental peaks in the 12th and 17th quarters. The trade balance is worsening with further appreciation of the real exchange rate. The fiscal deficit is increasing for the first three years and somehow stabilizes afterwards. The overall inflation rate fluctuates around 2.9 percent. The real interest rate continues to stay high at an average of 6.5 per cent, which depresses growth prospects.

We can hardly expect that this hands-off fiscal and monetary policy will prevail for a long. Financing public debt at a level over 80 per cent of GDP would be not realistic even if some easy loans were finalized this year. Also, the monetary policy will not be expected to change substantially, since the inflation rate is broadly within the target zone. Hence, public borrowing will be limited much sooner than expected. There are low chances for the baseline scenario to go unchanged over the entire period of the forecast.

Results of the alternative fiscal consolidation scenario are reported in Figure 2 as solid lines. GDP will modestly rise at 0.4 percent and the public debt will peak to 100 percent of GDP after 12 quarters. It will slightly go down afterwards. The rate of change of the fiscal deficit will be increasing in the first half of the period and decreasing in the second one. Inflation will still be broadly in line with the targets with the average rate of 3.5 percent. Real money balances will improve compared to the baseline scenario indicating slight recovery in the aggregate demand. The trade balance will also be less negative with lower appreciation of the real exchange rate.

Let us summarize results of the model's simulations. The consolidation scenario is superior to the unchanged fiscal policy scenario, but it is not good enough. The level of public debt is still unsustainable and much stronger fiscal consolidation is needed, compared to what we assumed, in order to stabilize public debt at the level suitable for regular financing. Broadly speaking, the fiscal consolidation policy is a doable option if the right size of fiscal measures is adopted. Inside such a policy, expenditure-reduction measures should be preferred to revenue-increasing measures.

Total factor productivity improvements

Fiscal consolidation alone will not secure high and stable growth and is costly in terms of forgiven output and employment, not to mention rising social and political tensions, if the right size of adjustments is adopted. From a macroeconomic point of view, fiscal consolidation works through income and demand channels of the economy. Reduction of aggregate demand always has a negative growth effect, at least in the initial stage of policy implementation. The increasing tax burden destroys incentives to work and decouple real personal income from productivity gain. There is no doubt that fiscal consolidation is a must for the Serbian economy in years to come. The question is whether this policy can be supported by measures from the supply side of the economy. The supply side policy is reflected in the policy of structural and institutional reforms aiming at improving the business climate, reducing costs and increasing the ease of doing business.

There are many different ways to raise competitiveness and improve the supply side of the economy. One is to increase total factor productivity. We model this by using the Cobb-Douglas production function defined in terms of growth rates instead of level in factors of production. This is reported in equation (4):

$$g_t = (1 - \alpha) \cdot (g_t^{K} + g_t^{U_K}) + \alpha \cdot [g_t^{LFP} + g_t^{L} \cdot (1 + \ln h_t)] + (1 - \alpha_K) \cdot g_t^{K_G} \tag{4}$$

Capital is divided into two parts: private capital and capital accumulated by government, with corresponding growth rates g_t^K and $g_t^{K_G}$, where α_K is the share of the private capital stock in the total capital stock. Use of private capital is subject to capital utilization rates, which are the model's consistent estimates depending on data and the model's specification of related equations. Labor demand is derived from the first-order condition of households' maximization problems and depends on their intertemporal decisions on whether to spend today on consumption or save and accumulate capital for tomorrow's investments. This optimal decision sets the labor growth rate g_t^L. The labor growth rate also depends on the average labor participation rate, which is low in Serbia compared to similar economies. We set this participation rate at 70 percent even if it has recently drifted below that percentage. On the other hand, the labor overhead participation rate (lnh_t) has a tendency to rise and additionally worsen labor market conditions. This is also taken into account in order to represent the overall impact of labor on output, where there is both a productive part and an unproductive part of the labor force.

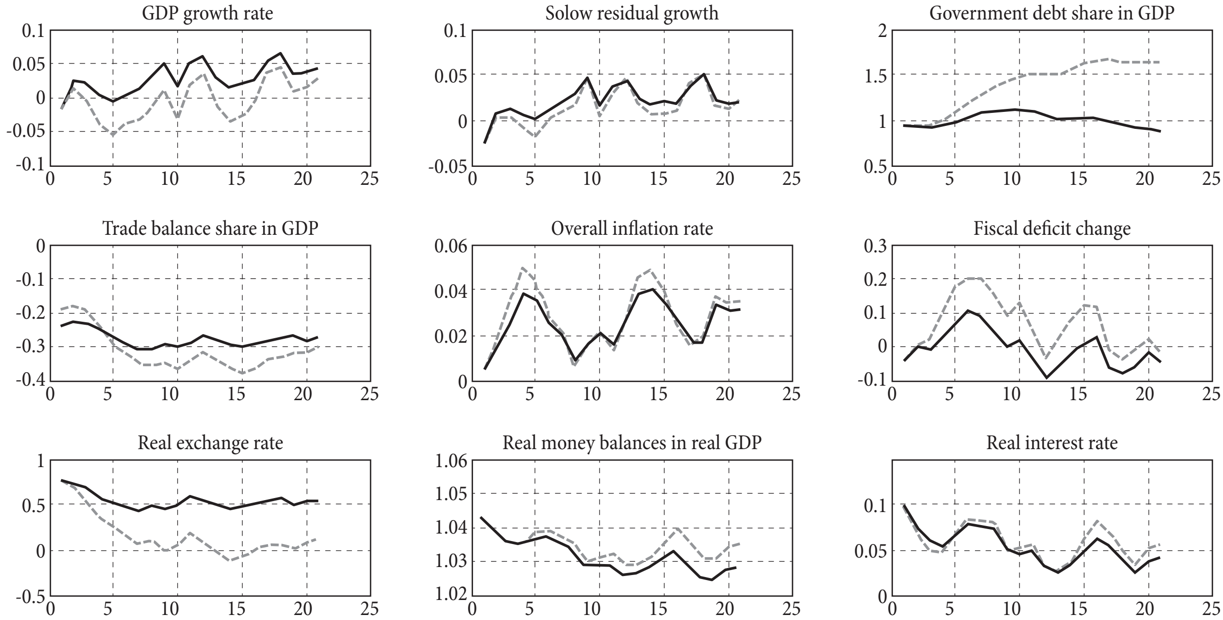
Total factor productivity is an effect on output that is assigned neither to physical capital input nor to labor input. It is also called the Solow residual. In our case, it is captured by a change in capacity utilization rate ($g_t^{U_K}$), and complemented by labor-augmenting technological progress (g_t^{LFP}), as defined in equation (5):

$$\textit{Solow residual} = (1 - \alpha) \cdot g_t^{U_K} + \alpha \cdot g_t^{LFP} \tag{5}$$

Since the capital utilization and its growth rate are solutions of the model, we rely on policy simulation only on the labor channel in equation (5) to model the impact of the total factor productivity on public debt. It will be subsequently explained how changes in human or knowledge capital may practically improve total factor productivity in Serbia. Before that, let us focus on the model. Time series g_t^{LFP} is a stochastic process, independent from other macroeconomic variables and subject to stochastic shocks. It is modeled as a random walk with a drift. The drift is not equal to zero and depends on the initial conditions of some other steady state variables and parameters. Its steady state value is derived from equation (4) under the assumption that the other growth rates $\bar{g}_t$, $\bar{g}_t^K$, $\bar{g}_t^L$ and $\bar{g}_t^{K_G}$ would be in the steady state, combined with the related parameters α and α_K. We changed its value for 0.02 in order to get the steady state increase in the total factor productivity growth of 1 percent. Results are reported in Figure 3.

Compared to the fiscal consolidation scenario, the total factor productivity scenario predicts higher growth rates, lower trade deficit, less real exchange rate appreciation, slightly lower inflation and real interest rate and, most importantly, lower fiscal deficit and the public debt-to-GDP ratio. The period's average GDP growth rate is positive and high (2.9 percent), while the corresponding the public debt-to-GDP ratio is 65 percent. All these make it superior to the alternative scenario. The point, however, is not that improving total factor productivity may have

Figure 3: Total factor productivity improvements – Baseline scenario (dotted lines) and alternative scenario (solid lines)



better macroeconomic results than the fiscal consolidation scenario. The point is that supply-side policy measures may be equally as or more effective than demand-reduction measures to contain disturbing public debt even with less severe external consequences.

Public attention is overwhelmingly focused on the demand side of the public debt problem. We propose a more balanced approach and consider total factor productivity growth as a part of the solution. Caution is, of course, needed. Increase in the total productivity growth should not be treated as a *Deus ex machina* solution that can be substituted for more painful fiscal consolidation. In our view, it is a mid-term complement to immediate fiscal consolidations. Fiscal measures can be implemented overnight, while changes in human capital are only effective after some time. Total factor productivity effects have considerable lags. This is evident if one considers the paths of GDP growth rates and public debt in Figure 3. It takes at least four quarters for these measures to start generating positive outcomes.

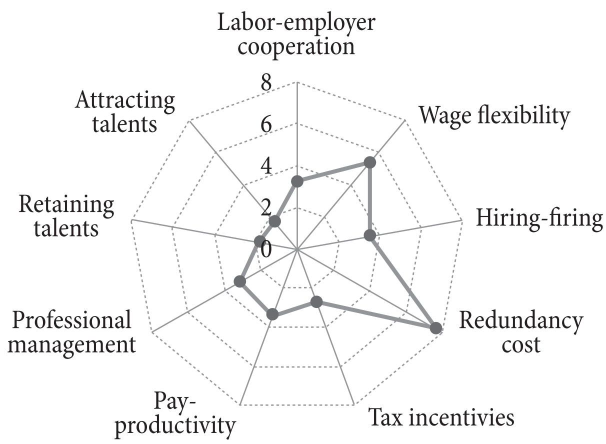
Human capital improvements

Serbia's economy is hampered by a highly rigid and protected labor market, as reported by an IMF mission sent to Belgrade to conduct Article IV consultation with the local fiscal and monetary authorities [2], [3]. Therefore, reforms of the labor market were strongly recommended. These reforms were intended to foster job creation in the private sector and redirect the growth model to export and investments. Priorities were given to delinking severance payments from lifetime employment, decentralizing wage bargaining, simplifying dismissal procedures, improving incentives for hiring, and ensuring that minimum wage increases should not outpace productivity gains. These recommendations were officially accepted, legally converted to amendments on related provisions of the Labor Law and sent to the Parliament for adoption. However, the amendments are still pending due to trade unions' objections and ongoing public controversy.

Reforms of the labor market are at the heart of the total factor productivity improvements. They illustrate what kind of structural and institutional reforms should be made in order to boost total factor productivity. However, the recommended structural reforms only partly address labor rigidities and overemphasize the firing-hiring problem. The World Economic Forum (WEF) in Davos provided a more productive scanning of Serbia's labor market deficiencies [8]. We reproduce in Figure 4 detailed findings on the 7th pillar of the Global Competitiveness Index relating to labor market efficiency in Serbia. According to this assessment the hiring-cum-firing deficiency is severe, but wage flexibility and redundancy compensations are not strong obstacles to labor market efficiency. We have a particular reason to believe such findings.

Our model QUEST_SERBIA has a particular parameter that reflects costs due to sluggish wage adjustment. It is set by the QUEST III model for the EU at the rather high level of 12.07. However, the estimated value for Serbia is 0.0049. This estimate is broadly in line with the WEF findings that the Serbian labor market is more flexible than what was reported by other studies.

Figure 4: Global competitiveness index – Labor market efficiency in Serbia



Tax disincentives and poor labor-employer cooperation have low marks and reveal even greater cause for concern than hiring-firing rigidity. There are similarly poor scores for the next two efficiency factors: the inadequate pay-to-productivity relationship and unavailability of highly qualified local professionals. The most worrying finding, however, is that the Serbian labor market does not attract talents or retain them. This is alarming if we recall that the WEF classifies world economic development into three stages – factor-driven, efficiency-driven, and innovation-driven stages – where the most developed economies have already advanced from the first to the third stage of development. Serbia is still in the second stage of development and is lagging behind the group's average. Innovation-based development relies on talented people and highly professional managers. That is something which Serbia needs if intends to go beyond the present stage of development.

Conclusions

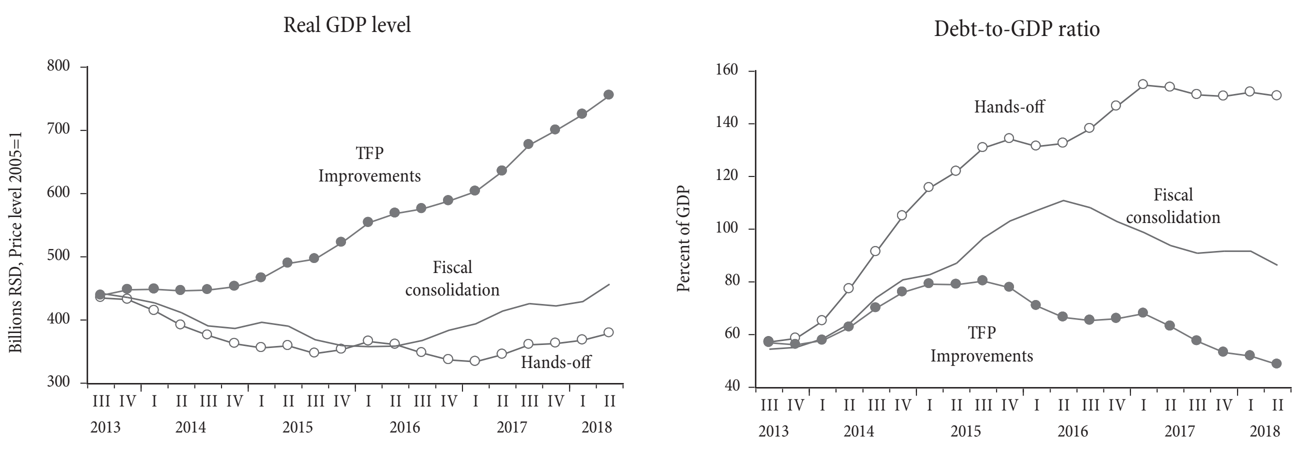
In a DSGE framework, by using our QUEST_SERBIA model, we illustrate how two alternative policies work and what effects they may have on managing Serbia's public debt at a sustainable level. Figure 5 has combined their simulated effects on the real GDP level and debt-to-GDP ratio separately as presented in Figures 2 and 3. Our conclusion is that fiscal consolidation is a necessary means to contain rising public debt, but it will not provide growth and employment over the mid-term. It is even more worrying that fiscal consolidation policy, both public expenditure-reducing policy and fiscal revenue-increasing policy, must be much harsher than what we assumed in our simulations. Otherwise, a rising public debt might go out of control.

For us there is no doubt that rising total factor productivity policy should complement fiscal consolidation policy. Improvements in total factor productivity were modeled by using labor-augmenting technological progress. This progress can be achieved in practice by restructuring the labor market. As far as restructuring is concerned, the present fiscal policy addresses wage and labor-to-employer rigidities. This does not go far enough and will not contribute much to improving human capital. We propose a complementary total factor productivity policy aiming at lifting high quality labor supply bottlenecks or obstacles to innovation development. The role of government is crucial in triggering such a policy change. There is no time to waste, since improvements in labor efficiency work with lags. From Figure 5 it is visible that effective reversal of negative trends comes after six to eight quarters.

To make our model-based conclusions both more practical and realistic, we propose to the government to adopt a comprehensive program of restructuring the labor market along these lines:

1. Survey the labor market to identify professionals' gaps or highly skilled workers' bottlenecks,
2. Anticipate the future development of labor demand, taking the advanced market economies as a benchmark case,
3. Set forth curriculum changes in the public education system necessary to meet the future labor demand

Figure 5: GDP and debt-to-GDP ratio – Alternative policy scenarios



based on innovation and technological progress development, and

4. Stimulate (not depress by the public wage policy) the public education system to generate labor profiles instrumental to future sustainable growth.

This policy is broadly in line with efforts to design the reindustrialization policy in Serbia.

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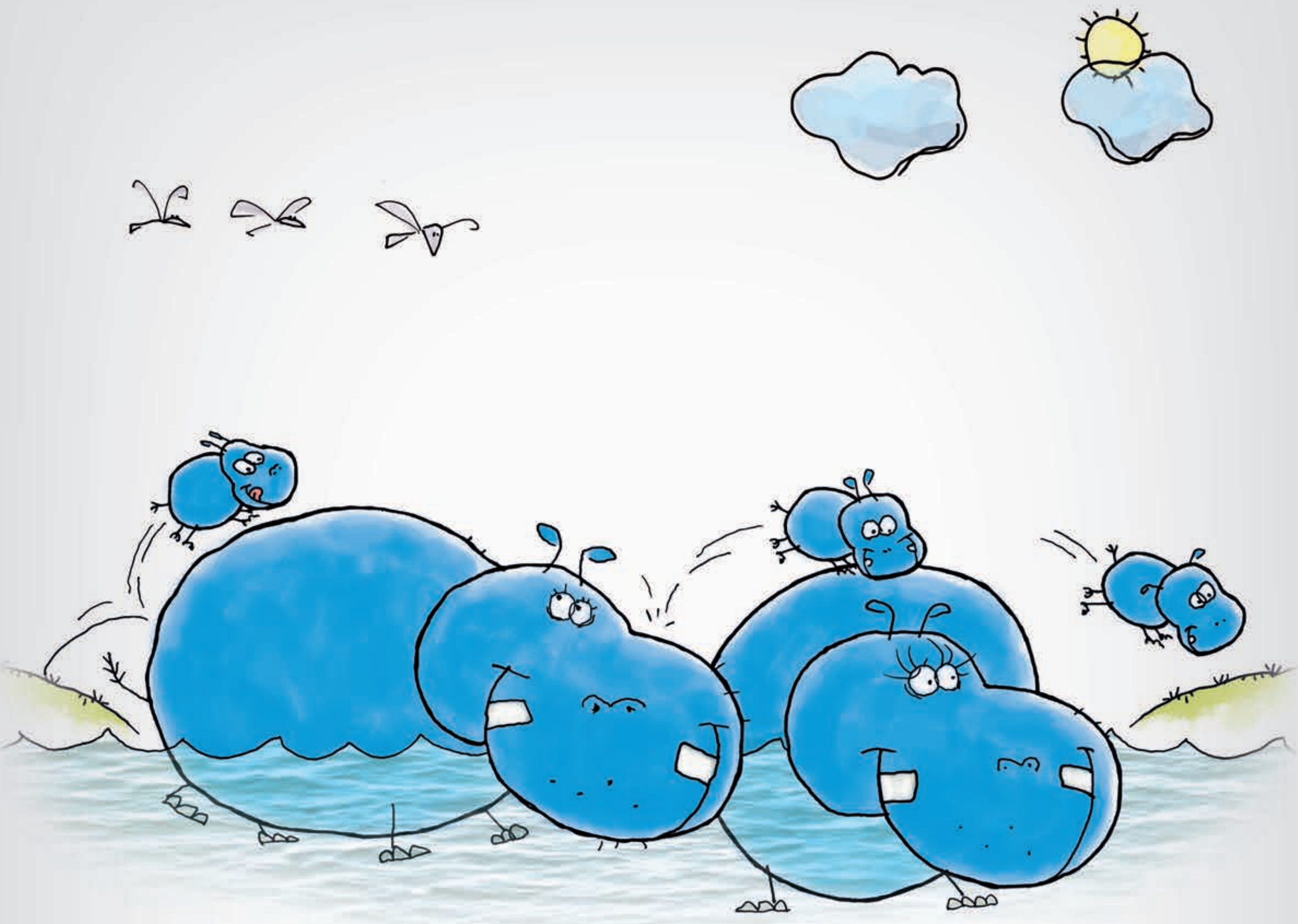
Miroljub Labus

is a Professor of Economics at the Faculty of Law, University of Belgrade, and former Deputy Prime Minister of Serbia. He has received BA in Law and PhD in Economics from the University of Belgrade. In his academic work, Dr. Labus is focused on macroeconomics, international trade, transition and anti-trust protection. He has written a well-known textbook "Foundation of Economics" and numerous monographs and articles in professional journals. Dr. Labus has valuable experience in statistics and applied general equilibrium modelling (CGE and DSGE). He set up the statistical journal "Economic Trend" and the business survey "Market Barometer", and served as their first Editor in Chief. As Deputy Minister, Miroljub Labus was instrumental in getting Serbia back to international financial institutions after a period of sanctions, settling the country's huge foreign debts, and negotiating the SAA with the EU. He founded in 2007 the consulting firm Belox Advisory Services



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Dejan Šoškić
University of Belgrade
Faculty of Economics
Department for Economic Policy and Development

MONETARY POLICY OPTIONS FOR TRANSITION ECONOMIES

Moguće vrste monetarnih režima za zemlje u tranziciji

Abstract

Implementation of an adequate monetary policy regime in transition economies has provoked an active debate in the past decades. There was a tendency to try to reach a "one-size-fits-all" solution. However, differences in macroeconomic performances and institutional development have led to different choices in terms of applied monetary regimes. This debate is ongoing since none of the monetary regimes is ideal. If there are reasonable doubts whether the choice of monetary regime a transition economy has made was optimal, it is eligible to reconsider available alternatives. This paper is a contribution to this ongoing debate. A lot of emphasis is sometimes given to the role of monetary policy in transition economies, with high expectations in terms of the capacity of the right choice of monetary regime to generate high levels of economic growth. However, institutional development substantially overshadows the importance of the choice of monetary regimes for economic success of transition economies.

Key words: *monetary policy, exchange rate, transition economies, inflation targeting*

Sažetak

Debata o izboru adekvatnog režima monetarne politike za zemlje u tranziciji aktuelna je već dugi niz godina. Postojala je tendencija da se dođe do idelanog monetarnog režima koji bi odgovarao svim zemljama u tranziciji. Ipak, različite makroekonomske performase i razvijenost političkih, monetarnih i finansijskih institucija vodile su različitim izborima monetarnin režima. Debata o adekvatnom monetarnom režimu i dalje je aktivna jer ni jedan model nije idealan. Ako postoje sumnje da li je neki monetarni režim ispunio očekivanja u pojedinim zemljama u tranziciji, legitimno se mogu razmotriti raspoložive alternative. Ovaj rad je doprinos toj javnoj debati. Monetarnoj politici se često pridaje veliki značaj i pred nju se postavljaju velika očekivanja u vezi s tim da pravilan izbor monetarnog režima može da kreira visoke stope privrednog rasta. Ipak, za ekonomski uspeh zemalja u tranziciji znatno je važniji stepen izgrađenosti i kapacitet institucija sistema u odnosu na izbog monetarnog režima.

Ključne reči: *monetarna politika, devizni kurs, zemlje u tranziciji, ciljanje inflacije*

Introduction

Monetary policy regimes have been developing throughout the past centuries in a way that has been evolutionary and gradual. Developed nations have led the path, and developing nations have been following. It was not a rear occasion that developing nations did not have necessary prerequisites for the implementation of developed nations' experiences. However, a lot has been learned and lots of improvements have been achieved in monetary policy conduct. Certain monetary regimes have been widely accepted for a period of time, but have completely gone out of fashion in the years and decades to follow. An active debate has been going on in the past couple of decades concerning the appropriate choice of monetary policy for transition countries. However, it is not clear what would monetary policy experience and "state of the art" of monetary economics suggest the transition economies should do. What monetary policy regime is an adequate one for a specific transition country, for its level of development and for its type of macroeconomic challenges? Various transition countries have opted for very different choices. And every country had strong arguments for their specific choice. What choices do transition countries actually have?

Discretionary monetary policy

Discretionary monetary policy is a non-rule based, no clear goal *ad hoc* monetary policy in which the government via central bank can implement a wide set of unclear, frequently and as a rule, politically influenced goals with a short run approach to monetary policy conduct. Such monetary policy has been widely in place for decades back in various developing nations with similar outcomes. Discretion of monetary authorities was frequently abused by political interest producing policies such as monetization of public debt, dual and multiple exchange rates, excessive monetary expansion, discretionary lines of credits to favored real and financial sector entities etc. Monetary policy was frequently misused by political elites in the name of development policies but rather for particular individual and group interests. In such a framework and in those times, credibility of monetary policy was heavily compromised in many developing countries. We have seen quite a number of episodes of very high inflation, massive capital flight, destructive financial crises with depressions and prolonged periods of low growth.

From 2000 to 2006 (formally 2008), Serbia was *de facto* in a regime of discretionary or *ad hoc* monetary policy with unclear goals. In practice, however, predominantly exchange rate was a target. Throughout this period, exchange rate was relatively stable with relatively high internally generated inflation. The consequence of these circumstances was a substantial real appreciation of the Dinar (especially in a period from 2000 to 2003). At the same time, and in the years to follow, the country has not experienced any significant increase in productivity. This has led to deterioration in country's competitiveness and to growing current account deficits (CAD), swiftly reaching unsustainable levels. Serbia entered double digit CAD as soon as 2004, reaching 21.7% CAD to GDP in 2008. In addition, these levels of CAD were mainly based on imports of consumption goods i.e. investment contribution to CAD was relatively low. Clearly, such policies were leading to declining rates of growth with an increase of public and private debt. Both consequences were clearly visible from 2009. Global economic crises has just accelerated and emphasized the negative consequences of inadequate economic policies and inappropriate structure of GDP growth from previous years.

In spite of Serbian experience with formally relatively high level of institutional independence of the Serbian central bank, discretionary monetary policy from 2000 to 2008 produced high real appreciation of the Dinar and dramatic increase in euroization of Serbian financial system, with detrimental consequences for both macroeconomic and financial stability of the country. So, even in the case of Serbia from 2000 to 2008, discretionary monetary policy was not able to resist politically influenced goals with a short-run and short-sited approach to monetary policy conduct.

If a country wants to move away from discretionary monetary policy, the key challenge and a prior question is whether transition countries are capable of setting up an institutional framework that will prove to be effective and efficient in constraining the discretion of their monetary authorities. As an alternative to discretionary monetary policy, central banks need to be fully and realistically independent from political influences and with a clear goal as a strong and effective "nominal anchor". Nominal anchor is a nominal variable used by monetary authorities to control inflationary expectations and for reduction and stabilization of inflation.

Legitimate nominal anchors are: exchange rate level, monetary aggregate level (level of money), and inflation level. Therefore, monetary policy regimes can basically be: exchange rate targeting, monetary targeting and inflation targeting.

Still, more as a theoretical concept, nominal anchor can also be a specific level of certain chosen prices. However, research suggests that tying monetary policy to a specific level of prices suggests a rather rigid rule, and a mechanism that might promote less output stability i.e. less stable GDP growth. This comes from the fact that in such a monetary regime price shocks are not treated as bygones by monetary policy, but rather as shocks that need to be reacted upon. Therefore, a more restrictive monetary policy response to bring back the specific prices to their targeted level [7] as a byproduct generates larger economic contraction then necessary under inflation targeting. There are really no available recent global experiences with this monetary regime. The only one available is that of Sweden in the 1930s [2] that proved to have been rather successful. Some recent research suggests that price level targeting has certain advantages over inflation targeting [15]. And even more recently, certain central banks of developed nations debate about implementation of price level targeting as an answer to relative ineffectiveness of inflation targeting to deflation challenge [1].

Therefore, transition countries are left with a choice that some see as a choice between fixed versus flexible exchange rates. More precisely, the choice is weather nominal anchor is an exchange rate (with hard pegs and soft pegs options) – exchange rate targeting, level of monetary aggregates (i.e. money) – monetary targeting, or level of inflation – inflation targeting.

Exchange rate as an anchor

Exchange rate targeting, based on exchange rate as an anchor, can have several forms. Broadly, we can divide them in two categories: soft exchange rate pegs, and hard exchange rate pegs [9, p. 356].

Soft exchange rate pegs can also be called fixed but adjustable pegs. This means that these monetary regimes allow occasional devaluations. Fixed exchange rate pegs allow for unannounced relatively large devaluations with different magnitudes, depending on stability and level of current account imbalances. In some cases, these devaluations are forced by the markets and come as a consequence of rapid FX reserves depletion. In some cases, the governments revert to devaluations as a preemptive measure to preserve the FX reserves and relative competitiveness of the national economy. There are situations in which devaluation is *de facto* a prelude to introduction of a flexible exchange rate. However, if the government has a long-run record of relatively low level of budget deficit and public debt with an economy that produces low levels of inflation and current account deficit, with sufficient FX reserves, fixed exchange rate may operate without devaluations for a long period of time.

Crawling exchange rate pegs allow for announced and predetermined relatively small devaluations in specific time frames. They can take various forms, but broadly they can take the form of crawling pegs – with fixed exchange for a predetermined time horizon, and crawling bands – with a small flexibility of exchange rate movements within a predetermined fluctuation band around central level of exchange rate that is occasionally reset. The magnitude of exchange rate devaluations in a crawling regime can be based on levels of inflation, current account deficit, FX reserves etc. and can be with different frequencies within a year

Soft exchange rate pegs leave little room for independent monetary policy to react to domestic and imported macroeconomic shocks [14]. At the same time, they are incapable of delivering a nominal anchor that keeps inflationary expectations under control. In addition, they cannot eliminate the currency risk component as long as devaluations are possible. They are incapable of preventing monetary policy misconduct if central bank is not really independent of political influences. In addition, crawling pegs and bands with their adjusting devaluations based on differences in various variables compared to the anchor country, with forward looking or backward looking calculations of potential devaluations can prove to be complicated for the general public to understand and follow [6].

If the economy has high levels of current account deficits, fixed exchange rate can waste FX reserves of the country and encourage speculative attacks on local currency with possible massive devaluation with overshooting effects that can initiate widespread bankruptcies of households, corporates, banks and the government [10].

Hard pegs can essentially take two forms: currency board and full dollarization. Both, if operating properly, can provide a strong nominal anchor that can keep inflationary expectations low, and can eliminate currency risk. They are simple, easy to understand, and eliminate the risk of public debt monetization or excessive monetary expansion. However, they leave no scope for domestic monetary policy and therefore it is impossible to react to domestic shocks that are independent of those in an anchor country. Devaluations and depreciations of exchange rate are excluded as a tool for improvement of competitiveness of local economy. Therefore, internal devaluation in terms of downward wage corrections remains the only realistic way of improving competitiveness in the short run. Similarly, external shocks may have a more direct and severe impact on GDP growth than in the case of exchange rate flexibility and independence of monetary policy.

Despite all of the disadvantages of exchange rate pegs, if a country does not have a developed political and financial institutional framework, capable of credible use of monetary sovereignty, so to have an independent and efficient monetary policy, transparent hard pegs may prove to have more benefits then shortfalls for a transition economy [11, p. 599].

Level of monetary aggregates as an anchor

A credible nominal anchor can be level of monetary aggregates, i.e. level of money [10]. If by monetary targeting a country wants to control inflation, it has to focus on three relevant elements: First, reliance on the level of monetary aggregates to conduct monetary policy. Second, public announcement of monetary targets, so to anchor inflationary expectations. Third, an accountability mechanism that does not allow substantial deviations from targeted monetary aggregates by the central bank.

Germany and Switzerland have been implementing monetary targeting with great success since the early 1970s for more than 20 years. It has strong advocates and still is an element of monetary policy of the ECB. It has been a monetary regime of choice for many countries in the 1970s and 1980s. It has enabled the central bank to aim inflation which is different than in other countries, and it has allowed a certain level of independence in terms of monetary policy to deal with internal and external shocks.

However, some countries have not been as successful, since this monetary regime is heavily reliant on constant velocity of money. If the velocity of money is relatively volatile, even relatively constant and well-targeted monetary aggregates can produce inflationary pressures beyond the desired level of inflation. This risk can undermine the credibility of the central bank and therefore the monetary targeting as a regime may prove to be less effective than necessary.

Transition countries that have higher level of dollarization (or euroization) may be exposed to high levels of volatility in velocity of money, especially in times of uncertainty. Therefore, reliance on monetary aggregates as a nominal anchor can prove to be insufficient bringing inflation down and for keeping inflationary expectations under control. Problems that this monetary regime may bring upon central banks in terms of their credibility, in countries that have relatively young central banks with unproven positive track record, can make this monetary regime incompatible with transition economies requirements.

If the country does not have a central bank with established credibility, and if the velocity of money tends to be volatile, this monetary regime can hardly be perceived as an optimal choice.

Even if some developing countries have publicly stated that they have adopted monetary targeting as a monetary regime, in practice they have not fully complied with strict definition of this monetary regime. Even the Bundesbank, as a famous monetary targeting central bank, in its monetary policy conduct in certain points in time has been behaving as inflation targeting central bank [3].

Additional problem of making this policy effective in transition economies is the fact that most of them are relatively small, with important amount of capital inflows and lack of effective monetary instruments capable of precise and affective corrections of monetary aggregates in short and medium term.

Level of inflation as an anchor

Declaring the targeted level of inflation and using it as a nominal anchor lies in the essence of inflation targeting. Inflation targeting, as was the case with monetary targeting, allows for independence of monetary policy and flexibility of exchange rate. Inflation targeting relies on five basic elements:

First, public announcement of mid-term numerical target for inflation. Second, central banks institutional devotion to price stability as a primary goal to which all other goals are of the second order. Third, monetary policy strategy that takes into account movement in monetary aggregates, exchange rate and other important variables in making decisions concerning monetary policy instruments. Forth, transparency of monetary policy and communication of the central bank with financial markets and the general public about plans, goals and decisions. Fifth, increase in central bank credibility concerning fulfillment of inflation goals, and mechanism of central bank accountability [12].

However this regime requires certain preconditions to be implemented in transition economies.

Primary precondition for inflation targeting to be successful is full institutional central bank independence. In addition, successful implementation of inflation targeting in transition economies calls for some additional requirements.

First, introduction of inflation targeting yields much better results after succesfull inflation reduction to relatively low levels. In other words, inflation targeting has much better chance of being successful if implemented on relatively stable single digit inflation levels with a several years of track record [4].

Second, lack of fiscal discipline is incompatible with inflation targeting. High budget deficits lead to public debt crises or pressures for monetization of public debt with pressure on exchange rate and increase in inflationary expectations. Therefore, absence of fiscal dominance over macroeconomic environment and institutional development to ensure fiscal discipline is a must for inflation targeting to have a chance to succeed [13].

Third, local currency must be in dominant use. Basic inflation targeting policy instrument is a local currency interest rate. This interest rate should influence savings, consumption and investments. If transition economy uses other currencies (dollars, euros) in a significant portion of financial transactions, reference rate of the central bank loses much of its influence over financial transactions, and therefore, loses much of its impact on aggregate demand and inflation.

Inflation targeting is not ideal. When targeting monetary aggregates or exchange rate, central bank can directly influence these variables. When targeting inflation, central bank influence is indirect and with a significant time lag, i.e. with monetary policy transmission lags. These lags can significantly vary from one country to another. So the conduct of the inflation targeting regime is more complex and therefore may pose a risk to credibility of a central bank, especially in transition economies. In addition, inflation targeting alone, cannot override the dominance of fiscal policy over macroeconomic variables. In addition to that flexibility of exchange rate movements associated with inflation targeting can cause financial stability risks and decrease the stability of business environment in the country.

Conclusion

In a variety of potential monetary regimes for transition economies, it is not clear what type of monetary regime should be appropriate for every transition country. It is not just the macroeconomic performance of a country that can influence the right choice. Of course, it is important to take into account the level and stability of inflation, of current account deficit, of budget deficit and the public debt. But even more than this, the right choice of monetary regime must take into account the capacity and the level of development of political and financial institutions in a specific transition economy. Is it possible to have not just "paper based" but "real life based" independence of the central bank? Is it possible to establish a nominal anchor that will be supported by the political institutions? Can a country have a credible and competent central bank responsible for implementation of a monetary policy regime? Does the financial system dominantly operate within a local currency upon which a central bank implements its monetary policy? Despite strong argumentation for advantage of monetary regimes based on flexible exchange rates and independent monetary policy, if the country does not have a developed political and financial institutional framework, capable of credible use of monetary sovereignty, transparent hard pegs may prove to have more benefits then shortfalls for certain transition economies.

In the end, it should be clearly said that any monetary policy regime alone cannot solve economic problems of any transition country. If the economy is balanced and with developed political and financial institutions, it is far less important whether it has a fixed or a flexible exchange rate. For economic success of transition economies, choice of monetary regime is of second-order importance to development of credible political, financial and monetary institutions.

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Dejan Šoškić

is Associate Professor at the Faculty of Economics (EFB), University of Belgrade. He graduated in 1989 – awarded as the best student of the generation by the University of Belgrade, received his M.A. in Monetary Economics and Banking in 1993, and Ph.D. in Finance in 1999 from EFB. He teaches undergraduate courses Financial Markets, Securities Investments, Economic Statistics as well as a graduate course Portfolio Risk Analyses. He specialized in Banking and Finance at Florida State University (1994), University of Rhode Island (1998), Swiss Central Bank (2001), Fulbright Lecturing/Research Grant – University of Nebraska (2002). He held lectures in this field on undergraduate and graduate courses at University of Nebraska at Omaha, USA (2002), Summer University of Wirtschaftsuniversität Wien (2008-2010), and on Master in Banking and Entrepreneurship organized by Unicredito Group (2005-2013), Italy. In 2002, as a Fulbright scholar, he had a series of guest lectures at University of New Heaven, University of Rhode Island, and University of California at Berkeley. Professor Šoškić headed and participated as a consultant in a number of projects of national and international scope. He served as a Member of the Economic Council of the Prime Minister of Serbia (2009-2010), Member of the Board of Scientific Association of Serbian Economists (2006-2010), President of the Council of the National bank of Serbia (2009-2010) and Governor of the National bank of Serbia (2010-2012). Professor Šoškić has authored the book “Securities: Portfolio Management and Mutual Funds” and coauthored books “Financial Markets and Institutions”, “Economic Statistics” and “Stock Exchange Lexicon”. He has published more than 40 papers in the fields of Financial Markets and Transition.


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Vladimir Vučković
Megatrend University
Faculty of International Economics
Belgrade
Fiscal Council, Republic of Serbia

Sanja Vučković
Megatrend University
Faculty of Business Studies
Belgrade

FINANCIAL STABILITY AND GROWTH: DYNAMICS AND MEASURES

Finansijska stabilnost i rast: dinamika i mere

Abstract

This paper addresses macroeconomic risks in the short and medium term. The problems related to budget deficit, public debt and external sustainability are piling up and will be increasingly challenging in the forthcoming three-year period. The year of 2017, in which public debt repayments will threaten to jeopardize country's external liquidity, is particularly critical. Objective assessment of medium-term prospects of the Serbian economy suggests that it will be difficult to maintain stability. Termination of negative trends assumes consolidation measures and avoidance of expansive measures that would result in deepening of the budget deficit. It is necessary to support economic growth through development of institutions and ambience. New funding forms have to be promoted – during the previous two terms of office, the Ministry of Economy announced it would legally regulate the field of venture capital and venture capital funds. This should be done through drafting and adoption of a special law. Thus, venture capital shall be clearly defined and recognized as a separate financial instrument, different and special compared to other similar financial instruments, while the venture capital funds are defined as special investment and financial institutions.

Key words: *stability, budget deficit, public debt, external sustainability, venture capital*

Sažetak

U radu razmatramo makroekonomske rizike na kratak i srednji period. Povezani problemi budžetskog deficita, javnog duga i eksterne održivosti akumuliraju se i biće sve izazovniji u narednom trogodišnjem periodu. Naročito je kritična 2017. godina kada otplate javnog duga prete da ugroze eksternu likvidnost države. Objektivno sagledavanje srednjoročnih perspektiva privrede Srbije ukazuje na činjenicu da će biti teško održati stabilnost. Zaustavljanje negativnih trendova pretpostavlja mere konsolidacije i izbegavanje ekspanzivnih mera koje bi rezultirale produbljivanjem budžetskog deficita. Neophodno je i da se izgradnjom institucija i ambijenta podrži privredni rast. Treba promovisati nove oblike finansiranja – prethodna dva ministarstva privrede najavila su zakonsko uređenje oblasti preduzetnog kapitala i fondova preduzetnog kapitala. Ovo treba učiniti kroz pripremu i donošenje posebnog zakona. Na taj način, preduzetni kapital se jasno definiše i prepoznaje kao zaseban finansijski instrument, različit i poseban u odnosu na druge slične finansijske instrumente, a fondovi preduzetnog kapitala kao posebne investicione i finansijske institucije.

Ključne reči: *stabilnost, budžetski deficit, javni dug, eksterna održivost, preduzetni kapital*

Short- and medium-term risks

In this section, we shall consider the dynamics of key indicators of macroeconomic stability: budget deficit, public debt, external debt and foreign exchange reserves. The aim is to objectively determine their trajectory, depending on the current situation, the latest official plans for economic policy, as well as projections and forecasts of the relevant variables in the next few years.

Budget deficit and public debt

The general government deficit of 7.1% of GDP (EUR 2.4 bn), as envisaged for 2014, is too high. First, this is the highest budget deficit in the entire Eastern and Central Europe and, second, it shall increase by about 0.5% of GDP compared to 2013. Even though in October last year the Government announced adoption of the package of fiscal consolidation measures, of at least 2% of GDP, the actual scale of measures adopted in late 2013 is almost half the size and is not sufficient to halt growing deficit in 2014 [1, pp. 39-46]. Additional and pronounced deficit decrease in 2014, which has to be realized after the establishment of new Government, is the first necessary precondition for fiscal consolidation.

In the medium term, the frameworks of official economic policy are determined by the Fiscal strategy [4]. The latest Fiscal strategy, dating back to November 2013, envisaged that the general government deficit (including off-budget financial transactions) will decrease in 2015 and 2016 by almost 4 percentage points (p.p.) of GDP in total, i.e. from 7.1% of GDP in 2014 to 3.2% of GDP in 2016. However, the measures behind this decrease are not convincing. The largest savings (about two-thirds of total savings) are envisaged in allocations for the public sector employees and in refinancing of an expensive public debt by means of a cheaper one. However, the savings in wages are estimated too optimistically since they imply reduction of wages and employment, which is hardly feasible. Replacement of expensive debt with cheaper one would imply that almost all of the funds obtained from still uncertain privatization revenues and from more favorable bilateral borrowings should be used for early repayment of expensive loan and for cheaper financing of deficit. Instead of such risky and unbalanced structure of medium-term savings, it would be more rational and credible to envisage commensurate savings in most of the budget items (pensions, subsidies, non-targeted social benefits, etc), instead of only in two.

Since the room for crisis avoidance is already narrowed, the public and politicians should be prepared for additional and painful austerity measures over the entire period 2014-2016. Only in this way could the trajectory of rising public debt reverse in 2017 – and even then only relatively (compared to GDP), while public debt will continue to grow in nominal terms after 2017. We shall note that it will be necessary over the entire period of consolidation to borrow about EUR 5 bn annually in order to finance deficit and repay the principal of the existing public debt. Mitigating circumstances in 2014 refer to slightly facilitated borrowing in the said year (EUR 3 bn loan from the United Arab Emirates) which, at the same time, can be dangerous if resulting in a delay in implementation of necessary measures. Gravity of the situation which Serbia faces is similar to that of Greece or Portugal – the countries implementing a long-standing program of deficit reduction. Adjustment will certainly take place in Serbia in the forthcoming period, but the question is whether to a lesser extent and controlled (over a three-year period of painful and politically unpopular measures) or uncontrolled (through production drop by over 5%, high unemployment growth, strong depreciation of the dinar and high inflation).

In the forthcoming period, public debt will continue to grow rapidly if stronger fiscal consolidation fails in the following three years. Stabilization of debt-to-GDP ratio by end 2016 – based on the 2014 budget and measures contained within the medium-term Fiscal strategy – is unlikely. Despite all efforts to reduce planned fiscal deficit in 2014, it is still higher than already high 2013 deficit. Bad practice to grant loans, primarily for borrowings to public enterprises, not only continued but the amount of anticipated guarantees is about 60% higher in nominal terms compared to the 2013 Budget Law plan. In addition, significant portion of savings in respect of measures planned for 2015 and 2016 is questionable, and there are also pronounced risks that fiscal adjustment in the medium term will be lower than envisaged. It can be often heard in public that the Government can solve problem of increasing costs of public debt by using privatization revenues for early repayment of debts and by replacing expensive loans with cheap ones. However, even though gravity of the situation requires that these funds, if existing in the forthcoming years, are really used for repayment of current debts, this would only result in a one-time reduction of the public debt level, but not in a reversal of an upward trend. Revenue from sales of state assets and favorable loans granted on the basis of bilateral agreements can facilitate Government's funding of state liabilities in the next period and can reduce interest expenses. However, permanent and sustainable reduction of public debt requires sharp reduction of fiscal deficit and termination of guarantees issuing. Having in mind that slower economic growth of about 1% is expected next year, public debt could exceed 70% of GDP by the end of next year [4, pp. 58-63].

Serbia has recorded the highest public debt growth in the period after the crisis relative to comparable countries of Central and Eastern Europe. At the end of 2009, with public debt standing at about 38% of GDP, Serbia stood at an average level recorded in the observed countries. However, over the last four years, debt increased by almost 30% of GDP, far more than in other countries, so, today, Serbia is a country with the second largest share of public debt in GDP (right after Hungary). Extremely rapid growth of public debt, reported in the previous period, is an important cause of higher interest rates on Serbia's borrowings compared to other countries in the region. Hungary's debt stands at the level of about 80% of GDP, but it has remained practically the same in the last four years, which sends a clear signal to foreign investors that public debt has been brought under control. This is certainly most important, although not the only cause of lower interest rates compared to Serbia whose debt was explosively increasing in the same period. On the occasion of the latest issuing of Eurobonds, within a gap of only few days, these two countries reported similar interest rate of about 6% but with important difference in maturity – Hungary issued bonds with a 10-year maturity, Serbia with a 5-year maturity.

It is important to know that slow economic recovery cannot be a justification for strong public debt growth in recent year. Even though economic growth is an important determinant that greatly affects movement of public debt share in GDP, recession does not characterize Serbian economy only. In fact, except for Poland and Albania which achieved remarkable economic growth in this period, most of other countries have not yet achieved the level of real GDP they reported back in late 2008. Therefore, the reasons for a record high growth of Serbia's public debt should be sought in weak fiscal consolidation and in constant postponement of necessary structural reforms.

The main causes of a rapid increase in Serbia's public debt over the last four years are high fiscal deficit and increase in issued guarantees. Since 2009, deficit has constantly contributed to public debt increase, whereby the public deficits reported in previous two years are of particular concern. According to IMF methodology, fiscal deficit has been exceeding 7% of GDP for two consecutive years, while in other comparable countries, except for Albania, it has not been exceeding 5% of GDP. It is also indicative that Serbia belongs to a group of countries whose fiscal deficit has not reduced even though fiscal consolidation officially started back in the second half of 2012. On the other hand, contingent liabilities of the state (mainly in respect of guarantees issued for loans to public enterprises) increased from about EUR 900 million, as was the amount reported in late 2009, to about EUR 3 billion in late 2013, whereby issuance of new guarantees, planned for 2014, is projected at about EUR 800 million. Therefore, only in respect of issued guarantees, public debt has increased over the past four years by EUR 2 bn, i.e. more than 6% of this year's GDP.

External sustainability

In addition to the dynamics of budget deficit and public debt, we shall consider the potential development of Serbia's external position. We shall analyze the period by 2017, even though certain "lap times" are set depending on goals established by 2020 [8]. According to Fiscal strategy, time horizon, by definition, lasts for three years, and is thus somewhat shorter (by 2016). The first scenario to be considered is called baseline scenario, but it is essentially optimistic (even though some of the results are certainly not such). Growth rates according to this scenario are rather high, and the model "jumps" through the external position. The second, alternative scenario relies more on the Fiscal strategy assumptions, economic growth rates are more modest, but the risks are accumulated in insufficient economic dynamics and high unemployment.

Projections referred to in the Government Fiscal strategy reflect hardly attainable scenario. It is assumed that economic growth will be accompanied by high growth of investments and exports on the one hand, and low growth of imports increase and consumption decline, on the other hand. We believe that these dependencies have not been set on credible grounds. In our baseline scenario, we assume that economic growth is accompanied by growth of investments and exports (despite consumption drop), but that they also have to be supported by more dynamic growth of imports than already envisaged. A possible consequence might be the entry into red zone of external sustainability indicator, while trends in foreign exchange reserves (which are reduced to the value of one-month import reported in 2017) are particularly critical. Alternatively, if assumed that export will grow faster than import (and that negative net export will really be reduced in accordance with Government plans), we estimate that investments will grow much slower than preferred and that economic growth, thus unemployment decrease, will be missing.

Objective assessment of medium-term prospects of the Serbian economy suggests that it will be difficult to maintain stability. In any case, external sustainability indicators will remain outside the sustainability zone and payment of external obligations will be jeopardized. In such conditions, arrangement with IMF becomes a short-term imperative thus the time has come to consider the need for rescheduling payment of obligations in critical years (the year of 2017 being the first). Significant narrowing of foreign trade deficit partly relaxes country's foreign position, but cannot avoid consequences on the other side – small-scale investment and lower economic growth. Unemployment will thus remain extremely high, so the question regarding social and economic sustainability of such economic system will arise again.

We shall further point to characteristics of the development scenario referred to in the Fiscal strategy, and then of the two other scenarios as well. First, we shall point to basic assumptions and results from the Government scenario (Table 1). We should primarily point to assumptions referring to drop in both personal consumption and government spending by 2016, with intact trajectory of GDP growth. Consumption drop provides low import growth rates with fairly rapid dynamics of export. As a result, negative balance of goods and services (net exports) almost halves compared to GDP for only three years, and as a consequence, foreign exchange reserves at the end of the period remain at the same level as at the beginning of the period, so there are no problems with external sustainability according to the Government scenario.

As for the described dynamics, the projected difference between export and import growth rates is overly optimistic. More specifically, according to our experience, one cannot expect that exports growth will be higher than imports growth in the period of three years. On the contrary, in only three years after 2000 exports grew more rapidly than imports, and the possible explanation is that structural breakthrough (and new trends in the observed series) occurred during 2013 is not, in our opinion, reason enough to make overly optimistic plans.

Table 1: Fiscal strategy projections (real growth rates and %)

	2013	2014	2015	2016
GDP	2.0	1.0	1.8	2.0
Personal consumption	-1.2	-1.8	-0.6	-0.3
Government spending	-3.0	-2.2	-4.4	-3.6
Investments	-3.4	4.7	9.6	8.9
Exports of goods and services	14.0	6.4	7.0	7.7
Imports of goods and services	2.3	1.6	3.5	4.6
Balance of goods and services,% of GDP	-11.9	-10.0	-8.6	-7.4

Source: [4, p. 13]

When it comes to our baseline scenario, it should be said that 2013 reported modest increase in gross domestic product, based on export growth, along with decline in overall domestic demand, consumption and investments within that framework, due to strict reduction of the goods and services deficit in balance of payments. Republic Statistical Office published annual projection of a 2.4% of GDP real growth in 2013. As in the previous cases, this estimate is based on some unrealistically assessed components – for example, growth of physical volume of manufacturing production is taken to assess GDP growth in manufacturing industry. However, in final (and correct) calculation based on financial indicators, such growth will prove to be overestimated, as was the case in past few years. Therefore, in this paper we adhere to previous estimate that 2013 GDP growth stood at 1.5%. For the years to come, we have chosen the scenario according to which the target GDP growth rate in 2020 will reach 4%, which is conditioned primarily by the fact that real growth of fixed investments will remain in 8%-10% rang in the period 2015-2017. At the same time, it is emphasized that GDP growth rate cannot exceed 3% in the last year of this three-year period (by 2016) – not even in case the investment cycle starts as early as 2014. Another condition is successful development of fiscal consolidation, i.e. calling a halt to public debt growth and stabilization thereof at the end of the period. Gradual increase in investment capital inflow is envisaged through foreign direct investment (FDI) and investment loans granted to national investors.

When it comes to foreign trade, it is assumed that export will maintain dynamic growth at double-digit annual rates, but not such high as was the 2013 rate achieved due to FIAT and to low base which this export was compared with. With about 40% of goods and services share in 2012 GDP, exports should stand closer to 60% of share in GDP in 2017. On the other hand, high investment growth will induce significantly faster growth of imports than the one reported in 2013, but at the rates lower than export growth rates. Starting from 2014, household consumption could grow by 1%-2% a year in real terms, but it would have to be accompanied by permanent decrease in the government spending share in GDP.

Major difference between this scenario and the one presented in Fiscal strategy lies in dynamics, i.e. deficit share in foreign trade of goods and services (negative net export within GDP use). Fiscal strategy has projected permanent decrease in that share – from 11.9% in 2013 to 7.4% in 2016; at a similar investment pace, the consequence is a permanent drop in both government spending and personal consumption. One can easily observe that the target parameter in this case is maintenance of the level of foreign exchange reserves. What we rated as unrealistic is acceleration of economic growth with a steady decline in household consumption throughout the period, which would imply simultaneous production growth and drop in real wages. The core elements of this scenario are presented in Table 2.

The scenario is essentially optimistic because it is based on the assumption that investment cycle will start as early as 2014 and that fiscal consolidation will be successful. The essence of the problem is a negative credit balance with other countries. Due to Eurobonds (or loans for covering budget deficit), this negative balance is neutralized, so 2013 and 2014 will report no erosion of foreign exchange reserves; however, such an erosion will become more accelerated subsequently, and will be particularly pronounced in 2017 on the occasion of repayment jump due to maturity of Eurobonds package (the second and the third jump in repayment will mature in 2020 and 2021). Foreign exchange reserves in 2017 would be reduced to the value of one-month import of goods and services. The consequences would be external liquidity problems and enormous depreciation of the dinar.

Table 2: Baseline scenario (real growth rates and %)

	2013	2014	2015	2016	2017
GDP	1.5	1.0	2.0	2.5	3.0
Consumption	-3.3	0.4	0.9	0.8	1.0
Investments	-5.9	6.7	8.3	8.9	8.6
Exports of goods and services	20.8	10.4	10.4	10.3	12.1
Imports of goods and services	6.4	9.9	9.4	8.9	10.0
Balance of goods and services,% of GDP	-12.0	-12.5	-13.0	-13.0	-12.5

Alternatives to closing the overall balance of payments through said reduction in foreign exchange reserves would be, first, greater inflow of investment loans and/or increased net inflow of foreign direct investments, and second, refinancing or rescheduling of debt maturing in those years. Technically speaking, there is an alternative with a lower deficit of goods and services – in case investment cycle would be missing – but in such a case we should take into account prolonged economic growth closer to stagnation and further reduction of household consumption, which is certainly not an option to choose.

Net FDI inflow in the presented scenario would stand at around 5% of GDP from 2014 onwards (from EUR 1.7 bn to EUR 2 bn annually). Is there a possibility that net FDI might be higher (with possibly greater inflow of investment loans) and thereby, at least, to partly neutralize the erosion of foreign exchange reserves? In case there is, it would hardly be such to eliminate the need for rescheduling a portion of maturing obligations. If the assumption on FDI growth is questioned, adjustments necessary for maintaining external liquidity will be more difficult to implement. In such a case, additional risks would be activated, and we shall here mention only the most important ones.

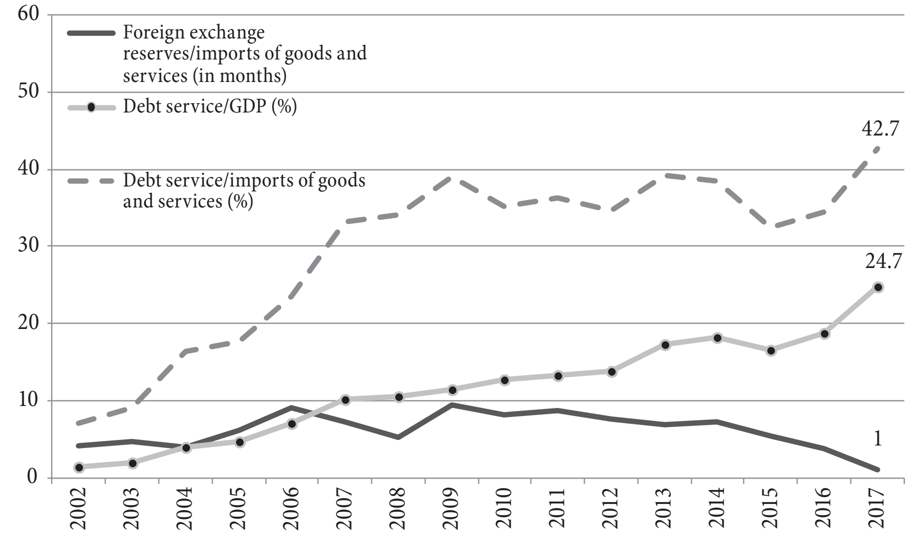
The first is high foreign debt of the private sector, reaching around 80% of GDP. Cumulated public and private debt, combined with appreciation of the national currency, increases the probability of the external liquidity crisis. Recent studies have shown that external credit risk significantly increases if country's foreign debt exceeds 50% of its GDP [2].

The second is a striking discrepancy of expenditures for servicing external public debt. These discrepancies, as pronounced in 2017, result from absence of any grounded strategy for public debt management over the previous years. Huge one-time outflows can, by their nature, jeopardize credit rating and country's credibility through activation of the mechanism usually called liquidity shock. In order to reduce this risk, it is preferred to abandon the presumption that the country will no further borrow at the EU market since foreign trade deficit will most probably remain high by 2017. Decrease in high variability of outflows, on the basis of foreign public debt, reduces the probability of liquidity shock. It would certainly be preferred to develop and adopt consistent and realistic strategy for public debt management.

The third risk to be activated, should the country's foreign liquidity become jeopardized, is the risk of accelerated depreciation of the national currency, whose effect would be quickly spilled over to inflation. Probability of activating the said risk depends not only on the possible liquidity shock but also on the level of current appreciation of the national currency and the level of current balance of payments deficit. The conditions for activation of this risk in Serbia definitely exist and they should be taken into account.

The Figure 1 shows the dynamics of three important indicators of external liquidity according to the baseline

Figure 1: External sustainability indicators according to the baseline scenario



scenario. It confirms strong exposure to the aforementioned risks. All three indicators reach and exceed critical values. Debt servicing against exports of goods and services stands constantly above the upper recommended limit of 25%, debt servicing through GDP reaches 25% and the ratio of foreign exchange reserves to imports of goods and services drops to 1 month (foreign exchange reserves, worth 6-month imports, is considered a preferred minimum limit).

In our second scenario we assume strong reduction of negative net exports (as in the Fiscal strategy), but it has its price – lower investments. In fact, it is impossible to maintain high level of investments, as preferred, with low rates of import growth. Therefore, according to alternative scenario (see Table 3), we have envisaged lower deficit of goods and services – in case investment cycle is missing – and, accordingly, defense of foreign exchange reserves. However, in that case we should take into account prolonged economic growth close to stagnation and further reduction of household consumption, as well as fewer possibilities for unemployment decrease. This certainly is not the option to choose, but we shall present here a scenario based on that option. A scenario illustrating this option actually starts from decrease in share of goods and services deficit as presented in Fiscal strategy by 2016, except that we added the year of 2017 in which such process slows down.

It is assumed here that FDI share in GDP will stand at 3% (about EUR 1 bn), while foreign exchange reserves in the critical year of 2017 will retain the 3.7-month value. As the main consequence, growth rate will be reduced to 1.5% by 2020 due to insufficient investment inflow by 2017. There will be no employment growth!

As for indicators of external liquidity, we mentioned that the level of foreign reserves remains at a higher level according to alternative scenario, but it is interesting that the other two indicators have worse values compared to baseline scenario. This is due to lower export growth rates (hence the values) in the second scenario.

Economic policy, reforms and growth

Part of the professional and general public raises a dilemma again: savings or growth. The view is presented that the savings (embodied in fiscal consolidation measures) reduce economic growth, and that sustainability of economic and financial system of the country requires just the opposite – measures to stimulate growth. Simply put, it is said that current measures, aimed at increase in public revenues (most pronounced – VAT increase) and decrease in public expenditures (control over expenditures related to the public sector wages and pensions, control over goods, services and subsidies expenditures) are not good and that they are counterproductive. In this respect, few facts have to be mentioned. First, unexpectedly poor collection of public revenues is not a consequence of the so-called Laffer curve (higher tax rates - lower income), but of growing tax evasion [4, pp. 11-15]. Second, consolidation is not a matter of choice, but of necessity. To finance deficit and service old debts we will need more than EUR 5 bn a year in the following couple of years and creditors have already expressed the requirement for measures to heal public finance; otherwise, we might run out of the necessary financial resources and would be forced to undergo more painful and severe adjustment. We cannot neglect the fact that the IMF and the World Bank have based their support (financial and conceptual) mainly on consolidation measures. Country's rating and borrowing costs are closely connected to the support of these institutions. Third, the proposed measures, i.e. reducing labor levy or abundant

Table 3: Alternative scenario (real growth rates and %)

	2013	2014	2015	2016	2017
GDP	1.5	1.0	1.5	2.0	2.0
Consumption	-3.3	-1.8	-0.8	0.2	1.8
Investments	-5.9	4.1	3.7	3.1	0.8
Exports of goods and services	20.8	5.7	4.7	4.6	5.8
Imports of goods and services	6.4	1.5	1.5	2.1	4.8
Balance of goods and services,% of GDP	-12.0	-10.0	-8.6	-7.4	-7.0

investments from borrowing, would certainly result in an increase in already high deficit (as well as in greater risk, instability and costs of public and private sector's borrowing), while the effects on growth of economy and revenues would remain completely uncertain. Unfortunately, there is no room for expansionary fiscal policy, whereby public debt stock and annual liabilities speak in favor of the said.

The message of the above discussion is that the new Government should not consider adventurous measures. Moves that may appear tempting to wider segments of population can result in rapid collapse of public finance, having thus extensive consequences. Quantitative analysis in the previous section of this paper shows that, as early as 2017, we shall face severe blow of public debt servicing. To reduce the force of such a blow it is necessary to think of consolidation as of priority.

This should not lead to a conclusion that economic growth is not important and that intensifying thereof is impossible. Economic growth would bring higher public revenues and would allow consumption and employment growth. Answers to the question of how to achieve such growth are available, but the problem is that not much is done to implement the said. We shall further remind of the list of tasks waiting for another Government.

As a matter of principle, we will have to address another topical issue. It is a dilemma whether Serbia is hit by a wave of (neo)liberalism or, on the contrary, the state overly interferes with the economy. This topic deserves a separate essay, and we will adhere to our view that the great number of economic problems stem actually from insufficient application of market mechanisms to Serbian economy[1]. The consequences are reflected in accumulated problems in public finance. Losses and consequent guarantees in public enterprises, companies in pre-restructuring, excessive employment in public sector, delay in pension reform, excessive subsidization, control over some prices, losses in the banking sector and other problems are, more or less directly, the consequences of the Government's excessive interference in social developments and persistent neglecting of the market logic (thus every other logic). The common denominator for these phenomena is the country's adulation to narrow and wide interest groups (from privileged businessmen to various strata of the population–for example, those employed in certain cities, trade unions or retirees) and avoidance of measures more painful in the short term, but inevitable and necessary. It is amazing that almost all the instruments of state interventionism have been tested in Serbia, but that the market and neo(liberalism) are blamed for bad situation!

On the other hand, it should be noted that the state failed to intervene where it should have – in the development of institutions, infrastructure and environment, for providing more dynamic investment and economic activities. There is little progress in areas such as starting a business, granting construction permits, facilitating tax payment, inspection supervision, bankruptcy proceedings, protection of competition, public-private partnerships [6], [7], [10]. Inefficient judiciary and protection of contracts are also persistent problems. One gets the impression that, instead of solving operational problems, it's easier to readdress the (philosophical) issue of savings vs. growth, state vs. market. The European Bank for Reconstruction and Development noted in its latest report that said issues were very important, thus crucial for economic growth. EBRD indicated the importance of the broader concept of country's organization, such as the importance of democracy, rule of law and mature political institutions, as well as specific issues that are often forgotten, such as human capital, education and inclusion [1], [3].

When it comes to financing growth, we face several problems. First, public resources are not abundant. Capital investments are low and declining – they decreased in 2013 by more than RSD 40 bn compared to 2012. Second, the government support to growth has been inefficient thus far (through Development Fund and other institutions), and shift in this field is not on the horizon. Third, banking resources have traditionally been geared towards mature loan seekers. However, they can hardly be relied upon in the process of developing new economic structure. We shall further address the very innovative funding resources in detail, and shall make the most concrete contribution to the issue of financing development.

1 See the meticulous analysis drafted by Prof. Lj. Madžar [5].

Looking for new funding resources for innovative business

Many businesses, especially micro, small and medium-sized, especially at the early and initial stage of business operations, fail to meet the requirements for obtaining bank loans, especially regarding debt collateral (particularly in terms of mortgage). Also, these businesses often lack credit history required in order to obtain the loan. Although they have marketable innovative ideas, the difficulty arises out of the fact that these businesses often lack know-how and skills in the fields of economy, finance, marketing, management and business law, necessary for placing their ideas on the market in the form of goods and services, thus making a profit. On the other hand, due especially to increased risk, banks do not generally show particular interest in granting loans for business projects and ventures of these businesses, but for projects and ventures of large companies. At the same time, financial resources for the implementation of a significant number of business ventures and projects, coming from public and international institutional financial resources, are rarely available to small and medium-sized businesses in the necessary critical mass. The existing investment funds are most interested in investing in large corporate entities and joint stock companies whose shares are traded on the capital market, while neither venture capital nor microfinance market are available and developed in our country to the extent necessary [12].

Venture capital is an alternative source of financing for the target company which is assessed by the venture capital fund as having good prospects, innovative and entrepreneurial potential and business perspectives to develop, grow and become competitive as an important economic entity able to generate high return on invested capital. After some time, measured in years, when the target company develops and achieves business success, improves its corporate management and entrepreneurial culture, i.e. when it emerges from business crisis or undergoes reorganization thus improving its business performance and increasing its value and the value of its capital with the help of professional, mentoring support, know-how and advice provided by the venture capital fund, this fund shall determine the most appropriate method to terminate the investment activity and shall leave the ownership structure of the target company (disinvestment) by selling its stake, i.e. the target company's shares. Venture capital implies an active approach to the target company management contrary to classical (traditional) financial instruments such as, for example, bank loan in which case the commercial bank is interested in repayment of debt principal and interest. Venture capital investments represent a form of non-public investment (private placements) in company's private equity.

Apart from venture capital, the venture capital fund invests and places mezzanine capital in the target companies, as a form of financial resources ranked by their characteristics between financial liability (debt) of the target company as debtor, i.e. financial claim of the venture capital fund as creditor and private equity of the target company, i.e. between debt (borrowed) capital and equity of the target company (examples: subordinated loan, a loan with profit share, i.e. loan with interest based on the target company' profit, convertible shares and warrants, etc.). Higher private equity reflects business and financial steadfastness of the company and provides greater guarantees (but certainly not a complete safety) for creditors, enabling them to enforce their claims against the company. Higher private equity positively affects company's creditworthiness and business reputation as essential requirements for successful operations, and in the capacity of guarantee capital substance acts to protect company's creditors as well as those investing in the company and members of that company, thus creating prospects for new business arrangements, new revenue generation and company's access to new financial resources. Combination of private equity increase and provision of business support to the company increasing its private equity, then further expansion of business network as well as mastering new know-how and technology, increases the company's business performance and additionally facilitates conclusion of new business arrangements and access to new funding sources. By providing mezzanine and debt capital the target company gets chance to obtain working capital, necessary for sustainable operations and development.

Venture capital is highly developed in the world (the United States, the United Kingdom, the Netherlands, Germany and many other European countries) where numerous venture capital funds are operational and where economic-financial and legal practice and theory are already developed, extensive professional literature is available as well as curricula and court cases, and where other fields, important in this respect, are developed. International development institutions play important role in the field of venture capital investments – European Bank for Reconstruction and Development (EBRD), European Investment Fund (EIF) and International Finance Corporation (IFC), as part of the World Bank Group. The most important European association of venture capital is the European Association of Private Equity and Venture Capital (EVCA), which has rich practice.

The Republic of Serbia lacks venture capital. There are just few examples of venture capital investments in Serbia. A good illustration of the lack of venture capital in Serbia is the latest research of the World Economic Forum – The Global Competitiveness Report 2013-2014, according to which the Republic of Serbia is ranked 129th of 148 countries in the category of Venture Capital Availability. According to the Global Venture Capital and Private Equity Country Attractiveness Index 2013, the Republic of Serbia is ranked 82nd out of 118 countries (economies). An additional concern is that these rankings have a tendency to fall, if observed over many years – for example, according to the Global Competitiveness Report 2011-2012, the Republic of Serbia is ranked 121st in the category of Venture Capital Availability while it was ranked 70th in the Global Venture Capital and Private Equity Country Attractiveness Index 2012, meaning it fell by 12 places in a year.

Venture capital in Serbia is not recognized in regulatory terms as a special financial instrument and legal business, neither are the companies that provide such capital. In addition, there is no legal ground set by other laws for recognizing holders of venture capital and business operations they perform. Thus, there is no legal ground to regulate tax and other fiscal and public incentives for venture capital. These incentives are the instruments necessary for the completion of venture capital framework and for greater recognition of this financial instrument. Experiences of other countries show that such incentives stimulate attraction of the new venture capital investments. The lack of legal regulation significantly limits participation of venture capital funds in various types of programs, projects, competitions, incentives for attracting investments and business development. Lack of legal regulation prevents greater participation of the public finance funds in encouraging the development of venture capital, such as financing in the form of the so-called fund-of-funds in the case when public fund invests resources in private fund, or in form of joint investment of public and private funds in other private funds or in target companies. Lack of legal recognition negatively affects the promotion of venture capital in Serbia. Entrepreneurs (particularly those managing micro, small and medium-sized companies as well as family businesses), lawyers and economists are neither sufficiently informed about nor familiar with characteristics and importance of risky venture capital. The above-said diminishes the importance of business associations of entities dealing with venture capital, and significantly lowers the possibility to attract venture capital investments.

During the previous two terms of office, the Ministry of Economy announced it would legally regulate the field of venture capital, venture capital funds and business activities thereof. This should be done through drafting and adoption of a special law [9]. In this way, venture capital is clearly defined and recognized as a separate financial instrument, different and special compared to other similar financial instruments, while venture capital funds are recognized as special investment and financial institutions. Separate regulation in this field brings legal clarity and practical usability of norms, thus positively affecting attraction of large-scale investments.

The Law should regulate the establishment and operations of venture capital funds and management companies, then administering of the venture capital funds and management companies, supervision over the work of these funds and companies, as well as other important issues in the field of venture capital funds. This Law would stipulate that the venture capital fund shall invest and dispose of venture capital under the term prescribed by said Law, and shall be allowed to invest in target companies and place mezzanine capital, loans and collaterals, i.e. loans in the form of guarantees and legal entity sureties. This Law should regulate legal form of the venture capital fund as a limited partnership, limited liability company or joint stock company, along with appropriate application of the Law governing companies. The amount of the fund's private equity should be regulated in a way to create sufficient substance of guarantee to creditors, while not being an obstacle to establishment of funds.

When it comes to founders, members and investors in the venture capital fund, the Law should set the terms and limitations prohibiting engagement of persons convicted of business-financial criminal offences and commercial offences, persons subject to imposed security measure or protective measure of prohibition to carry out the occupation, activity or duty, as well as persons whose contract on sales of capital or assets of the privatization subject was terminated due to failure to perform contractual obligations. The law should provide that an investor in the venture capital fund can only be a professional client within the meaning of the Law regulating capital markets. The Law defines a professional client as a client with sufficient experience, know-how and competences to independently make decisions on investment activities and proper assessment of risk related to investment activities, as well as a client who meets the requirements stipulated by the Law. Professional clients, in terms of all investment services, activities and financial instruments, are: persons subject to obligation of getting approvals, i.e. supervision by the competent authority for conducting business operations in the financial market, such as: credit institutions, investment companies, other financial institutions whose business operation is approved or supervised by an appropriate supervisory authority, insurance companies, collective investment institutions and their management companies, pension funds and their management companies, commodity exchange dealers as well as other persons supervised by the competent authority; legal entities that meet at least two of the following requirements: 1) total assets of at least EUR 20,000,000, 2) annual operating income of at least 40,000,000 and 3) equity in the amount of at least EUR 2,000,000; the Republic, autonomous provinces and local self-government units as well as other states or national and regional bodies, the National Bank of Serbia and the central banks of other countries, international and supranational institutions such as the International Monetary Fund, European Central Bank, European Investment Bank and similar international organizations. It should be prescribed that, apart from a professional client, investor may be another entity committed to invest a certain amount (e.g. at least EUR 50,000) and to provide written statement confirming its awareness of the risky nature of such investment. Investor may be complex venture capital fund (fund-of-funds), as a corporation investing financial resources in venture capital funds. The Law should provide that financial resources owned by the Republic of Serbia, autonomous province and local self-government unit (public financial resources) may be invested in the venture capital fund, as well as that the committee of investors may be established in the venture capital fund, whereby the establishment of the committee of investors shall be obligatory when public financial resources and public-private financial resources are invested in the venture capital fund.

It is very important to define the goal of investment activity and venture capital placement in terms of the development of business concept in the initial stage of target company (seed capital), development of products and/or services and initial business operations of the target company (initial capital) and development of such target company after initial and starting phase, through improvement of company's business capacities, widening of its market, further development of products and services and/or through investment activity aimed at providing additional working capital (development capital).

When it comes to structure of investments and placements of venture capital fund, this Law should establish the obligation of venture capital fund to invest, in the form of venture capital, at least 70% of total financial resources invested in the target companies, as well as to invest mezzanine capital with economic substance of private equity capital. The remaining 30% of financial resources should be invested, i.e. placed to target companies as mezzanine capital with economic substance of debt capital (borrowed capital), loans and collaterals, i.e. loans in the form of guarantees and legal entity sureties. The law should provide that at least 50% of the financial resources invested, i.e. placed by the venture capital fund in target companies, shall originate from private investors, i.e. from privately-owned financial resources. Furthermore, the Law should stipulate a maximum period during which the venture capital fund may hold venture capital within the target company. Stipulation of such limitations and terms is aimed at ensuring compliance with the European regulation governing venture capital, control and allocation of state aid, as well as with the European funds' terms of financing. At the same time, national regulations have to be amended and harmonized in accordance with the rules on granting state aid. Venture capital funds are non-deposit financial institutions, so there is no systemic risk like the one related to depository financial institutions, thus the reason for prescribing such limitations and terms is not of such nature. The real reason lies in the fact that venture capital funds will use state aid, including tax incentives and public resources, so it is necessary to establish the structure of investments enabling to achieve investment goal and the purpose of the very Law. In this respect, the law and other regulations should impose tax and other public incentives for venture and mezzanine capital, i.e. for venture capital funds, investors, venture and mezzanine capital investments and for target companies. Tax incentive of particular importance would be the one reducing tax liabilities of the venture capital fund, in respect of taxation of capital gain generated by transfer of share in company's private equity through disinvestment, because it enables reinvestment of the financial resources acquired in such way.

Venture capital fund management should be prescribed as an alternative, as follows: by the management company or by own (internal) management administration of the venture capital fund. At the same time, the Law should regulate the contract on venture capital fund management, concluded between the venture capital fund and the management company, as well as activity and management tasks, management duties, private equity of the management company and relations in respect of joint capital and voting rights of the venture capital fund and the management company, terms and limitations for founders, members, general manager, governing and supervisory bodies of the management company, modeled on the terms and limitations prescribed for founders, members and investors in the venture capital fund.

Further, pursuant to the EU regulation, this Law should stipulate competences of the Securities Commission important for supervising the implementation of this law and operations of the venture capital funds and the managing companies, as well as forms of supervisions, preventive measures and elimination of irregularities. Securities Commission has already gained extensive experience in supervising operations of investment funds, of the companies managing these funds, as well as of existing financial institutions most similar to venture capital institutions. At the same time, the Law should regulate reporting of the venture capital funds and the management companies to Securities Commission as well as compulsory audit of these entities, which enables to obtain evidence for expression of an opinion on regularity and legality of business operations conducted by the venture capital fund, i.e. by the management company.

Through regulation of the venture capital funds it has been envisaged to create conditions for implementation of new activities performed by the present Agency for Export Insurance and Financing (future Agency for financing and rehabilitation of the economy). It has also been envisaged that this Agency will invest in venture capital funds. In this way, the Agency would be a complex venture capital fund (fund-of-funds). In this respect, under the Ministry of Economy budget section the 2014 Budget Law envisaged financial resources in the amount of about RSD 33 bn for the purchase of national financial assets. The resources within this appropriation are intended for the purchase of accounts receivable in the amount of RSD 17.4 bn in respect of employment relationship with companies under privatization process, as well as for the share in equity of the financial institutions dealing with loan operations and issuing of guarantees, and share in equity of economic entities, in the amount of RSD 16 bn. It remains to be seen which of these initiatives will survive after establishment of new Government but, in any case, a good idea for the promotion of venture capital in Serbia should not be rejected.

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Vladimir Vučković

is Associate Professor of Economics at the Dept. of International Economics, Megatrend University. He received his BSc, MSc and PhD from University of Belgrade, Dept. of Economics. He lectures and writes on corporate and public finance and international economics. He holds the position of Editor-in-Chief of the Macroeconomic Analyses and Trends economic bulletin. He is a member of the Fiscal Council of the Republic of Serbia, a member of the Presidency of the Serbian Association of Economists and an associate member of the Scientific Association of Economists. Vladimir Vučković authored more than 80 papers in scientific and professional journals, and co-authored one textbook.

Sanja Vučković

graduated and received her M.Sc. from the Faculty of Economics, Belgrade University. She received her Ph.D. from the Faculty for Business Studies, Megatrend University. After acquiring professional experience in the corporate and financial sectors, she has been employed at the Faculty for Business Studies as an Assistant since 2008 and as an Assistant Professor since 2009. She lectures the group of subjects in the field of finance, financial markets and financial management. She has published papers covering these fields in scientific journals and in the proceedings from national and international conferences. She is the author of the textbook "Fundamentals of Finance".

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Jasna Atanasijević
Chief Economist at Hypo-Alpe-Adria Bank
Serbia

Marko Danon
Analyst at Hypo-Alpe-Adria Bank
Serbia

FINANCING AGRICULTURAL DEVELOPMENT IN SERBIA: OPPORTUNITIES AND CHALLENGES[1]

Finansiranje razvoja poljoprivrede u Srbiji: prilike i izazovi

Abstract

This paper overviews the opportunities and risks of Serbian agriculture's development with the special accent on its financing. We take into account its impact from macroeconomic, social, and individual business perspective, and lay it in context European Union (EU) agricultural policy and changes in Serbian trade policy in line with Stabilization and Association Agreement (SAA) implementation. After discussing the current situation and key characteristics of Serbia's agriculture, we narrow down the research, through identification of dual nature of Serbian farming by locating trends in large-scale agriculture and giving a picture of small-scale agricultural sector using LSMS survey database provided by World Bank. After describing main risks of agricultural business and policy objectives and instruments, the main novelty is a detailed case study of a corn producing farm in Serbian lowland with different financing scenarios. We illustrate previous insights on challenges, risks and policies into a coherent system, by using data along the period from 2008 to 2013. The main conclusions include that major improvement in net cash inflows stem from improvements in cultivation technologies of mercantile corn, relatively significant improvements in average net cash flow are reachable with insurance from drought. Irrigation technology may reduce yield volatility, but initial investments are financially unsustainable with regular commercial loans. That is why which is why we suggest shifting to higher value crops, such as seed corn, should be considered in case of installation of irrigation systems. In such a case, even commercial loans may become a suitable way of financing of investment. The main overall message from the analysis calls for holistic approach in formulating policies aiming to enable sustainable rural development, competitiveness and appropriate financing of output growth amidst rapid global changes and European integrations.

Key words: *agriculture, financing, Serbia, competitiveness, EU integrations, farm case study*

Sažetak

Ovaj članak ima za cilj da prouči mogućnosti i rizike za razvoj srpske poljoprivrede, sa specijalnim akcentom na aspektu finansiranja. Sagledava se značaj poljoprivrede iz makroekonomskog i socijalnog ugla kao i iz perspektive pojedinačnog proizvođača, sve u kontekstu principa poljoprivredne politike Evropske Unije kao i promena u srpskoj trgovinskoj politici u skladu sa primenom Sporazuma o stabilizaciji i pridruživanju (SSP). Nakon predstavljanja aktuelne situacije i ključnih karakteristika ovog sektora, predmet istraživanja se sužava kroz osvrtanje na dualnu prirodu srpske poljoprivrede, odnosno opis trendova u intenzivnoj poljoprivrednoj proizvodnji, s jedne strane, i stanja u ekstenzivnoj proizvodnji u okviru domaćinstava, koristeći se statističkom obradom podataka iz Ankete o životnom standardu domaćinstava (LSMS) Svetske banke. Nakon pregleda osnovnih rizika za poljoprivredni biznis i ključnih elemenata poljoprivredne politike, glavna novina ovog rada je detaljna studija slučaja proizvođača kukuruza u ravničarskoj oblasti sa više alternativnih scenarija koja uključuju i način finansiranja. Ujedno se, prethodno predstavljeni rizici, izazovi i politike koji se odnose na poljoprivredan biznis, ovim putem ilustruju u okviru realističnog modela u kojem su primenjeni podaci iz perioda od 2008. do 2013. Glavni zaključci studije slučaja upućuju na to da je najveći rast neto gotovinskih priliva ostvariv kroz unapređenje agrotehničkih mera uzgajanja merkantilnog kukuruza, kao i da se relativno značajan rast prosečnih neto gotovinskih priliva u ovom periodu mogao dostići uz osiguranje od suše. Sistem navodnjavanja može smanjiti volatilnost prinosa, ali su inicijalna ulaganja finansijski

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neodrživa sa uobičajenim komercijalnim kreditima. Zato se, u slučaju ugradnje zalivnih sistema, sugeriše prelazak na uzgajanje useva sa većom dodatom vrednošću po jedinici površine, kao što je, u našem primeru upotrebljen semenski kukuruz. U tom slučaju, čak i komercijalni krediti mogu biti odgovarajući način finansiranja ove investicije. Glavna poruka koja proizilazi iz ovakve analize je usmerena na potrebu sveobuhvatnog pristupa u formulisanja politika koje bi omogućile održivi ruralni razvoj, konkurentnost i finansiranje rasta proizvodnje, u uslovima promena u globalnom okruženju i evropskih integracija.

Ključne reči: *poljoprivreda, finansiranje, Srbija, konkurentnost, EU integracije, studija slučaja poljoprivredne proizvodnje*

Introduction

Agricultural sector has a traditional importance within the Serbian economy, so that it is often regarded as an area of great potential. Apart from its importance in providing food security for the local population and its social, developmental and political impacts on securing well-balanced regional development, it also has very important economic implications.

Currently, agricultural sector has large importance within the Serbian economy, underlined by its large share in total employment (i.e. 19%), GDP (10%, or app. 15% with food processing included), and exports (6%, or app. 17% with processed food included). It is also one of rare major net exporting sectors, with trade surplus increasing almost every year since 2004 (surplus attained EUR 210 million in 2013, against total trade deficit of EUR 4.5 billion).

The key economic potential resides in its export capacity, which may help increase GDP, and lead to balancing of the traditionally large trade deficit. Also, given that food prices' share in Serbian consumer price index attains app. 37% (as of 2013), a higher yielding agricultural production might reduce inflationary pressures.[2]

However, the rising net exports have been result, to a large extent, of soaring global prices since 2007. Namely, world food prices have been rapidly rising in recent years, driven mostly by the increasing global population, changing eating habits in emerging economies, and especially by the soaring production and demand for biodiesel [12].On the other hand, the market was relatively protected with import tariffs, while the effects of liberalization require a deeper analysis by types of products. It is because the foreign markets, such as the EU, where Serbia exports most of its agricultural products, except for direct protection measures, have numerous standards that are needed to be met.

Another challenge faced by all agricultural developing economies is their dual nature, underlined by large differences between the relatively unproductive small scale farms, and rapidly developing industrial agricultural sector. Among the largest Serbian companies[3], most of large investments were registered in agri-food complex in recent post-crisis period.

Agriculture is a business that bears many risks and has a long history of policy measures and trade protection in developed countries, while Serbia has relatively limited budget for support of agriculture. An especially difficult task for policy makers is to take into consideration that agricultural development needs to satisfy at least two aims at a time: to increase production through intensification and industrial agriculture, and to provide a decent life of rural population and prevent new unemployment and depopulation of countryside (rural areas).

Hence the sector faces a number of risks and weaknesses, while the recently presented draft of national Strategy for agricultural development is overly comprehensive, and may be lacking precision. One of the key weaknesses of the agricultural sector is its under financing in comparison to other sectors, as only 4.7% of total loans to companies relate to agricultural loans. Although the agricultural business is generally perceived as risky [12], the share of non-performing loans (NPL) to companies in agriculture business is at 15.2% comparing to significantly higher share of non-performing loans to companies being at 26.1% (as of end September 2013). However, the financial sector has recently started to see the agricultural sector's favorable potentials and to consider land as good collateral. Thus new lending is significantly directed towards agricultural businesses, as the agriculture's development gap is being increasingly perceived as one worth financing.

2 As it was the case in 2013, when inflation dropped to record low at 2.2% yoy, mostly due to effects of a bountiful agricultural season in that year.

3 Those that reached position among the 500 largest Serbian companies (ranked by business revenues), analyzed in NIN's Top 500 publications, published in 2012 and 2013 [9], [10].

The aim of this paper is to review the opportunities and challenges of agricultural development in Serbia both from macroeconomic perspective and individual business perspective. First, we present main opportunities for increase in agricultural output and value added. Further on, we describe the current situation and dual nature of Serbian farming by presenting (a) recent business trends and financial performances of large-scale industrial-style agriculture companies as well as (b) a picture of small scale agricultural holdings and their way of production, income generation, and living standards obtained from the statistical analysis of the World bank database from LSMS survey conducted in Serbia in 2007. The third section gives an overview of the mains risks that agricultural production is facing and basic strategies to manage these risks. The forth section provides main elements of agricultural and trade policies that are relevant for Serbian agricultural competitiveness. The main novelty of this paper is the analysis presented in the fifth section, where we model several scenarios of corn production including alternative financial arrangements and investments in productivity increase. The model results, based on actual data on inputs, outputs and prices along the observed period of six years from 2008 to 2013, provide a good base for evaluation of alternative scenarios. Our main contribution, besides previously overviewing opportunities and challenges for development of agriculture in Serbia in the context of increasing market and political integration of Serbia into the EU, results from the case study analysis. The main messages from the calculation of cash flow in corn production are that major improvement in net cash inflows stems from improvements in cultivation technologies of mercantile corn, while relatively significant improvements in average net cash flow are reachable with insurance from drought. Irrigation technology may reduce yield volatility, but initial investments are financially unsustainable with regular commercial loans, which is why we suggest shifting to higher value crops, such as seed corn, in case of installation of irrigation systems. Finally, we summarize the conclusions in the last section of the paper. The main overall message from the analysis calls for holistic approach in formulating policies aimed at enabling sustainable rural development, financing and competitiveness amidst rapid global changes and European integrations.

Production gaps in Serbian agriculture

In order to reap full economic benefits from it, Serbian agriculture needs to bridge the large production gap, which may be decomposed into at least five sources.

Firstly, according to the 2012 Agricultural census, as much as 8% of total agricultural land, or app. 420,000 ha, remains non-utilized, due to social, economic or infrastructural reasons, with only 65% of agricultural land actually used for agricultural production (3,4 million ha), with the rest being covered by forests, ponds and other land (1,5 million ha).

Moreover, the agro-technical measures are often sub-optimal in terms of utilized inputs and cultivation techniques, machinery is often outdated (average tractor is almost 20 years old). Meanwhile, more advanced and more costly practices could significantly increase yields.

Apart from below-potential utilized agricultural area (UAA) and suboptimal agro-technical measures, the production itself is highly exposed to weather-inflicted shocks, such as droughts, as the total irrigated land covers only 100,000 ha, or as little as 3% of the total UAA (against 20% in Greece and Italy, 13% in Spain, 7% in Netherlands, 6% in France, and 3% in Hungary), causing significant volatility in yields.

Another reason for low productivity is fragmentation of agricultural land, with average holding covering only 5.4 ha, which dampens potential scale effects in farming. However, land enlargement and production intensification may be confronted with high rate of employment and decent life standard of rural population. Thus, although highly desirable from output volume perspective, a quick rise in agricultural productivity could provoke a rise in unemployment, given the large share of agricultural employment in Serbian small-scale less productive farms. [4]

Finally, Serbian agricultural production is relatively dependent of low value-added crops, such as corn, while moving up the value chain would require diversification of crop production and larger share of cultivation of higher value added crops (such as various types of industrial

4 As a way of tackling this issue, some researchers advocate for a stronger presence of farming co-operatives, as to address both the challenge of limited scale economy effects and the aforementioned social challenges [7], [8].

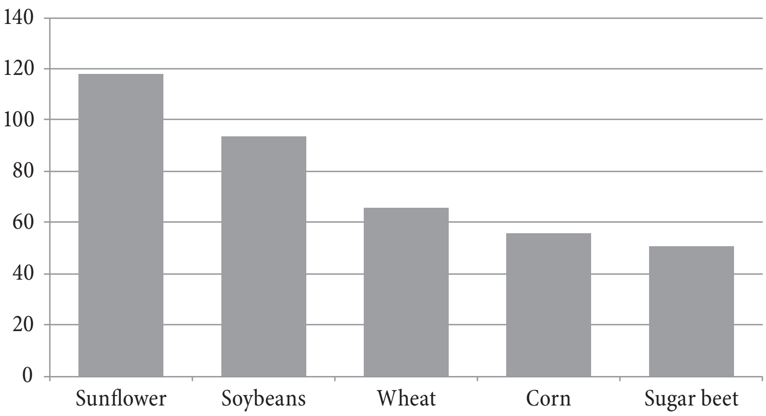
crops) as well as increase in livestock breeding, meat and dairy production. Besides, a successful agricultural sector may serve as a resource base for the higher value added activities, i.e. food processing industry, where even current capacities are underutilized – according to the Draft of the Strategy of agricultural and rural development [6] rate of capacity utilization in food processing industry is at 65% (as of 2011).

Bearing the previously stated in mind, we underline at least two issues: (i) smaller actual yields in comparison with countries with similar geo-climatic potentials, and (ii) significant production volatility, depending on the weather conditions (e.g. see Figure 1 and Figure 2).

Dual nature of agriculture and implication for its development and financing

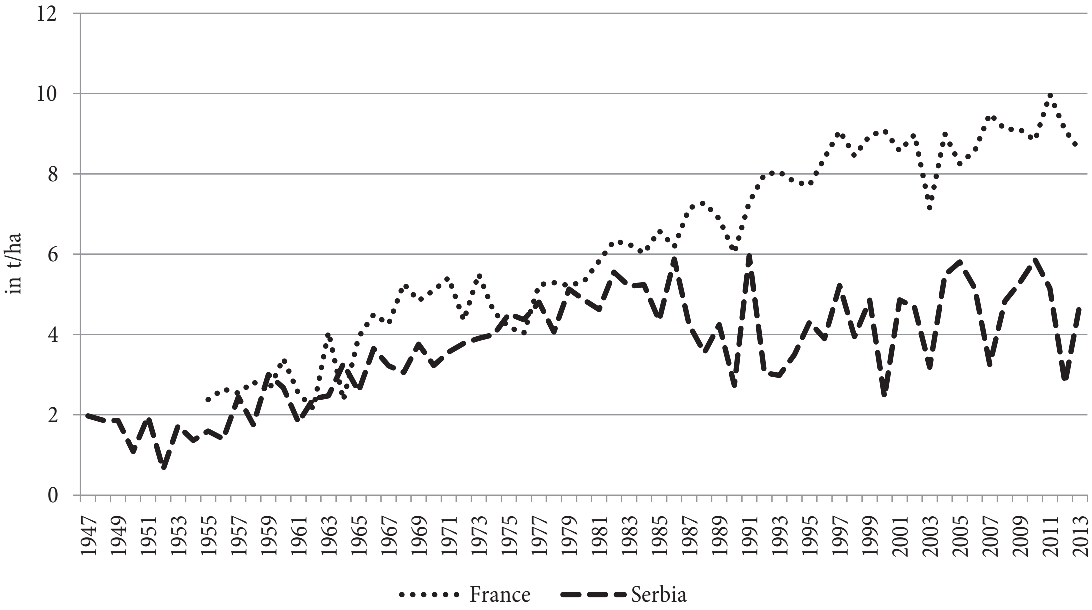
The recent rise in net exports is principally driven by the small number of large agricultural farms, with the overwhelming majority (92%) of smaller farms falling behind. This is because 92% of farms are small scale, mostly family-run properties using sub-optimal production technologies that are unable to reap benefits of the economy of scale effects. As shown in Figure 3, average farm size is 5.4 ha, but only 1% of all registered farms have more than 100 ha of land (see Table 1).

Figure 1: Average yield by product in Serbia in % of average yield by product France, in 2013



Source: Statistical Office of Serbia, Eurostat

Figure 2: Average yield in corn production in Serbia and France, 1947-2013



Source: Statistical Office of Serbia, Eurostat

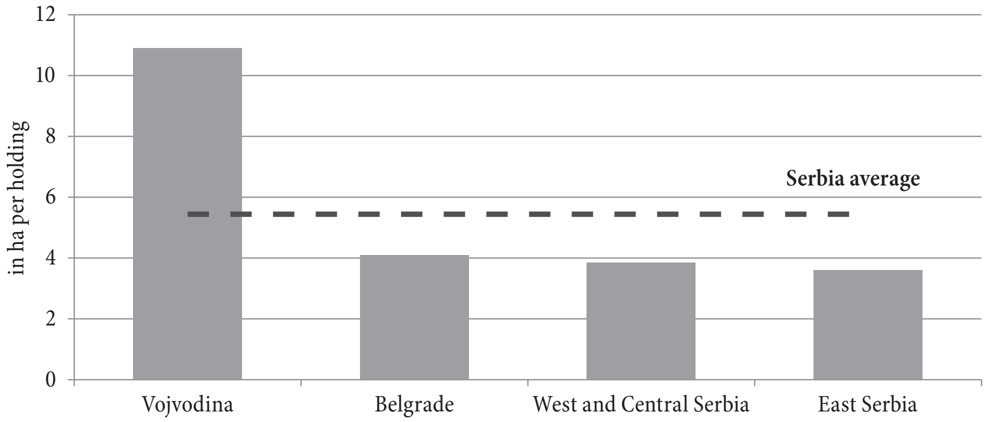
Table 1. Agricultural holdings by size categories*

Agricultural holdings by size categories*	Small	Medium	Large	Total
Number of holdings	579,965	45,342	6,245	631,552
Utilized agricultural area, in ha	1,486,955	825,013	1,125,458	3,437,426
		in %		
Number of holdings	91.8%	7.2%	1.0%	100.0%
Utilized agricultural area	43.3%	24.0%	32.7%	100.0%

*Small farms occupy 0-10 ha, medium 10,01-50, large 50,01 and more

Source: Statistical office of Serbia, Agricultural census 2012

Figure 3: Average household size, in ha



Source: Statistical office of Serbia, Agricultural census 2012

Overview of living standards of rural non-intensive agricultural production

For the purpose of this overview, we used the latest available dataset provided by the World Bank from Living Standards Measurement Study (LSMS), which was conducted in 2007, with aim to explore ways of improving the type and quality of household data collected by statistical offices in Serbia, and thus to foster increased use of household data as a basis for policy decision-making. The survey consists of representative sample for Serbia including 5,557 households, of which 41% are agricultural households.[5]

5 Which makes Serbia a country with one of the highest shares of agricultural population in Europe (also see [17, p.9]).

We provide a breakdown of surveyed agricultural households and obtain the following statistics on presence of small farming and the role of agriculture in household income generation. A half of households farm only for their personal use (i.e. the so-called subsistence farming), while the other half obtain some part of their income through selling the products at market. Even within the latter group, a small minority (7% of all agricultural households) obtain all of their income exclusively from agriculture, and thus can be truly regarded as market participants, while the rest acquire a part of their income from social benefits, pensions or wages (see Table 2).

Table 2. Agricultural households: income, size and land ownership

	Share of households in total agricultural households	Average monthly income, in EUR per household	Average household size	Average number of adults (18+)	Average number of children	Average used arable land, in ha
Without any income (only farming for own needs)	11.9%	0.0	2.9	2.5	0.4	1.4
Income from wage, pension or social benefits and farming for own needs	37.8%	310.4	2.8	2.4	0.4	1.1
Income from selling of own agricultural products	50.3%	451.3	3.7	3.0	0.7	3.8
only from farming	6.8%	271.4	3.8	3.1	0.7	5.3
both sources of income (farming and wage/pension/social benefits)	43.5%	479.2	3.6	3.0	0.6	3.6
Total	100.0%	345.2	3.3	2.7	0.5	2.7

Note: 2006 average monthly net wage in Serbia amounted to 260 €

Source: World bank LSMS Serbia, 2007

Serbian small scale farming is thus characterized by numerous elderly households in remote areas, which operate with outdated machinery and techniques. Average size of agricultural households is 3.3 members (against average of 3.1 for all households), with an average used farm surface of only 2.7 ha (4 ha in Vojvodina, 2.3 ha in Central Serbia). Out of the agricultural households, a majority of 85% doesn't cultivate the whole arable land surface that they own, mainly due to economic and socio-demographic reasons (elderly households), and to smaller extent, technological reasons (see Table 3).

Table 3. Reasons why the household did not cultivate the total used arable land

Crop rotation	2.5%
Lack of financial means	19.7%
Lack of workforce	28.8%
Lack of equipment	13.9%
Economic instability	23.4%
Other reasons	11.7%

Source: World bank LSMS Serbia, 2007

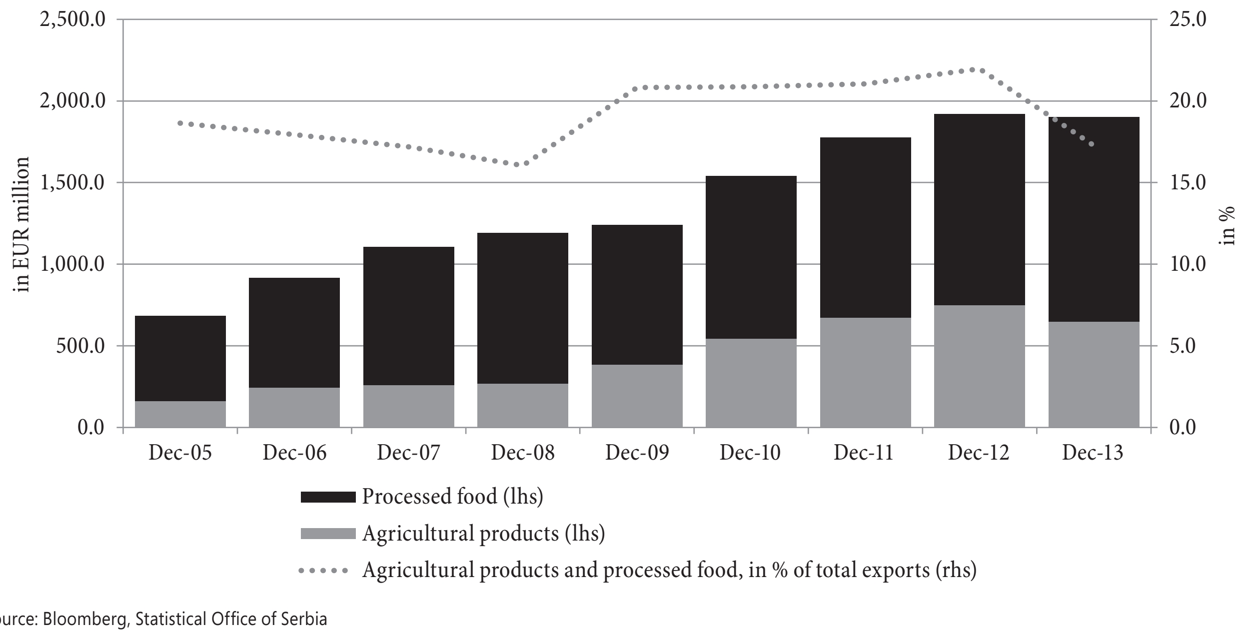
Agricultural households' standards of living remain relatively modest in comparison with their urban counterparts. Namely, minimal wage for which a person living in an agricultural household would accept to work for is net EUR 200 on average (EUR 250 for non-agricultural household population, as of 2006), while about 8% of agricultural households live under the poverty line (defined as household monthly consumption at less than EUR 110), versus 6.5% with non-agricultural households, according to LSMS data.

Overview of intensive agricultural production with the largest Serbian companies

Large scale, intensive agricultural activity has been rapidly developing in recent years. This is driven by heavy investments financed by borrowing, IFI support or from own funds. Besides, in recent years there was reported a growing number of examples of vertical integration, i.e. moving the activity along the value chain into food processing and/or trade, and increasing regional market integration. These companies were the key drivers of the growth in agricultural products' and processed food' exports in recent years (see Figure 4).

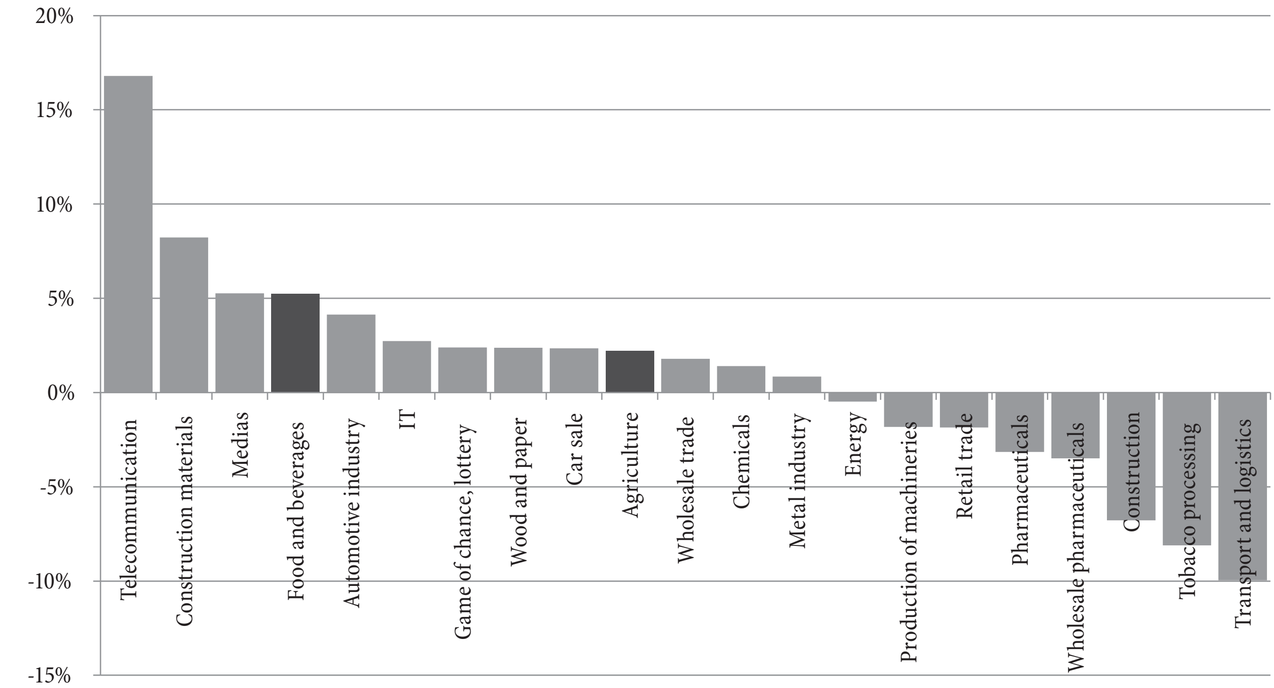
According to NIN's TOP 500 [9], [10], in the period between 2010 and 2012, the closely related agricultural and food processing sectors had above average profitability indicators (see Figure 5), all with a steady rise in number of employees. Moreover, the relative importance of Serbian agri-complex companies keeps increasing, as suggested by their rising number within the 500 largest Serbian companies – there were 108 in top 500 in 2012 (22% of total) up from 83 in 2011 (17%).

Figure 4: Agricultural products and food exports



Source: Bloomberg, Statistical Office of Serbia

Figure 5: EBT margin of the 500 largest companies in Serbia*, average by sector of activity, in 2012



Note: EBT (Earning before taxes) margin represents ratio between pre-tax profit and operating revenue

*Ranked by the size of operating revenues in 2012

Source: Serbia Business Registers Agency

The risky nature of agricultural business

Agricultural production is associated with various risks and these risks are often interconnected. Six types of risk are generally considered, according to their source [13]. First is production risk, concerning variations in crop yields and livestock production, affected by a range of factors: weather conditions, climate change, pests, diseases, as well as management of natural resources such as water. Second are price and market risks associated mostly with variability in output price, but also with variability of input price and integration in the food supply chain (with respect to quality, safety, new products etc.). Third group are regulatory risks connected with the impact of changes in agricultural policies (e.g. subsidies, regulations for food safety and environmental regulations) or trade policies. Fourth category of risks is technological risks associated with the adoption of new technologies. Fifth group of risks may be categorized under financial risks resulting from different methods of financing the farm business, subject to credit availability, interest and exchange rates, etc. Finally, there are human resource risks, associated with unavailability of personnel.

Among these types of risks, production risks (yield volatility) and price volatility are usually considered the most important by farmers [14]. Both of these are expected to increase. On one hand, there appears to be an increase in occurrence of extreme weather events, possibly due to climate change, which will negatively affect yields [12], [13]. On the other hand, long-term supply/demand imbalances are possible worldwide, due to structural factors: increased protein intake demand – driven by population and income growth – combined with scarcity of water (due to pollution and increased meat consumption that requires more water), arable land and energy. [6] While somewhat offset by increasing yields and GMOs, the supply demand/imbalances combined with weather events are likely to lead to tight stocks and increased price variability.

Output price variability is probably one of the biggest contributors to the overall risk in agricultural business. It arises due to the biological lag inherent in agricultural production. Obviously, producers must make production decisions months (even years for some crops) before they have a product to sell (i.e. before the actual crop prices are known). During this period, output prices may change

6 For more details, see [12]

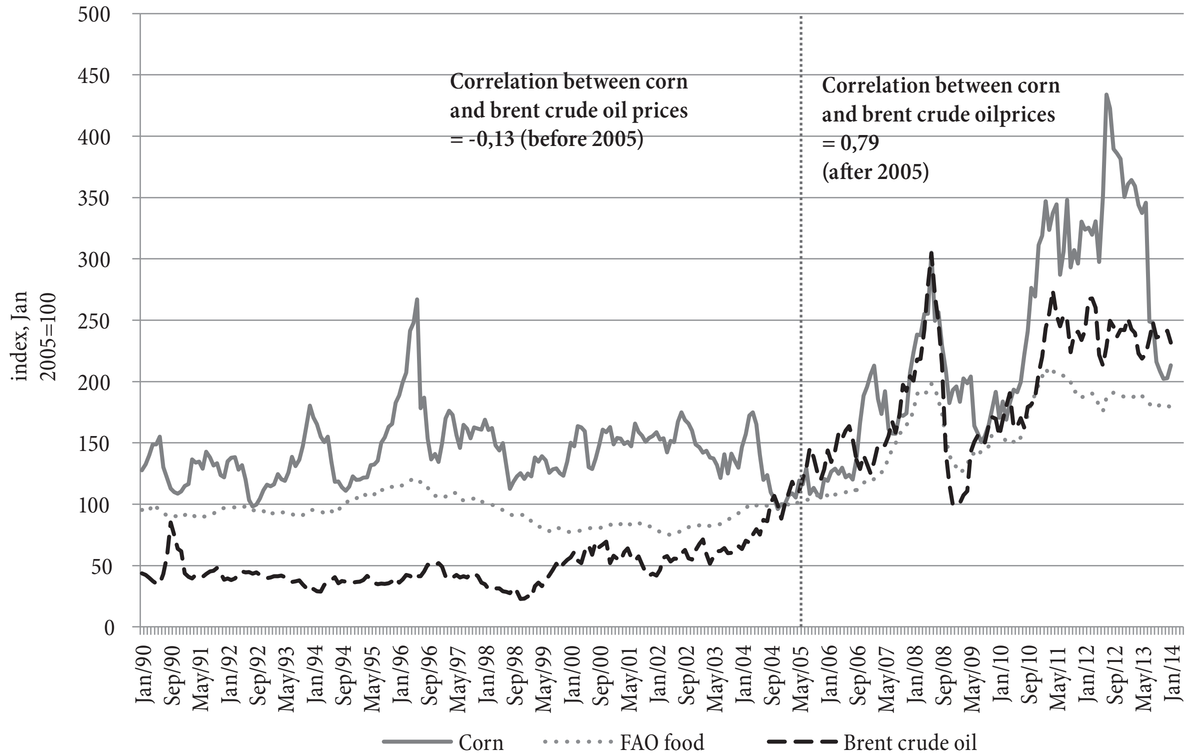
dramatically in response to shocks in supply and demand. This may put farmers in a difficult situation, if commodity prices decrease dramatically during the production and marketing cycle. Due to low elasticity of both supply and demand, the responses to price shocks are slow. Since 2005, food and above all – cereals commodity prices have become correlated with crude oil prices as oil has become not only the input in agricultural production but also an alternative to food, as subsidized biofuel production has raised the opportunity cost of selling crops for food (see Figure 6).

Objective of risk management in agriculture may be various depending on agent in an economy. Some agents may focus on stabilizing food prices, other directly on stabilizing farmers' incomes. Price volatility is a concern both at the macro level of governments (e.g. trade bill and inflation) and at the micro level, for producers and consumers. For example, a drop in commodity prices during growing season is negative for farmers but tends to benefit consumers. Nevertheless, producer's objective should, besides profit maximization, take into account its income stabilization in the longer run including reduction in yield and price volatility. This objective has effects on investments in agriculture, because higher prices and income volatility increase risk premium, which decreases the rate of agricultural investments and growth.

Apart from being categorized according to their sources, risks can be classified according to the frequency of the occurrence of negative events and the magnitude of their impact. This kind of risks classification is directly related to risk management practice that may be applied.

Risks associated with frequent events which do not cause large losses, such as "normal" fluctuations in prices and production, are managed on the farm. Risk management starts with decisions on the farm and at the household level: which outputs to produce, how to allocate land, which inputs and techniques to use. Diversification of activities on and off-farm normally contributes to reducing risk. The level of the farmer's integration in the food supply chain also affects the degree to which the farmer is impacted by price volatility. Vertical integration – when the farm controls a commodity across two or more levels of activity – typically reduces risks associated with a variation in quantity and quality of inputs (backward integration) or outputs (forward integration). Vertical integration is more common in the livestock sector

Figure 6: Food price, corn price and fuel price, index, January 2005=100, 1990-2014



Source: FAO, Bloomberg

(integration backward into feed manufacturing) or in the fresh vegetables sector (integration forward into sorting, assembling and packing). Another example of farm risk management strategy is accumulation of financial reserves. General government policies, such as support for agricultural production or social and health protection, provide support in mitigation of this kind of risks.

Events which are infrequent but lead to severe damage to a whole region (e.g. floods, droughts or disease outbreaks) typically fall under the catastrophic layer for which some insurance products may help but usually a high public involvement is necessary. Between these two extreme layers, there are risks with moderate loss probability and severity. These risks are well manageable by some market solutions as insurance, futures, contracts in production and marketing.

Strategies to mitigate risk may be classified into risk transfer (production contracts, futures), risk pooling (insurance, cooperatives), and diversification in production (different activities or different crops). Different risk categories also require different providers: banks, insurance companies, governments or public private partnerships, and some risks are best managed on the farms by the farmers themselves.

The risks associated with agricultural production represent an important case for public policy involvement targeting, among other objectives, also income stabilization of agricultural producers. Hence, public policies in agriculture have usually much complex set of objectives and instruments.

Policy effects on development and competitiveness of agriculture

Competitiveness of one country's agricultural and food production is directly related to agricultural policy and trade policy differences with regard to its trade partners. However, rising of local agricultural production competitiveness is not the only goal of agricultural policies worldwide as agriculture plays a more complex role in a society, as mentioned in introductory section.

The major part of Serbian agriculture and food export is directed to the EU (see Table 4). Referring to the EU trade and agricultural policy is relevant for assessment of the competitiveness of Serbian agriculture. Moreover, an overview of the Common Agricultural Policy which is one of the major components of common EU budget is an excellent illustration of the complexity and evolution in time of objectives, principles and instruments of such a policy. The EU policy is also relevant from the perspective of Serbian integration path toward EU membership (candidate since 2012).

The initial case for the Common agricultural policy (CAP) dating back to the period of constitution of EEC in the late 1950s laid in the argument that a possible failure to absorb a high rate of labor exit from agriculture would cause a relative and perhaps absolute decline in agricultural income for a (then) substantial part of the population, which would destabilize society and in any event not be socially acceptable. Another political driver to create CAP at the time was the wish of EEC6 countries to be largely self-sufficient after the war experience of hunger and food

Table 4: Geographical distribution of Serbian agriculture products and food export

		2004	2005	2006	2007	2008	2009	2010	2011	2012
Imports from Serbia, in % of total	World	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	EU27	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
	CEFTA	7.9	8.2	9.5	12.3	15.9	17.3	16.9	14.2	15.2
	Russian Federation	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.4
	Turkey	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Serbian export destinations, in % of total exports	World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	EU27	54.9	54.1	48.6	51.7	41.0	47.8	48.5	51.0	51.8
	CEFTA	39.1	36.7	36.8	40.4	52.3	46.0	42.9	40.0	38.3
	Russian Federation	2.0	2.2	3.0	3.8	3.8	3.2	5.6	6.2	6.0
	Turkey	0.2	0.2	0.3	0.2	0.1	0.2	0.5	0.3	0.2

Source: UNCTAD
Note: During the whole period, the constant sample of CEFTA countries (Albania, Bosnia and Herzegovina, Croatia, Macedonia, Moldova, Montenegro) was used

shortages. These main cases justified main objectives of the agricultural policy but with time its instrument became inappropriate which caused a several waves of CAP reform. The three principles underlying the CAP are a single product market, European Community preference (that is, protection) and financial solidarity among the Member States. The five main objectives of CAP are: increase in agricultural efficiency, market stabilization, supply security, reasonable prices for consumers and fair standard of living for farmers where the last one was paramount among five objectives. CAP has undergone several waves of reforms starting from 1992 driven by the EU budget quarrels on the overall size of expenditures, trade conflicts due to export subsidies and World Trade Organization (WTO) driven liberalization pressures, CAP intrinsic regulatory failures and a need to pay more attention to rural development [11, p. 235]. These reforms have in general increased market orientation toward agriculture while providing income support and safety net mechanisms for producers, improved integration of environmental requirements and reinforced support for rural development.

The last CAP reform is adopted in 2013 and concerns the next seven-year period. It was mainly driven by economic, environmental and territorial challenges [3, p. 2] implying that the EU agriculture needs to attain higher levels of production of safe and quality food, while preserving the natural resources that agricultural productivity depends upon. CAP consists of two pillars: first is market management and direct payments and second is rural development. The reforms concerned its instruments reflecting in the reduction of market interventions (quotas, subsidies and levies) to only 5% of total CAP expenditure while direct payments became the major source of support and most of them are decoupled from production (producer instead of product support). The most important element of the new CAP under this firs pillar is the newly introduced "greening" payment: in future, 30% of direct income support for farmers will be granted only if they observe certain farming practices that are beneficial for the environment and the climate rewarding farmers in that way for delivering public goods (biodiversity, water quality and availability, air quality, landscape etc.).

The second pillar of CAP being rural development policy (absorbing about 80% of total CAP budget in 2007-2013 period) has remained untouched by the last reform. It is implemented through national and/or regional rural development programs. These last have to be built in more strategic approach based upon at least four of the six common EU priorities being: (1) Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas, (2) Enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and sustainable management of forests, (3) Promoting food chain organization, including processing and marketing of agricultural products, animal welfare and risk management in agriculture, (4) Restoring, preserving and enhancing ecosystems related to agriculture, food and forestry sectors, (6) Promoting social inclusion, poverty reduction and economic development in rural areas [3, p. 9].

Serbian trade policy is directly linked to competitiveness of own agricultural and food products. In that respect, the most important agreement for Serbia's agriculture is the SAA with the EU. Witnessed by some previous EU enlargements, agricultural producers face the most challenges on the way to entering the EU, but they also stand to profit the most from it upon obtaining full membership. Hence, the logic behind procedure of obtaining full membership is to shorten the period as much as possible, as prolongation of talks incurs additional costs for farmers. Namely, in the pre-accession period, a country needs to open its borders for the EU products and adapt to the EU strict standards. Precisely for this reason, most adhering countries strived to make the year of accession to the EU and year of trade liberalization coincide, as to avoid the situation in which they do not benefit from membership, but have no tariff protection. During this sensitive period, the EU provides some support (currently under so called IPARD[7] funds), but it is much smaller than the post-accession support under CAP. Serbia's liberalization with the EU effectively occurred in 2014, with the full implementation of SAA after six years of gradual reduction of tariffs, following Serbia's unilateral application of SAA. The average tariff on agricultural and food products is reduced to 2.49% from 22%, while the full membership negotiations have

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only started in 2014 with full membership unlikely to happen in years ahead and probably not in this decade. This time gap is particularly risky for the agricultural sector, especially with the current level of competitiveness, investment capacity and level of average compliance with EU standards. Moreover, Serbia found itself in a situation where it has liberalized its trade, without completing conditions for using any pre-accession (IPARD) funds envisaged to facilitate upgrade of level of rural development including attaining of the EU standards [17, pp.10-11].

Moreover, Serbian agricultural budget is limited in absolute terms and in a way also in relative terms. Namely, while EU's agricultural budget has been somewhat smaller relative to overall output than Serbia's in the past decade (0.5%-0.4% of GDP in EU against 0.7% of GDP in Serbia), share of agriculture in EU's GDP is substantially lower (1.6% of GDP in EU28, against app. 10% in Serbia)

In the past, Serbian agricultural policy was characterized by its unpredictability reflected in frequent changes of objectives and instruments, effectively nonexistent strategy of agricultural development (in spite of having formal strategy in some periods in recent past), agricultural budget that is below the needs and that's smaller than the budget of competitor countries (per hectare, per farm, as a percentage of total state budget or as a percentage of GDP), uncertainty as to the size of agricultural budget, reactive instead of proactive development approach, undeveloped institutions some of which formally exist without operating in practice [17].

Financing of agriculture business – A case study

For the purpose of an analysis and illustration of the farm business including financing aspect, we take here an example of a 100 ha farm in Serbian lowland area with high quality of soil. We alternate some technological and financial aspects of production using real technological inputs obtained from business insiders in terms of quantities, current prices as well as yields in the period from 2008 to 2013. We include subsidies that were

Table 5: Assumptions of the model and alternative scenarios

Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7
Average technology	Premium technology	Premium technology with insurance (no irrigation)	Premium technology with irrigation - Loan 10y, 7%	Premium technology with irrigation - Loan 5y, 10%	Planting seed corn - with irrigation -Loan 10y, 7%	Planting seed corn - with irrigation -Loan 5y, 10%
Sub optimal agro technical measures reflecting average cultivation method.	Optimal agro technical measures applied.	Insurance against drought, premium paid all over the period.	Irrigation system installed at 2,000 Euro per hectare at the beginning of the observed period.	Irrigation system installed at 2,000 Euro per hectare at the beginning of the observed period.	Stable selling price all over the period observed (800 Euro per Tonne).	Stable selling price all over the period observed (800 Euro per Tonne).
Medium quality seed planted and lower quality and quantity of fertilizers applied.	High yield hybrid seed planted and optimal quality and quantity of fertilizers applied.	Insurance compensation is received in 2012, 40% of insured amount.	Investment in irrigation system financed by loan with 7% p.a. interest rate and 10 years maturity.	Investment in irrigation system financed by loan with 10% p.a. interest rate and 5 years maturity.	Investment in irrigation system financed by loan with 7% p.a. interest rate and 10 years maturity.	Investment in irrigation system financed by loan with 10% p.a. interest rate and 5 years maturity.
Average yield in period 2008-2013 is 5.7 t/ha	Average yield in period 2008-2013 is 8.8 t/ha	Average yield in period 2008-2013 is 8.8 t/ha	Average yield in period 2008-2013 is 12 t/ha	Average yield in period 2008-2013 is 12 t/ha	Average yield in period 2008-2013 is 2.9 t/ha	Average yield in period 2008-2013 is 2.9 t/ha

Output sold in September (no storage) at current price on Novi Sad product market.

Installation of irrigation system provided necessary condition for planting of seed corn (higher value added product).

Size of the farm: 100ha, providing for scale economy in terms of machinery and labour cost.

No overhead farm cost allocation.

Received subsidies according to ruling scheme by each year.

Land is rented by 200 Euro per hectare all over the observed period.

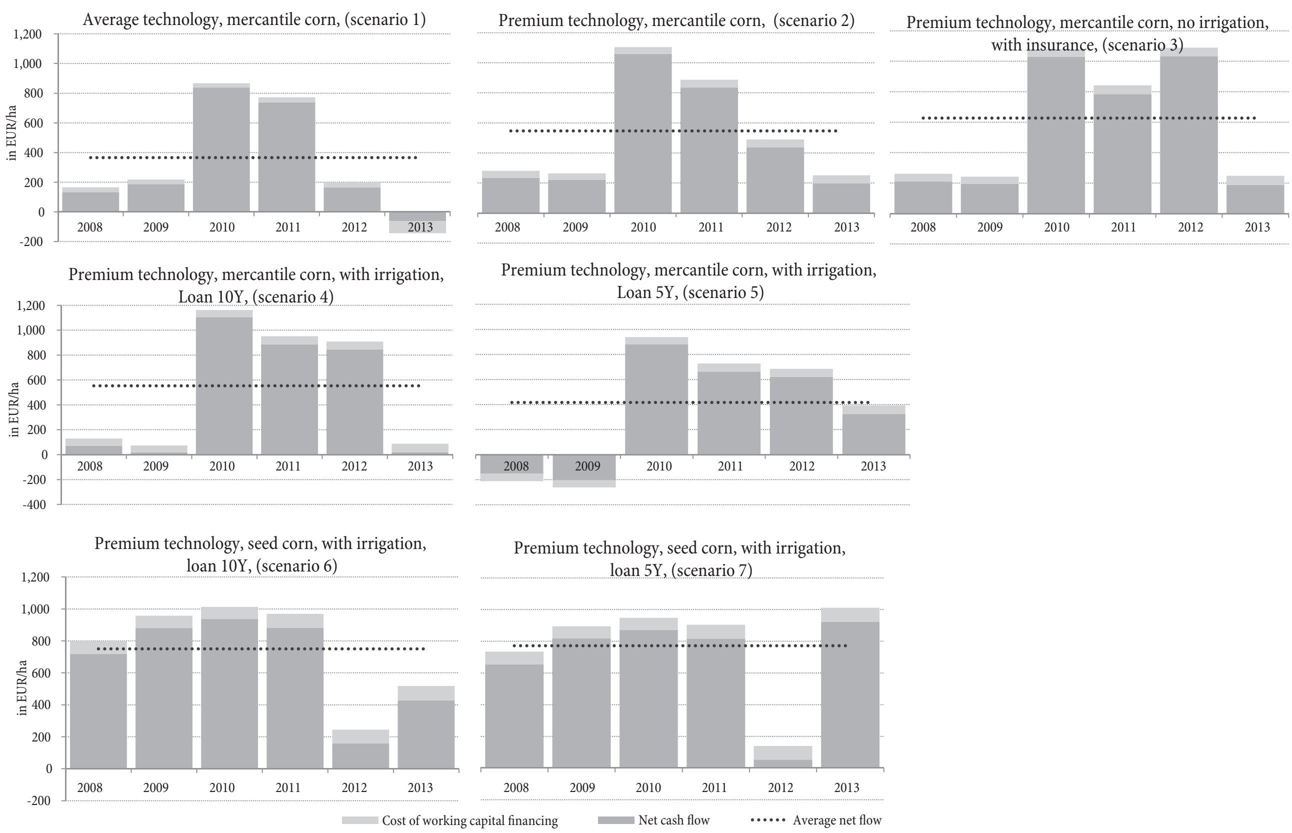
Production costs including (seed, fertilizer, protection, machinery rent, labor, fuel and water) are financed by working capital loan during 7 months from planting to harvest, with interest rate of 13% p.a.

Source: Author

effectively paid to farmers along this period according to the ruling regulation. We model the cash flow in seven different scenarios in order to illustrate the risks and opportunities from different technological and financial solutions for the same crop farm. The presented model is also illustrative from the point of competitiveness of the corn production in Serbia as selling prices applied in the model were following global price trend being even a little bit below prices from Budapest, Paris or Chicago market. Table 5 contains main underlying assumptions of the model as well as some information that help interpret the results such as average yield over the observed period while Figure 9 contains applied output prices as well as prices from international market for comparison needs.

The analysis of net cash flow in seven alternative scenarios leads to the following main messages (see Figure 7 and Figure 8 for illustration). First, the major relative improvement in average net cash inflow along the observed six years period may be attained by the improvement of cultivation technology in mercantile corn production i.e. passing from Scenario 1 to Scenario 2 by applying higher quality seed, more and better fertilizers, protection measures, soil treatment and know how. Second, the average technology (Scenario 1) production became uncompetitive in 2013 when market prices decreased as it resulted in a negative net cash flow. Third, the average net cash flow gets additionally improved with insurance against drought (Scenario 3) as a significant drop in income in 2012 is compensated from insurance benefits repaying sum of annual net outflows on insurance premium along the observed period. Fourth, although yield varies from one year to another in each scenario, overall income volatility is mostly affected by market price volatility of output which is driven by world trends and registered a surge in 2010-2012 period and a drop in 2013. Fifth, investment in irrigation system decreases yield volatility. However, it implies a large initial investment and additional annual expenses on maintenance and fuel. We modeled two different scenarios of financing of the initial investment in irrigation system. All further scenarios suppose financing of irrigation equipment installed from the beginning of the observed period by an investment loan that is being repaid annually. In Scenario 4 and Scenario 6, we suppose a loan with fixed interest rate at

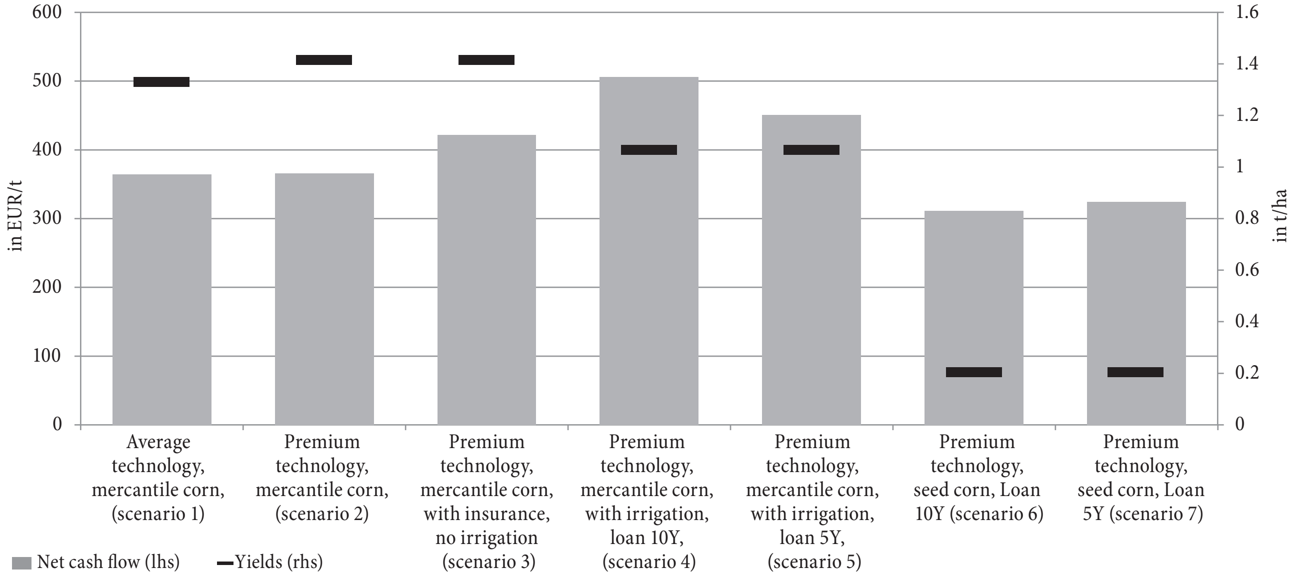
Figure 7: Net cash flow by alternative scenarios in terms of technology and financing : mercantile corn and seed corn



Source: Authors' calculation

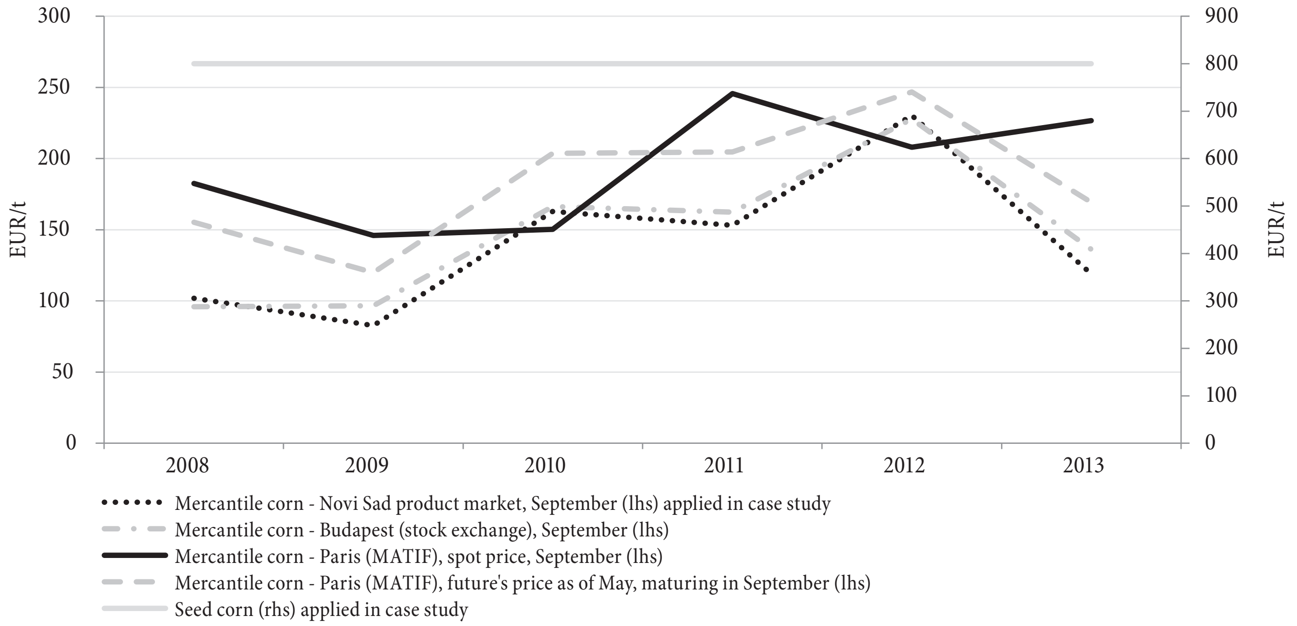
7% and 10 years maturity. These are terms that are hardly obtainable on the market and are rather provided by some development or subsidized program. Alternatively, Scenario 5 and Scenario 7 assume irrigation investment financing by a rather commercial loan with 10% interest rate and with 5 years maturity. Both loans are hardly bearable for mercantile corn producer, though 10y loan repayment is resulting in positive net cash all along the period but with tiny net cash levels in three out of six years covered by the model. Nevertheless, irrigation is a precondition for many higher value added crops, and in order to stay technologically close to other assumptions of the model, we suppose that the observed producer switches to seed corn production since the introduction of the irrigation system. The seed corn has much stable selling price and yield though the yield was somewhat lowered in 2012 drought season despite irrigation. Both scenarios assuming seed corn cultivation result in significantly higher net cash that any other scenario. In both Scenario 6 and Scenario 7, loan repayment is possible without causing illiquidity in any of the observed years. The last implication of this analysis is that irrigation system investment is worth and

Figure 8: Volatility of net cash flow and yield, by scenario, standard deviation 2008-2013



Source: Authors' calculation

Figure 9: Prices of mercantile corn and seed corn



Source: Authors' calculation

Note: Due to unavailability of data on market prices of seed corn, we apply the constant selling price corresponding to lower range along the whole period bearable in terms of liquidity in the case of higher value added crops. The last holds even in the case of commercial loan terms. However, some easing of the financial burden to agriculture production by participating in risk premium and providing longer term financing may additionally support the competitiveness of produced crops.

It is worth to note here that typical producer in Serbia has no necessarily a free choice of switching to seed corn production, as apart from somewhat different planting technology, it requires previous agreement with purchaser of certified seed and as it is not traded on the commodity market. It is, however, used in this case study for an illustration of high value added crop planting. Similar results may be obtained using vegetables or fruits. These high value added crops are generally considered rentable and therefore used in practice on irrigated land fields.

Concluding remarks and open issues

Serbia has a large agricultural sector, whose potentials are based mainly on high quality arable land, favorable continental climate and abundant labor. In order to reach its full potentials, Serbian agriculture needs to overcome its overall low level of productivity. Although a small number of larger producers is already able to compete and participate in global markets, as they have already reached critical size and have invested in technology, thus reaching high productivity levels, most agricultural producers' activity is characterized by old technology, undercapitalized production and low value added. The latter suggests a wide room for production gains, within a global market that is expected to grow in the forthcoming period [12].

Agricultural development and improvements in productivity represent a significant opportunity for Serbian economic prospects, but it should also represent a foundation for investments along the value chain into industry and services in order to provide sustainable economic development.

However, agricultural policy making process needs to aim double objectives. While it is important to stimulate large scale agricultural production and competitiveness, policy making also needs to take into account the importance of small scale farming for the social well-being, as very large share of Serbian agricultural jobs are concentrated in small, relatively unproductive farms. This issue could partially be addressed by encouragement of co-operative farming, in order to facilitate higher competitiveness for market-oriented family farms, via effects of scale economy, direct access to markets and pooling of certain risks. However, this enablement needs better institutional framework.

Adequate well-designed policy approach is crucial given limited resources. In addition to creating the appropriate fiscal space, Serbia must build the institutional capacity for allocation of earmarked IPARD resources, as the recent experience from the new member states in the EU shows that insufficient absorption capacities of potential beneficiaries is one of the key reasons for underperformance of SAPARD (IPARD) programs [15].

A major challenge stems from almost complete liberalization of trade between Serbia and the EU starting from 2014, with the domestic agricultural sector losing tariff protection, while in overall it lacks level of standards of its European counterpart and enjoys a lower level of direct income support. In this context, a start of IPARD-based financing (which hasn't been utilized so far) is essential for maintaining and improving the level of competitiveness, but also a coordinated public and private investment cycle in technology, knowledge and infrastructure.

Agriculture is a risky business for individual producers – as we show on our case study of a corn farm – with risks mainly connected to price and yield volatility. Well understanding of these risks and their recurrence, is the key to their mitigation, but also represents challenge for the cash flow stability and repayments in case of external financing.

Investments in storage capacities, irrigation, specialization in crops, value chain integration toward higher value added products, investment in branding and marketing, improving the know-how and technology, insurance against disasters, as well as fulfillment of the ongoing ruling standards, are all necessary for development of the agricultural sector.

As self-financing of some of these investments may prove to be too heavy for individual producers, there is a large need for participation in risk mitigation by development agencies, specialized lines, IFIs and the state in order to decrease the costs of financing and increase maturity of loans. Moreover, a coordinated shift toward higher value added products jointly with efforts in branding and marketing in international market may be a way toward more sustainable structure of agricultural output, able to provide much more stable cash flow and ability to bear higher investments financed even from commercial loans.

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Jasna Atanasijević

is Chief Economist at Hypo Alpe-Adria-Bank in Serbia since October 2009. She obtained a PhD from University Paris 1 Sorbonne in 2013 and holds a Master's degree in banking and finance from University Toulouse 1— Sciences Sociales (2003) as well as a Bachelor's degree from Faculty of Economics, University of Belgrade (2002). She worked previously as researcher and member of managing board of a local think-tank (Center for advanced economic studies, CEVES) and member of the editing board of "Quarterly monitor of economic trends and policies in Serbia" – a flagship publication of the Foundation for advancement of economic science (FREN). She has experience in audit and advisory service from KPMG. She has a number of published research and policy papers both internationally and locally. She is editor in chief in monthly publication "Economic Digest – finance and market trends guide" and co-editor in NIN magazine's special annual edition "Top 500". Her main professional and research interest are finance, economic integration, macroeconomic and monetary policy issues and financial intermediation in emerging economies.

Marko Danon

has been Analyst at the Economic Research of Hypo Alpe-Adria-Bank a.d. Beograd since January 2012, with primary tasks of analyzing and forecasting developments of key macroeconomic series for Serbia and SEE region, as well as preparation of Hypo Alpe-Adria-Bank's daily, monthly and yearly publications. In addition, Marko Danon is a PhD candidate in economics at the University of Nice, France, where he obtained Master's degree in economics, following Bachelor's degree at the Faculty of organizational sciences at the University of Belgrade. His main areas of interest include: economic geography, institutional economics, as well as macroeconomic aspects of transition and development.

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Dragan Lončar
University of Belgrade
Faculty of Economics
Department of Business Economics and Management

NATIONAL STRATEGIC PLANNING AS THE BASIS FOR IMPROVING COMPETITIVENESS OF SERBIA

Državno strateško planiranje kao osnova unapređenja konkurentnosti Srbije

Abstract

This paper deals with national strategic planning as the basis for improving competitiveness of a country. The aim of this paper is to examine possible models for strategic planning and to propose a framework model of strategic planning for the Republic of Serbia, given its local specifics. The author has analysed the specifics of national strategic planning and alternative models of public administration. The paper analyses in detail the current model of strategic planning of the Republic of Serbia. It proposes concrete measures for the improvement of the current model, in view of the benchmark models of strategic planning of relevant international organisations and other countries.

Key words: *strategic planning, strategic goals, competitiveness, Serbia*

Sažetak

Ovaj rad tretira temu državnog strateškog planiranja kao podloge za unapređenje konkurentnosti jedne države. Cilj rada je da sagleda moguće modele strateškog planiranja i, uzimajući u obzir lokalne specifičnosti, predloži okvirni model strateškog planiranja za Republiku Srbiju. Autor je analizirao specifičnosti državnog strateškog planiranja i alternativne modele javnog upravljanja. U radu je detaljno analiziran aktuelni model strateškog planiranja države Srbije. Predložene su konkretne mere za unapređenje zatečenog modela, sagledavajući benčmark modele strateškog planiranja relevantnih međunarodnih organizacija i drugih država.

Ključne reči: *strateško planiranje, strateški ciljevi, konkurentnost, Srbija*

Introduction

Planning involves defining goals and ways to attain them, through strategies, projects, action plans, policies, rules and procedures. Planning is a result of the tendency of people to manage future events or to react to them in a timely manner. An English proverb says: “Forecast is always wrong.” Other authors [17] argue that planning, especially by the Government, does not produce the expected result due to the complexity and rigid nature of the process, and due to the great influence special interest groups have on designing and implementing important strategies.

At first glance, it seems that any planning, especially strategic planning with longer time horizon, is futile. Numerous companies fall into this trap as well and see their strategic plans and business plans only as marketing documents they hand out to their financial institutions and business partners in hard cover, not believing in their soundness and potential for implementation.

However, the initial fault of this approach is the fact that forecasting and planning should result in surgically precise projections of the future, which is certainly not possible. Planning should be understood as a flexible process with overall contingent consideration of possible future scenarios and preparation of responses to possible events. Plans are also the basis for controlling the attainment of the defined goals. Without plans, there are no standards for measuring performance of the persons responsible, and therefore, no stimulative impulse for improving the operations of any organisation.

Typically, strategic plans are developed by profit organisations. During recent several decades, strategic planning has become increasingly important for non-profit organisations as well, including the Government and local self-government. Namely, there is a consensus that it is necessary for any organisation to define its strategic goals, based on a detailed diagnosis of external trade and international competence, and then to design a strategy to attain those goals. It is also interesting to note that, in recent years, state institutions have been taking the strategic planning tools from the economy, so that now the use of traditional strategic planning tools has become almost a standard in developed countries. These are tools such as benchmarking, SWOT, portfolio analysis, performance management, management by objectives, strategy maps, balanced scorecards, total quality management, value chain, and value networks, and many other tools.

This paper discusses the topic of national strategic planning as a basis for improving competitiveness of a country. The aim of this paper is to examine possible models for strategic planning and to propose a framework model of strategic planning for the Republic of Serbia, given its local specifics. The first part presents specifics of national strategic planning as opposed to business planning. The second part presents public administration models, with particular focus on the New Public Management model. The third part offers a detailed analysis of the zero strategic point of Serbia, current strategic documents and the strategic planning process within state administration. The fourth part of the paper analyses useful comparative strategic documents of national institutions and countries. The fifth part proposes an advanced strategic planning model for the Republic of Serbia. The last part summarises major conclusions of the paper.

Specifics of national strategic planning

There are several major specifics of national strategic planning as opposed to business planning.

Firstly, strategic planning at the national level requires longer time horizon, since it is practically based on visionary planning. A detailed vision is subsequently specified in detailed strategic goals and action plans. In terms of planning horizon, there is a tension between politicians, who insist on short term results due to short election cycles, and national professional technocracy, who seeks to also attain goals that require longer time horizons.

Secondly, cascading goals at national level have much more levels than in a typical corporation. Goals have to be cascaded from the national level down to regional level, local self-government, individual state agencies, institutions and the like. In other words, the process of harmonisation of goals and their implementation on the national level is much more complex and demanding.

Thirdly, there is a major difference in the initial mission, which, in this case, is securing room for attaining a higher level of satisfaction of the citizens (voters, taxpayers) as key stakeholders. As a result of this, the strategies designed and implemented by the state administration are significantly different from the strategies of companies. Specifically, state administration combines two approaches at the same time: the political one and the managerial one. It takes skill and a strong consensus of political rulers to reconcile the two approaches. In practice, this is often a utopia due to the usual domination of the political approach over the managerial one. The difficult and unpopular strategic decisions, for example, are delayed or diluted by means of slow or partial implementation. Also, there is an open question of what the demands of citizens really are, that is, what the demands of different segments of citizens are. Very often, the strategic goals of managerial character, especially in the period before political elections, are overwhelmed or deformed by goals originating as a result of political mathematics and goals that are expected to bring the largest number of votes and seats.

Fourthly, the structure, processes, and organisational culture in state administration are much more rigid than in a typical profit-oriented corporation. This significantly complicates the harmonization of strategic goals and the subsequent coordination of their implementation, primarily because of the tendency to maintain the status quo, and not to implement organizational changes.

Fifthly, such an inflexible context, which is manifested in the existence of strong informal groups that hinder even the slightest change, significantly complicates the process of allocating responsibility to individual subjects as well as measuring individual results. For example, what is the basis for measuring the success of a minister during the period of reconstruction of the Government or that of a director of a public enterprise? What are the performance indicators and what is the responsibility of the subject accountable for a particular goal? In state administration, it is very difficult to protect performance indicators and the source of information from banal relativism, and it is even harder to introduce the logic of differentiated remuneration. Very often, the defensive mechanism of the people whose performance is being measured is that the performance indicator is not good or that the data underlying the measurement results are inadequate. In the business world, this kind of discrediting happens much more rarely, and since they insist on one source of "the truth" (for example, business intelligence applications that generate automated quarterly reports on the performance of managers), which is then used as the basis for variable remuneration of managers.

Another specificity of the state strategic planning is the fact that strategic plan is funded mainly from the state budget and implemented through the use of internal administrative resources with the help of external consultants. In a situation with limited resources, it is necessary to prioritize strategic goals and adjust their implementation calendar.

Regardless of the specific problems in the application of the concept of strategic planning at the state level, this approach becomes inevitable and unavoidable. This is especially important for Serbia as a transition economy that cannot provide the overall development of the whole society without visionary approach on the national level and systematic strategic approach.

Models of public administration and strategic planning

The path proposed to Serbia on the road to improving national strategic planning is the introduction of adjusted New Public Management approach [3]. By adjusted, we mean adjusted to local specifics of Serbia, especially in the part of the existing capacities of the public administration. It is a management philosophy of public administration with the idea of modernizing it and making it more efficient [2]. Representatives of this approach advocate the application of management philosophy from the private sector in public administration, to the extent possible. The key objective is to establish the smallest possible and most efficient state administration that will periodically account for the achievement of strategic goals and the fulfilment of their action plans and project plans and key performance indicators, which are known in advance to all relevant representatives of the state administration and which are aligned with the state budget. The idea is to divide state administration, in line with the divisional model, into a smaller number of systems (strategic business units) and to stimulate entrepreneurial competition between these systems in terms of the achieved performance level. In addition, this stimulates competition between public systems and private systems. Citizens are seen as atomized shareholders (owners of the state) and consumers (users of public services). There is always a question of whether internal savings can be achieved and whether services can be delivered in a cheaper and more efficient manner [9].

By the nineteen eighties, public sector administration was considered to be a centralized process, which stems from the budgetary framework, and which is implemented almost automatically through pre-defined policies and programs. The New Public Management approach insists on a bottom-up logic, which means that plans are created by a large number of stakeholders, such as politicians, government officials, business representatives, citizens, and many others. In this process, it is always insisted that a distinction be made between the entities that create a plan and the entities that will implement the plan. In considering new plans, there is always the question of the effects the implementation of these plans will have on the citizens as key stakeholders. Namely, this approach always insisted on public value as a key result, which was a shocking novelty, considering the fact that never before had the Government been regarded as an institution that should create value.

This approach argues that state administration strategy makes sense only if it respects the so called strategic triangle with three key criteria: 1) Strategy creates public value, 2) Strategy is legitimate and is politically sustainable, and 3) Strategy is operationally and administratively feasible. Experience has shown that, in practice, the most difficult things to reconcile are points 1 and 2, i.e. the managerial and political dimensions, respectively.

Perhaps the best representative of this approach is *Margaret Thatcher*, former Prime Minister of Great Britain [15]. In those times of economic stagflation, there was great dissatisfaction of the citizens with the former state bureaucracy. The then Prime Minister realized the necessity of fundamental changes, but that a key condition for the success of that change was to provide political support. She was aware that state administration is a system that vigorously defends the status quo. She therefore assumed the role of a "political entrepreneur" and began a general reform of the public sector in the areas of organization, operational methodology, labour relations, cost management, reporting system, evaluations and remunerations, and the implementation of public procurements. Each ministry and state administration organization set their own goals for whose attainment they were responsible. For this purpose, the Efficiency Control Unit was formed within the Office of the Prime Minister.

This approach was later taken over by other countries such as New Zealand, Australia and Sweden, and later on America, too. For example, at the beginning of his first term, *Bill Clinton* introduced the National Performance Review and the Government Performance and Results Act [1]. Also, the OECD established the Public Management Committee and Secretariat – PUMA with the aim of emphasizing this segment of social development.

An increasing number of authors believe that the optimal model of governance is a milder New Public Management approach, the so called Neo-Weberian State [4], which is advocated by Germany and France, with the introduction of managerial logic into the functioning of public administration, but with simultaneous reaffirmation of the state as an integral managerial subject [7]. Namely, extreme New Public Management has shown a number of weaknesses and the need for on the fly adjustments. For example, one of the weaknesses is the theory on the formation of quasi markets between the state and the private sector which is certainly not possible in a situation of natural monopoly. The same is true for the practice of entrusting the provision of certain services to the private sector, which often led to a drop in efficiency due to lack of capacity or to a significant increase in the prices of services. Furthermore, the practice of hiring foreign experts did not provide a result within the projects of public sector reforms, due to lack of flexibility and adaptability to the local context when implementing a new model.

Strategic planning in Serbia

Starting point

The foundation for strategic planning is strategic analysis, and the definition of the starting point of various relevant aspects. Notwithstanding the significant number of deficiencies, very often the basis for defining the starting point of Serbia is the Global Competitiveness Index (Global Competitiveness Index) of the World Economic Forum (World Economic Forum)[1]. Its advantage is the fact that it shows integral diagnosis of a state, including a significant number of indicators of economic, social, technological, environmental, legal, demographic, and political nature.

The World Economic Forum ranks countries based on competitiveness elements, which are included in the calculation of the pillars of competitiveness, which comprises the values of the sub-indexes of competitiveness and finally the Global Competitiveness Index. The values of this index and its sub-indexes and the pillars for Serbia in the period of 2010-2013 are shown in Table 1.

1 http://www.weforum.org/

Table 1: The GCI values by pillars of competitiveness

Item no.	Index elements	2010-2011		2011-2012		2012-2013		2013-2014	
	Total position	96	3.8	95	3.9	95	3.9	101	3.8
I	Basic requirements sub-index	93	4.1	88	4.3	95	4.1	106	4.0
1	Institutions	120	3.2	121	3.2	130	3.2	126	3.2
2	Infrastructure	93	3.4	84	3.7	77	3.8	90	3.5
3	Macroeconomic framework	109	4.0	91	4.5	115	3.9	136	3.4
4	Health care and primary education	50	6.0	52	5.8	66	5.7	69	5.7
II	Efficiency drivers sub-index	93	3.7	90	3.7	88	3.8	92	3.8
5	Higher education and training	74	4.0	81	4.0	85	4.0	83	4.0
6	Efficient goods market	125	3.6	132	3.5	136	3.6	132	3.6
7	Efficient labour market	102	4.1	112	3.9	100	4.0	119	3.9
8	Developed financial markets	94	3.8	96	3.7	100	3.7	115	3.5
9	The ability to harness the benefits of the existing technologies	80	3.4	71	3.6	58	4.1	60	3.9
10	Market size	72	3.6	70	3.6	67	3.6	69	3.7
III	Innovation sub-index	107	3.0	118	3.0	124	3.0	125	3.0
11	Sophisticated business operations	125	3.2	130	3.1	132	3.1	137	3.2
12	Innovation	88	2.9	97	2.9	111	2.8	112	2.9

Source: [18]

In short, Serbia's ranking is not encouraging, and it has the worst rankings in the following segments: corruption, inefficient administration, political instability, inadequate infrastructure and insufficient and expensive capital. The quality of strategic planning, as a factor of competitiveness, can be placed in the first pillar of competitiveness – Institutions, which ranked low.

Table 2 shows GCI values for Serbia and other countries in the region in the period of 2010-2013. It is evident that the ranking of Serbia has deteriorated and is currently the worst in the region.

There is an unanswered question of whether we have defined our starting point given a significant number of social contradictions that arise from undefined starting point (undefined territorial issue, socialism vs. neo-liberalism, state strategic partnerships, and many others). Resolving these issues is the basis for building cohesion in the society, without which it will not be possible to reach consensus on key strategic directions of the state in the future.

The current strategic documents

Notwithstanding the fact that starting point is defined only vaguely and that discontinuity is more normal than exceptional, there is still room for the state to offer and set its key strategic directions. Now, we wish to observe the position of the state regarding key strategic issues and to examine the current strategic documents of the Republic of Serbia.

Development Strategies are prescribed by the Law on the Government and the Rules of Procedure of the Government as documents adopted by the Government. Article 45 of the Law on Government[2] prescribes that the strategy is a means by which the Government establishes the situation in a particular field, as well as measures to be taken for its development. The Law on State Administration, in Article 12, prescribes that state authorities, inter alia,

2 With the Development Strategy, the Government shall establish the situation in the field in the competence of the Republic of Serbia and measures to be taken for its development. The Law on the Government, Official Gazette of RS, no. 55/2005, 71/2005-correction, 101/2007 i 65/2008, Article 45

Table 2: Relative position of Serbia as compared to other countries in the region

	Albania		B&H		Croatia		Macedonia		Montenegro		Slovenia		Serbia	
	GCI	Rank	GCI	Rank	GCI	Rank	GCI	Rank	GCI	Rank	GCI	Rank	GCI	Rank
2010	3.9	88	3.70	102	4.0	77	4.0	79	4.4	49	4.4	45	3.8	96
2011	4.1	78	3.8	100	4.1	76	4.1	79	4.3	60	4.3	57	3.9	95
2012	3.9	89	3.9	88	4.0	81	4.0	80	4.1	72	4.3	56	3.9	95
2013	3.8	95	4	87	4.1	75	4.1	73	4.2	67	4.3	62	3.8	101

Source: WEF

propose to the Government development strategies and other measures to shape government policy. The Law on Ministries defines the scope of work of all ministries and, inter alia, prescribes the obligation to develop the strategy in the fields for which the ministry is competent. The Rules of Procedure of the Government defines the layout of the Government Annual Program of Action and the Government Report.

In the previous period (2001-2013) a large number of strategic documents of the Republic of Serbia were made (the author estimates that there about 130 strategic documents) that can be grouped by pillars of competitiveness (Table 3 shows examples of strategies that are predominantly adherent to each of the pillars of competitiveness). Each strategy, depending on its objectives and planned activities for its implementation is related to one of the twelve pillars

Table 3: Examples of current strategic documents by pillars of competitiveness

Pillar I: Institutions	• The Strategy for Developing the Public Procurement System in the Republic of Serbia • The Strategy on Development and Promotion of Socially Responsible Business Operations in the Republic of Serbia • The Strategy on the Development of Internal Financial Control in Public Sector in the Republic of Serbia • The National Judicial Reform Strategy • The National Anti-Corruption Strategy • The Strategy on Free Legal Aid Development in the Republic of Serbia
Pillar II: Infrastructure	• The Development Strategy of Railroad, Road, Air and Intermodal Transport in the Republic of Serbia for period 2008-2015 • The Strategy on Telecommunications Development Strategy in the Republic of Serbia for period 2006-2010 • The Industrial Development Strategy and Policy 2011-2020
Pillar III: Macroeconomic framework	• The National Sustainable Development Strategy • The Tourism Development Strategy • The Republic of Serbia Energetics Development Strategy until year 2015 • The Fiscal Strategy • The Poverty Reduction Strategy • The National Strategy for Sustainable Use of Natural Resources • The Competitive and Innovative Small and Medium Enterprises Development Strategy for period 2008-2013 • The Strategy on Promotion and Development of Foreign Investments
Pillar IV: Healthcare and primary education	• The Strategy on Permanent Quality Improvement of the Health Protection and Patient Safety • The Strategy on Improving Handicapped Persons Position in the Republic of Serbia • The HIV and AIDS Strategy • The Social Protection Development Strategy • The National Strategy on Aging • The National Strategy on Social Housing • The Youth Health Development Strategy • The Strategy on Tobacco Control • The Republic of Serbia Public Health Strategy • The Birth Promotion Strategy • The Strategy on Prevention and Control of Chronic non-Infectuous Diseases • The Strategy on Permanent Quality Improvement of the Health Protection and Patient Safety • The Strategy on Development of Vocational Education in the Republic of Serbia
Pillar V: Higher education	• The Strategy on Adult Education Development in the Republic of Serbia • The National Strategy for Youth • The Strategy on Development of Vocational Education in the Republic of Serbia • The Strategy on Science and Technological Development of the Republic of Serbian in period 2010-2015
Pillar VI: Market efficiency	• The Republic of Serbia Trade Development Strategy • The Free Zones Development Strategy in the Republic of Serbia for the period 2011-2016 • The Strategy on Market Supervision
Pillar VII: Labour market efficiency	• The National Employment Strategy for period 2011-2020 • The Strategy on Carrier Guidance and Consulting in the Republic of Serbia
Pillar VIII: Financial markets development	• The Strategic Action Plan (CSAP) to Enhance Corporate Financial Reporting. and Improving Audit Quality • The Monetary Policy Strategy and Objectives of the National Bank • The Strategy on Promotion and Development of Foreign Investments
Pillar IX: The ability to harness the benefits of the existing technology	• The Strategy on Change from Analog to Digital Broadcasting of the Radio and Television Programmes in the Republci of Serbia • The Strategy on Increase of Share of Domestic Industry in telecommunication Developments in the Republic of Serbia • The Information Society Development Strategy in the Republic of Serbia until year 2020 • The Strategy of Broadcasting Development in the Republic of Serbia • The Strategy on Development of Electronic Communications in the Republic of Serbia for period 2010-2020 • The Strategy for the Development of the Public Information System in the Republic of Serbia until 2016 • The Strategy for the Development of and Support for the Information Industry Technologies
Pillar X: Market size	• The Strategy on Republic of Serbia Exports Increase
Pillar XI: Sophisticated business operations	• The Strategy on Development of E-Government in the Republic of Serbia period 2009-2013 godine • The Introduction of Cleaner Production Strategy in the Republic of Serbia
Pillar XII: Innovation	• The Information Society Development Strategy in the Republic of Serbia until year 2020

Source: The author

which, according to the World Economic Forum, determine the level of productivity and consequently the achieved level of development of a national economy.

The latest attempt to create an umbrella strategy resulted in the National Sustainable Development Strategy of Serbia, which was created in 2008, for the period of 2009-2017. This strategy sees good geographical position, the wealth of natural resources and rich cultural infrastructure as key advantages of Serbia. Key weaknesses are institutional decapacitation, regional inequalities, poorly executed privatization, low level of direct investment, underdeveloped physical infrastructure, brain drain, and deficit of professional staff, low investment in research and education, high unemployment and growing environmental pollution.

This strategy defines the goals and strategic priorities within four components. These are: the economic dimension, the social dimension, the environment and natural resources, and the institutional framework. This strategic document defined the vision of Serbia as a country which, in 2017, is institutionally and economically developed, with adequate infrastructure and fully harmonized with the EU standards in terms of its functioning. The Strategy sets out five key strategic priorities, which support the achievement of the aforementioned vision. These are: 1. Membership in the EU; 2. Balanced economic development; 3. Development of people and their employment; 4. Development of infrastructure and balanced regional development; 5. Rational use of natural resources. In addition to the priorities, the vision is also supported by the following strategic principles, which are derived from the Declaration on Sustainable Development from Johannesburg, The Millennium Development Goals and the EU Sustainable Development Strategy. These are the following eight principles: 1. Inter and intra generational solidarity (meet the needs of the present generation without compromising the rights of future generations to meet their needs); 2. Open and democratic society (access to information and justice. guaranteeing civil rights. encouraging public participation in decision-making); 3. Knowledge-based economy (promote education and innovations); 4. Social inclusion (equal opportunities for all, minimize polarization and reduce poverty); 5. Triple-bottom line (link environmental issues to economic and social factors); 6. Precaution (protect environment and preserve natural balance); 7. Externalities (polluters must pay for pollution costs); 8. Sustainable production and consumption (reduce pollution while providing economic growth).

The analysis of current policy documents in Serbia suggests the following conclusions [3]. Firstly, most of the strategies were adopted in 2008-2011. Secondly, most of the strategies were adopted by the Government of Serbia, and a small number by the National Assembly. Thirdly, the implementation period of a strategy is usually from one to five years. A quarter of strategic documents did not define the period of observation. Such is the case, for example, with the Defence Strategy of the Republic of Serbia. Fourthly, less than 30% of strategic documents have clearly defined action plans, more than 25% overlap, less than 10% have a mechanism for monitoring and measuring performance. A significant number of documents are extensive, outdated, too broadly defined, vaguely written, and with too many strategic goals. The SIGMA Report recommends that 20% of the strategies should be discarded immediately, 33% implemented and 47% correct and only then implemented [14]. Fifthly, the strategic documents are mutually incompatible, as a result of the lack of an umbrella strategy document.

The analysis of the strategic planning process in Serbia

The text below deals with the analysis of the current strategic planning process in the Republic of Serbia.

Firstly, awareness of the importance of strategic planning is not currently present in the Serbian administration. Notwithstanding the significant number of initiatives (such as the Serbian European Integration Office and the General Secretariat of the Government), there is still no unique and coherent framework for strategic planning in Serbia [10]. Consequently, we have a situation where each ministry develops its strategic planning documents (mainly development strategies) without any consideration whether their goals are compatible with medium and long term goals of the state, nor how these goals are aligned with the strategic goals of other ministries. Isolated development of strategies of individual ministries without consultation and cooperation with other departments will not produce satisfactory results in the field of economic recovery and improving national competitiveness.

Secondly, the insufficient resources and inadequate administrative capacity have led to the fact that important strategic documents are not prepared or that are prepared in a completely inadequate way. Sometimes, this is coupled with insufficiently qualified foreign consultants, who are trying to apply an indigo approach to the strategic planning process, which cannot produce a good result [10]. Such documents are not aligned with each other and lack comparable content and the depth of analysis. The planning and the implementation of strategies suffer from problems of internal decapacitation due to insufficient training of civil servants in the planning, monitoring, evaluating and reporting. In addition, these activities are seen as an "extra work for the same pay". The level of quality of planning is reflected in the fact that, in 2012, only about 30% of the points discussed at Government sessions were envisaged by the Government Annual Program of Action.

Thirdly, the regulatory framework is a significant problem. Namely, the regulations, which we have mentioned earlier, do not define a common framework for planning at the national level. The regulations govern only parts of the strategic and operational planning (development strategies, medium-term plan, annual plan of activities), and do not unite them into a single unit. There is no clearly defined calendar of submission of plans, but only the final deadline by which state administration bodies should submit their plans of activities to the General Secretariat. These deadlines are often not met in practise.

Fourthly, in many cases, the strategies adopted by the Government lack action plans with defined goals, initiatives, responsible subjects, and correlations with the budget. Without this segment, the implementation of strategies is not possible and the strategic document itself loses its meaning.

Fifthly, most strategies, even if they have an action plan, do not have an adequate mechanism for implementation, monitoring, evaluation and reporting. There is no accountability for the implementation of these strategies, as they represent a set of wishful thinking, not based on an in-depth strategic analysis of the current situation, and very quickly, these documents end up in some drawer without any intention to be used in any manner. In terms of monitoring, the part being monitored is the implementation of the Government Plan relating to the adoption of legislation. Other segments of the Government Plan are not monitored consistently.

Sixthly, one of the key issues is the absence of correlation between planning and budgeting. In practice, the predominant planning logic is the inverse logic. First, the projections of available funds are made, and then the question of what could be done with the available money is asked. In addition, according to the Law on the Budget, along with their financial plans, state administration bodies must also submit medium-term plans, which should clarify how public funds are to be used in the following three years. In practice, state administration bodies submit their financial plans to the Ministry of Finance, whereas their medium-term plans are submitted to the General Secretariat. These processes are separate and there is no coordination between the two.

In summary, the main weaknesses of strategic planning in Serbia are the following: the lack of an umbrella policy framework, inadequate capacity and lack of motivation of administrative staff, inadequate quality of strategic documents, mutual incompatibility of strategic documents, lack of monitoring and reporting on the implementation of the strategy, lack of accountability for the results of the implementation of a strategy, and lack of coordination between strategic planning and budgeting.

Examples of umbrella strategic plans

A key problem that we observed in the analysis stage is the lack of an umbrella strategy at the national level, which would then cascade down to the levels of sectoral strategies and strategies of territorial units. Therefore, in the text below we will be analysing benchmark strategies, which can be used as a type of guidelines in the formulation of future umbrella strategic plan of the Republic of Serbia.

Europe 2020

Considering the visionary tendencies of much of the political establishment in Serbia, we believe that it is logical that the basic document for the creation of Serbia's umbrella strategy should be the EU strategy called Europe 2020: A European Strategy for Smart, Sustainable, and Inclusive Growth [6].

The creators of this strategy have first conducted an in-depth strategic analysis based on which they conclude that the crisis has caused the manifestation of a series of structural flaws in the Euro zone. The growth rate is lower than that of other economic partners due to the gap in productivity as a result of inadequate sectoral structure, lower level of R&D investment, market entry barriers and insufficient use of ICT. It is also noted that the employment rate for people between 20 and 64 years of age is at a level of only 69%. Finally, they note the fact that Europe's population is aging rapidly, which causes increasing pressure on social, health and pension funds of individual countries.

European Commission defines three strategic priorities (see Figure 1). These are: smart growth (fostering knowledge, innovation, education, and digital society), sustainable growth (green and resource-efficient production while boosting competitiveness), and inclusive growth (education, employment and fight against poverty). The three strategic priorities are concretized through five strategic tasks (strategic targets) for the period by 2020: 1. The employment rate for the population aged 20-64 should be at least 75%; 2. 3% of the EU's GDP should be invested in R&D; 3. The 20/20/20 targets in terms of reduction of greenhouse gas emissions, renewable energy production, and energy efficiency should be met; 4. School dropout rate should be less than 10% and at least 40% of the population between the ages of 30 and 34 should have a degree or diploma; 5. 20 million fewer people should be living below the poverty line.

It is clear from the above that the EU insists on the following growth drivers: education, innovation, economic growth, employment, environmental protection, the fight against poverty and social inclusion. These are strategic issues that Serbia should consider when formulating their umbrella strategy.

UN Millennium Development Goals

MDGs represent eight development goals established following the UN Millennium Summit in 2000 [16]. All UN member states and 23 organizations committed to help achieve the following goals by 2015: 1. Eradicate poverty and hunger; 2. Achieve universal primary education; 3. Promote gender equality and empowering women; 4. Reduce child mortality rates; 5. Improve maternal health;

Figure 1: Europe 2020

Strategic priorities

Smart growth
- Fostering knowledge
- Innovation
- Education
- Digital society

Sustainable growth
- Green and resource-efficient production while boosting competitiveness

Inclusive growth
- Education
- Employment
- Fight against poverty

Strategic data
- The employment rate for the population aged 20-64 should be at least 75%
- The 20/20/20 targets in terms of reduction of greenhouse emissions renewable energy production and energy efficiency should be met
- School dropout rate should be less than 10% and at least 40% of the population between the ages of 30 and 34 should have a degree or diploma
- 20 million fewer people should be living below the poverty line

Source: [6]

6. Combat diseases; 7. Ensure environmental sustainability; and 8. Develop global partnership for development.

Each goal was concretized through tasks and initiatives. However, the implementation of these strategic goals was subjected a lot of criticism for too broadly set of goals, the difficulty of their measurement and monitoring and favouring one group of goals over the other (most of the money was spent to repay loans and solving problems of natural disasters, whereas a smaller portion was spent on development projects, education projects, improving health, reducing hunger and poverty). In 2010, the goals were further specified in view of the deficiencies that were identified during the previous implementation.

Transformed World 2025

This US Government strategic document [17] predicts that the world will be challenged by growing resource constraints. All the world countries have been turning their attention toward access to relatively secure and clean energy sources and management of chronic food and water shortages. Adding over a billion people to the world's population by 2025 will put additional pressure on availability of vital resources. Significant growth in demand from developing markets, combined with constraints on new production, limits the likelihood that market alone will repair the supply-demand imbalance and potential food and energy price soaring. The already stressed energy and food sectors will be further exacerbated by detrimental impact of climate change. What is needed is stronger financial and policy support from national authorities and more coordinated and flexible effort from multilateral international organizations.

Food and water scarcity are closely interrelated with climate change, energy, and demography. A sudden switch from use of arable land for food to biofuel crops represents limited solution that could worsen both the energy and food situation. Such a complex syndrome of problems could overload decision-makers, making it difficult for them to take actions in time.

The projections suggest that energy and food prices will continue to grow after the economy recovers from recession. By 2030 commodity prices are expected to be for a substantial margin higher than 1997-2013 averages, but much lower than maximum prices experienced in mid-2008.

Altogether, the world is faced with many discontinuities, some of which are energy transition, demographic and urbanization flows, resource constraints and possible conflicts over resources, global multilateral institutions perspective, destiny of state and liberal capitalism models, wealth transfer to the East, and many others.

What are the implications of these trends on future policies and trends within Serbian economy? In short, Serbia should invest more in primary agricultural production and food processing industry in order to ensure food security and potentially alleviate trade deficit problem. Taking into account abundant natural resources and existing expertise, the agricultural productivity and production can be significantly increased with better access to inputs, efficient use of existing and advanced technological solutions and infrastructure development.

Croatia

New Budget Law demanded that the state of Croatia defines its strategic goals for two years in advance in order to analyse the possibility of financing their implementation through concrete programs and projects [12].

Strategic goals of the Government are as follows: 1. Macroeconomic stability; 2. Justice and the rule of law; 3. Promoting knowledge, excellence and culture; 4. Uniform regional development; 5. Strengthening social welfare; 6. Tourism; 7. Agriculture; 8. International reputation; 9. Security of citizens; 10. Health of the nation; 11. Natural resources and environment protection. Each of the above goals was concretised through performance indicators, quantified targets, and concrete project initiatives.

Western Australia

This strategic document [8] predicts trends and defines the strategic goals of Western Australia for the period by 2050. The vision of the state is sustainable prosperity. Key strategic principles, strategic goals, and strategic directions are shown in Figure 2.

It is interesting to note that a significant number of these principles, goals and directions can be applied to the case of Serbia. It just shows that the overall strategic framework of states is fairly stable (with some variations because, for example, in Serbia the issue of remote settlements is not relevant, but certainly the EU accession is, an issue which, naturally, is not mentioned here), and that key differences emerge in the concretization of goals by defining the performance indicators, objectives, initiatives, budget base and concrete implementation mechanisms, and responsible subjects.

Proposals for improving strategic planning in Serbia

In the last two decades, Serbia has been shaped by political turmoils, depopulation, unpredictable economic cycles, increased resource requirements, and many other changes. The need for proper strategy plan has never been greater.

List of proposals for improvement

It is necessary to create an umbrella strategy document based on a vision of the future development of the whole society. The umbrella plan document of the Government should set priorities top to bottom, in order to develop an effective system of state planning (similar to the expose of the Prime Minister which determines the basic goals of state policy, but the umbrella document must be quite a bit more specific). It can be made in the form of a National Development Plan or a Sustainable Development Strategy that would include an analysis of the comparative advantages of the Republic of Serbia, identify development opportunities and determine the priority sectors of the economy that would be generators of economic development of the country. Without an umbrella planning document, it is impossible to synchronize the process of creating and implementing sectoral strategies.

An umbrella strategic document should cover two key strategic areas: European integration, with improvements in the National Programme for Integration of Serbia into the EU, and improving economic competitiveness of Serbia. This umbrella strategy should be synchronously complemented by sectoral strategies of the Government. The umbrella strategy should be aligned with the EU 2020 strategy and its development priorities, as well as

Figure 2: Western Australia strategy structure

Vision: Sustained prosperity

Diverse	Liveable	Connected	Collaborative

Principles

Community Economy Environment	Infrastructure Regional development Governance

Strategic goals

Global competitiveness Sustainable communities Conservation	Strong and resilient regions Infrastructure planning

Strategic Directions

Economic development Education, training and knowledge transfer Tourism Environment Agriculture and food	Physical infrastructure Social infrastructure Land availability Remote settlements Security

Source: [8]

the planned budgetary framework of the Republic of Serbia. The umbrella strategic document should refer to the future five-year period with the possibility of annual refreshment of the relevant goals, performance indicators, targets and initiatives.

It is necessary to create a methodological document that would specify a hierarchical flow of the development of national strategies and provides clear guidelines for creating individual strategic documents and the accompanying action plans and monitoring of their implementation.

In order to properly implement the measures, it is necessary to strengthen the office of the Prime Minister and the General Secretariat and to create a mechanism for horizontal coordination of the planning and implementation processes with the Memorandum on the Budget and Fiscal Strategy as a document of paramount importance in testing the financial viability of the planned activities. It is also necessary to ensure better communication in the area of strategic planning and implementation, between representatives of various ministries, as well as between the Government and the National Assembly.

Improving the above weak points and shortcomings of strategic planning would significantly improve the quality of strategic documents and their synergistic effect. What gives us hope that things in this segment can still improve are the political support for the reform of public planning, recruitment of new educated young people, somewhat better coordination between the Ministry of Finance, the European Integration Office and the Council for Regulatory Reform, the existence of a useful GOP software application for planning, monitoring and reporting on the Government level and trainings for its implementation, constant pressure from the EU to harmonise strategic planning and strategic documents with the EU standards, as well as the formation of the modern centre of the Government in the form of the General Secretariat of the Government. Specific guidelines for improvement are given in the SIGMA Report (Support for Improvement in Governance and Management) [14].

Proposed model of strategic planning and implementation

The basis of the strategic planning model should be the requirements and needs of the community and the citizens. In order to profile the needs clearly, it is necessary to define the starting point, i.e. to conduct an in-depth economic, social, demographic, technological, political, environmental, and institutional and regulatory analysis and record the key gaps in the strategic development [5].

After the detailed strategic analysis, it is necessary to define the vision, mission, strategic goals and key principles that should, in the case of Serbia, be under the umbrella of the strategic documents of the European Union, which were previously discussed. It would be pretentious if the author provided the final list of strategic points for Serbia, since it is not even the subject of the paper, however, he is prepared to give an outline of strategic themes and principles that are based on the logic of strategic documents that have been previously presented, as well as the specifics of Serbian society (see Figure 3).

Figure 3: Strategic themes and objectives for Serbia (the author's preliminary proposal)

ECONOMY	Competitiveness	Innovativeness	Employment	Macroeconomic stability	Infrastructure		
SOCIETY	Trust	Family values	Cultural heritage	Social support	Tolerance	Reputation	Partnerships
PEOPLE	Demography	Knowledge	Health				
NATURE	Environment	Land	Renewables				

Source: The author

Table 4: Example of BSC

Objective:	Indicator	Task	Initiative
Employment	Unemployment rate in Serbia	Decrease unemployment rate below 15% in the next three years	• Financial support to entrepreneurial business • Business incubators • Education programs form workers and managers • Self-employment programs • Part-time employment

Source: The author

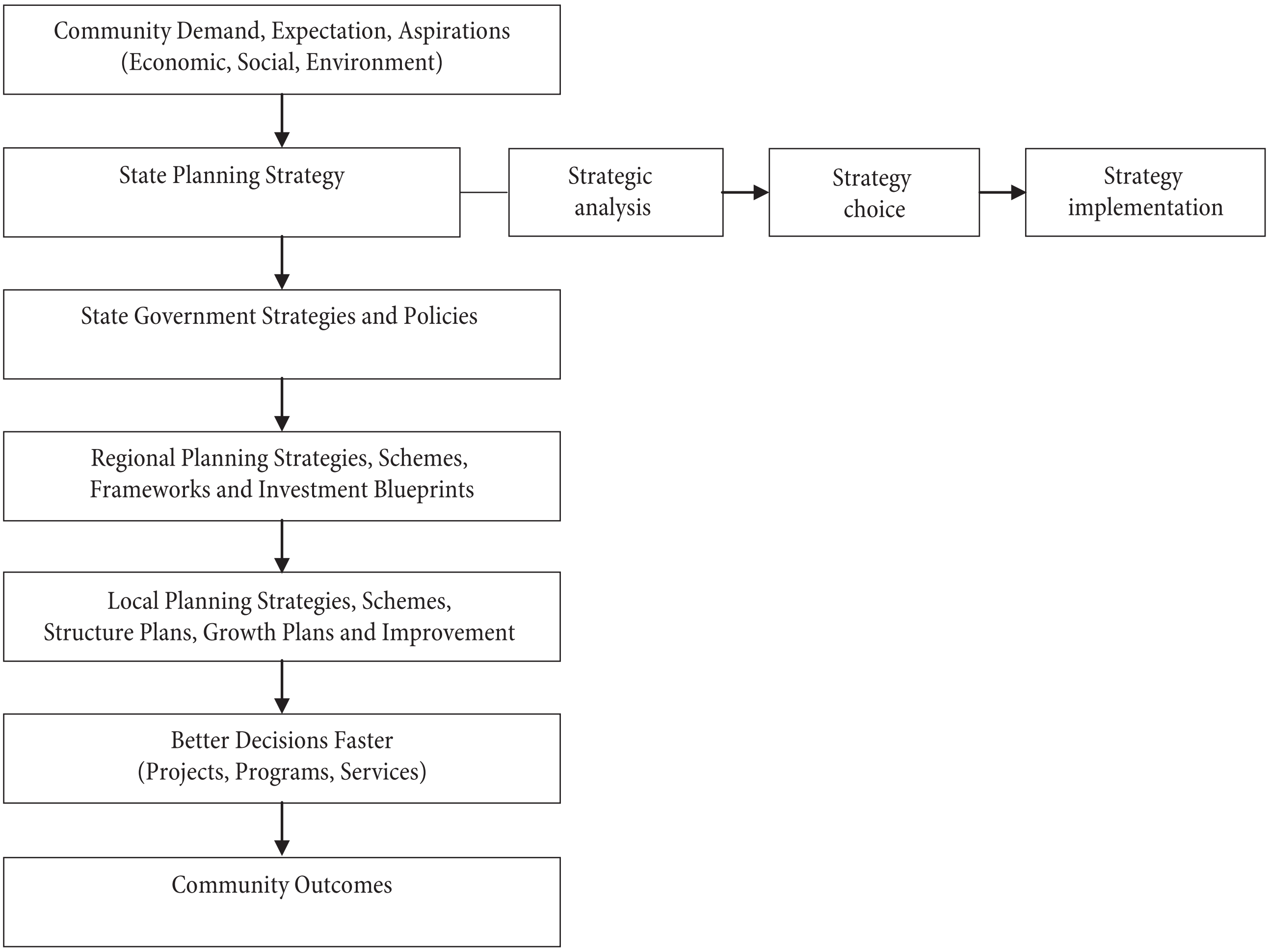
It is necessary to concretise the defined strategic objectives in order to enable their implementation. In this paper, we propose the Balanced Scorecard methodology that concretises each target in the form of performance indicators, tasks and initiatives [11]. The Table 4 shows the idea of decomposition of the objective "Employment" through individual key performance indicators, tasks and initiatives.

The defined strategy map and BSC should be subject to public discussion and agreement between the Government and relevant stakeholders on individual topics and goals. Only in this way is it possible to reach realistic goals, which would be established by consensus and which could be implemented in the future.

The strategic plan at the national level must be cascaded down to lower levels in order to achieve the desired effects on the citizens and the community (see Figure 4).

When a strategic plan is agreed upon, the next step is to design the implementation part that would deal with monitoring and reporting, and if necessary, initiate re-planning as well. We propose that this should be a Government body and that it should operate using the

Figure 4: Cascading down a strategy to lower sub-systems



Source: The author

Project Management Office logic. This centralized unit of the Government for planning could be established according to the principles of the Department of Planning of Western Australia. However, in order to make it possible, it is necessary to attract good quality staff and implement a training program in strategic planning and implementation. It is also necessary to include representatives of ministries and relevant bodies and associations in the PMO structure in order to reduce resistance to the strategy and its implementation.

Conclusion

The paper highlights a few important specifics of state strategic planning compared to strategic business planning. Some of them are longer time horizons, the complexity of the process of harmonization of a great number of goals, focus on citizens as key stakeholders, the need to combine managerial and political approaches, the rigidity of the structure and culture of state administration, higher resistance to organizational change, as well as the difficulties in allocating responsibility for results and measuring performance of individuals and organizational units within the state administration.

Serbia has not yet chosen a model of public management. Externally, the model of New Public Management is being imposed, whose main idea is to equalise the public sector with the private sector and to make public sector more efficient by introducing the principles of business economics. This approach insists on simultaneous achievement of three strategic goals: creating public value, political effectiveness, operational implementation of the defined goals. An alternative model for Serbia is the neo-Weberian model which starts from the previous logic, but with a significant modification of the principles of business economics when they are adopted by the state administration.

We have analysed the zero strategic position of Serbia based on the index of global competitiveness. The key disadvantages are corruption, inefficient administration, political instability, inadequate infrastructure, and inadequate and expensive capital. There is an unanswered question of whether we as a society have defined our starting point given a significant number of social contradictions that still burden the society and make it difficult to reach consensus on key strategic directions of the state in the future.

A large number of strategic documents were created in the previous period. The biggest drawback is the lack of an umbrella strategy document. The analysis of the existing policy documents has shown several of their flaws. Firstly, the strategies are not aligned with each other and there is a significant level of overlap, with significantly different time horizons. A significant number of documents have no action plans, monitoring and reporting mechanisms, or responsible subjects. A number of documents have been outdated in terms of the concept of writing, extensiveness, a great number of general goals. The administrative capacity of the state administration staff is inadequate and there is no good coordination between the processes of budgeting and strategic planning.

This paper analyses strategic documents of relevant international organizations and states. The idea was to examine the strategic framework that could be a guideline in formulating future umbrella strategic plan of the Republic of Serbia. The analysis has shown a significant homogeneity of strategic goals and the ability to implement them in Serbia to a certain extent.

Key recommendations for improving the process of strategic planning in Serbia are the following. It is necessary to create an umbrella strategy document based on a vision of the future development of the whole society, which should cover two key strategic areas: European integration and improvement of competitiveness of the Serbian economy. The umbrella strategy should be aligned with the EU 2020 strategy and its development priorities, as well as the planned budget framework of the Republic of Serbia. This umbrella strategy should be synchronously complemented by sectoral strategies of the Government, using the model described in detail in this paper. It is necessary to create a methodological document that specifies a hierarchical flow of the development of national strategies and which provides clear guidelines for the development of individual strategic documents and the accompanying action plans and monitoring their implementation. After alignment of the umbrella and lower level strategic documents, an important step is to develop the implementation part that would perform monitoring and reporting. It is necessary to include representatives of ministries and relevant bodies and associations in order to make the implementation of the strategy faster and more efficient.

What gives us hope that things in the segment of national strategic planning can still improve are the political support for the reform of public planning, recruitment of new educated young people, somewhat better coordination between state administration bodies, the existence of a useful software application for planning, monitoring and reporting on the Government level and trainings for its implementation, constant pressure from the EU to harmonise strategic planning and strategic documents with the EU standards, as well as improving the functioning of the General Secretariat of the Government.

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Dragan Lončar

is Associate Professor at the Faculty of Economics in Belgrade in Project Management and Strategic Management and Associate Dean for Finance and Organisation at the same faculty. He graduated from the Faculty of Economics in 2001, completed Master course in Management Studies at the University of Cambridge (Judge Business School) in 2003, and acquired PhD title at the Faculty of Economics in 2007. He was awarded Fulbright scholarship (academic year 2008/2009) for postdoctoral research in financial management. The research was completed during 2009 at the University of Chicago (Booth Business School). He is the author of significant number of research papers and consulting projects. He possesses CFA certificate in the field of finance. He is a member of Fulbright and Cambridge Associations and an active member of Global Operations Research Project led by Bristol School of Business and Law. He is academic director of joint MBA program of Faculty of Economics Belgrade and Texas A&M University. He is a member of the Serbian Association of Economists and the Editorial Board of its journal "Ekonomika preduzeća". He is married and has two sons, Luka and Vuk.

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Ana S. Trbovich
Singidunum University
Faculty of Economics
Finance and Administration-FEFA
Belgrade

Ana Drašković Malešević
Singidunum University
Faculty of Economics
Finance and Administration-FEFA
Belgrade

Jelena Miljković
Singidunum University
Faculty of Economics
Finance and Administration-FEFA
Belgrade

THE ROLE OF VENTURE CAPITAL IN ECONOMIC TRANSITION IN SERBIA[1]

Uloga preduzetnog kapitala u privrednoj tranziciji Srbije

Abstract

Venture and more broadly private equity finance is in early stage development in Serbia, both in form of seed-capital financing for innovative small and medium size enterprises (SME) and private equity financing in growing companies. Banking dominates as a source of finance with significant drawbacks in terms of cost and required collateral, especially hampering potential growth of SMEs that constitute 99% of all businesses in Serbia. This article finds private equity investments made to date to have demonstrated positive results, confirming data from other, especially transition economies, presented in the introductory literature overview. In the mid-term, Serbia stands to benefit both from entrepreneurial private ventures and important regional initiatives supported by the European Union such as the Western Balkan Enterprise Development and Innovation Facility, whose innovation and expansion investment funds are expected to start operations in 2014. Serbia is also eligible for the new EU Programme for the Competitiveness of Enterprises and SMEs (COSME), which will have an equity facility, stimulating venture capital stream for SMEs. Education of local financial institutions and SMEs in Serbia about venture capital and investor readiness will be vital, facilitating the construction of project pipelines. In conjunction, the legal framework should be upgraded, both by enacting the amendments to the Law on the Export-Credit Agency (AOFI) and the Law on venture capital funds, accompanied by wider regulatory reform to improve the business climate and foster entrepreneurship.

Key words: *venture capital, private equity, Serbia, EU, Western Balkans, access to finance, SMEs*

Sažetak

Finansiranje iz izvora preduzetnog kapitala, i u širem smislu privatnih investicionih fondova, u početnoj je fazi razvoja u Srbiji, bilo da se radi o početnom finansiranju za inovativna mala i srednja preduzeća (MSP) ili za rastuća preduzeća. Banke preovlađuju kao izvor finansiranja uz probleme visoke cene i traženog kolaterala, što posebno otežava rast MSP koja predstavljaju 99% privrede u Srbiji. Ovaj članak nalazi da su dosadašnje investicije privatnih fondova imale dobre rezultate, potvrđujući podatke iz uvodnog pregleda literature. U narednom periodu Srbija će imati koristi i od privatnih preduzetnih investicija i važnih regionalnih inicijativa koje podržava Evropska unija kao što je Institucija za razvoj preduzetništva i inovacija za Zapadni Balkan (*WB EDIF*), čiji fondovi za inovacije i za rastuća preduzeća počinju sa radom 2014. godine. Srbija takođe može da učestvuje u novom programu EU za konkurentna MSP – KOZME koji predviđa i investicije za MSP. Obrazovanje domaćih finansijskih institucija i MSP o preduzetnom kapitalu i investicionoj spremnosti od suštinskog su značaja i omogućiće pripremu investicionih projekata. U sklopu sa tim, pravni okvir treba pojačati, i kroz izmene Zakona o AOFI i novi Zakon o društvima preduzetnog kapitala, uz širu regulatornu reformu sa ciljem unapređenja poslovne klime i podsticanja preduzetništva.

Ključne reči: *preduzetni kapital, investicioni fondovi, Srbija, EU, Zapadni Balkan, pristup finansiranju, MSP*

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Introduction: The role of venture capital in fostering growth

Venture and more broadly private equity finance is in early stage development in Serbia, both in the form of seed-capital financing for innovative small and medium size enterprises and private equity financing in growing companies. Banking dominates as source of finance with significant drawbacks in terms of cost and required collateral, especially hampering potential growth of small and medium size enterprises that constitute 99% of all businesses in Serbia. This article explores the potential of venture capital and private equity finance as an alternative source of financing that could facilitate economic growth.

In developed economies, high-growth potential businesses have typically relied on financing from sources other than traditional lenders such as banks during their early growth phases. Venture capitalists usually filled this gap by providing capital to early stage ventures with good growth potential [48]. The availability of such capital has helped to promote the emergence of numerous high-growth firms in the United Kingdom, United States, and several other developed economies. This has led many to conclude that venture capital (VC) is a crucial factor in fostering a region's economic growth [22].

Private equity as a financial tool can be informally and formally organized. If it is informally organized, private equity can take the form of business angels, who are wealthy individuals with corporate experience. These individuals are ready to invest their money, contacts and experience in a particular industry in order to profit from an increase in the company's value. When it is formally organized, private equity takes the form of private equity funds, a limited partnership where investors are limited partners and the fund manager serves as the general partner. Once established, a private equity fund is looking for companies with a prospective future and growth potential [40]. The Serbian Private Equity Association (SPEA) gathers private equity investors and promotes this type of investment as an alternate source of finance.

A venture capital fund is part of the private equity industry specialized in financing companies in their first phases of growth. Hence, VC funds are professional investors willing to take a risk investing in companies without a track record and companies that are not listed on stock markets. Venture capital can invest in the seed phase (research, assessment and development of initial concept, i.e. R&D phase), start-up phase (product development and marketing) and expansion phase (growth and expansion for achieving profitability) [40].Venture capital involves a five-step process; (1) obtaining funds from limited partners; (2) identifying, analyzing, and selecting appropriate entities in which to invest; (3) structuring the terms of the investment; (4) implementing the deal and monitoring the portfolio firms; and (5) achieving returns and ultimately exiting from the investment [32]. VC funds must be raised competitively, as are the funds raised for leveraged buyout (LBO) and project financing (especially in the case of R&D limited partnerships); all three situations involve investments by limited partners, which are risky, illiquid, long-term investments. LBO situations are heavily debt-financed and involve firms with large cash flows; venture capital involves firms in the early stage of their life cycle in situations where debt is not a suitable financing instrument. Unlike an R&D limited partnership, the purpose of venture capital investment is not so much to develop and patent a new technology as it is to create value and generate wealth for both the entrepreneurial team and venture capital pool investors [32].

It is a generally accepted fact that venture capitalists (VCs) play an important role in innovation and economic development [7], especially in a knowledge economy. VCs are usually perceived to be active investors [4] that are much more involved in the firms they back than ordinary shareholders [39]. This type of behaviour is to be expected, given that their own profits are conditional on the firm performance. However, empirical research has shown that their involvement varies from virtual passivity to active participation in the firm's organization [39], although the impact on added value is not always obvious. Some studies have shown that VC involvement is positively correlated to firm performance [12], [6], while others found no evidence of added value and even, in some cases, identified negative impacts for the entrepreneur, such as underpricing during initial public offerings (IPOs) [17].

Entrepreneurial ventures are considered to be of crucial importance for economic growth and development worldwide [31]. However, especially in Europe, they often lack sufficient availability of and access to funding sources to set up, maintain, develop and grow their businesses [26]. This problem is extremely acute when banks are reluctant to lend money to these companies and/or the formal VC market is not highly developed. Unlike other types of finance providers, the contribution made by venture capitalists (VCs) to the small and medium-sized enterprises (SMEs) they fund is not strictly financial in nature. Because they have a stake in the firms' profits and losses, they often play an active role as investors, for example by helping to introduce business processes and practices conducive to long-term development and performance [42]. In recent years, researchers have identified four types of strategic capabilities over which VCs have an influence. They are: (1) product innovation and development; (2) market and customer development; (3) networking; and (4) strategic human resource management, which helps ensure that other capabilities can be deployed adequately within the firm by obtaining the appropriate personnel and conditions [20]. These capabilities are primarily concerned with assessing the internal and external environment, and the VCs' experience and knowledge can be extremely useful in this respect [4].

More recently, venture capital has started to reach into emerging economies, encouraging the establishment of local venture capital industries [8]. This has proved to be a challenge as many emerging economies are undergoing significant economic transition and offer little protection for either investors or private property [37]. Such an ambiguous business environment adds to the already difficult task faced by venture capitalists in the selection of firms to fund and monitoring those investments effectively [38]. Venture capitalists count on a stable institutional regime with a predictable rule of law and enforcement regime to facilitate and safeguard their investments [11]. In addition to legal stability, venture capitalists seek environments with efficient markets for corporate control and capital, which readily allow exit from ventures as well as systems with minimal corruption [48]. This institutional stability and predictability reduces uncertainty and risk, and enhances the likelihood of success in new ventures.

Small and medium size enterprises access to finance problems in transition economies and the European Union

One of the issues facing countries in the transformation from centrally planned into market economies is the need to develop small and medium sized enterprises (SMEs). At the firm level, transformation involves a shift from public to private sector ownership, which can occur either through the direct privatisation of former state owned enterprises or through the creation of completely new businesses. As a consequence, the pace of new venture creation, combined with their qualitative characteristics and the type of barriers they experience, may be seen as a barometer indicating how quickly the process of market reform is occurring. A second element in the process of transformation is the liberalisation of markets, where central administration of prices is replaced by market mechanisms, involving an increase in market opportunities for entrepreneurs, as well as in the level of competition. A third element in the process of economic transformation involves the creation of market institutions, such as banks and other financial intermediaries, and business and training services. Whilst this may create opportunities for entrepreneurs in some cases (such as training providers), the absence or slow rate of establishment of the basic market institutions can be a major constraint on the extent to which the small business sector is able to develop [41].

Studies referring to emerging economies in great part relate to Latin American and Asian countries [49], [30], [46], with relatively few studies investigating early internationalization of SMEs from Central and Eastern European (CEE) countries. Research suggests that entrepreneurship development findings from more advanced economies may not be applicable in the context of emerging markets [8], [50]. Two key explanations for this could be institutional differences and resource constraints, resulting partly from different institutional settings and histories. Recent surveys of entrepreneurship behaviour [14] indicate that the index of entrepreneurial climate is on average lower in CEE transition economies, than in Western Europe. The same research indicates that entrepreneurs in CEE can rely less frequently on entrepreneurial family traditions and are on average younger, and therefore also less experienced than SME founders in Western European countries. Such differences could be ascribed to the fact that only since the 1990s has entrepreneurship been officially recognized and encouraged in these post-communist economies, after a long pause during Communist rule that allowed very limited entrepreneurial ventures.

For most of the 19th and 20th centuries, large corporations were considered the primary and driving force of economic and technological progress. Large corporations dominated research and development (R&D) and the introduction of innovations, and experienced major improvements in production efficiency. The exploitation of economies of scale and scope were considered to be the driving force of economic development. Beginning in the 1970s, however, large manufacturing firms in key industries began to lose competitiveness and a number of important empirical studies began to document the critical role of SMEs. For example, *Acs* [1] argued that newer and smaller firms entered sectors as "agents of change". Studies using direct measures of innovative activity – such as measures of new products and processes – replaced older measures (such as R&D) and showed that small firms and not the larger incumbents introduced innovative activity [2]. SMEs also began to play an important role as efficient providers of intermediate goods and services to large firms. Many papers showed that developed countries that encouraged entrepreneurship and SMEs had higher economic growth [23].

Unlike the United States, which experienced a natural birth of new, small firms, the SME sector in Eastern European countries emerged as a result of the privatisation and breakup of large state-owned enterprises, as well as through a large number of new, generally very small firms that came as a consequence of the market liberalisation process. The restructuring and downsizing of large firms, the privatisation of public utilities and other large companies, the outsourcing of many support services, and the vertical fragmentation of production are all forces that promoted the creation and expansion of SMEs [23].

Both in the developing and developed world small firms have been found to have less access to external finance and to be more constrained in their operation and growth [5]. Small firms do not only report facing higher growth obstacles, but these higher obstacles are also more constraining for their operation and growth than in the case of medium-size and large firms [5]. *Berger* and *Udell* [6] found that small and young firms – with generally shorter banking relationships – pay higher interest rates and are more likely to be required to pledge collateral. *Peel* and *Wilson* [36] showed that in SMEs have higher costs and reduced access to financing because of the information asymmetries associated with newer, smaller firms.

Statistics show that the size of the SME sector as measured by the percentage of total employment in Eastern European countries is smaller than in most developed economies. Although we find in almost every country a large number of SMEs as a percentage of total firms, the SMEs in Eastern Europe are generally small and hire few employees. However, SMEs seem to constitute the most dynamic sector of the Eastern European economies, relative to large firms. In general, the SME sector comprises relatively younger, more highly leveraged, and more profitable and faster growing firms. At the same time, these firms appear to have financial constraints that impede their access to long-term financing and ability to grow. They tend to borrow short-term debt, which appears to be the prevalent, often only type of financing that these firms can access [5]. The Serbian market fully reflects the observations made for Eastern Europe.

In a transition context, SME financing is of special importance, as small firms play an important role in the restructuring process by absorbing employees that lose their jobs in privatised, restructured, or bankrupt state-owned enterprises [24]. *Calvo* and *Corricelli* [10] and *Pawlowska* and *Mullineux* [35] show that the sharp decline in bank credit to Polish SMEs at the beginning of the transition process has significantly contributed to the strong output decline in this country. At the same time, *Carlin* and *Richthofen* [12] find that the rapid growth of the SME sector, and the availability of sufficient external funding for these firms, has contributed to the integration of Eastern and Western Germany [19]. Although the emergence of the SME sector in CEE has contributed positively to the transition process, it is a sector that remains underdeveloped. One reason put forward for the SME sector being smaller in CEE is that firms have access to expensive finance while those that are unable to raise external finance are forced to rely solely on internal finance, which is constraining their growth [18]. The EBRD Transition Report for 1998 has recommended that not only must access to finance for SMEs be improved, but there must also be greater diversification in the range of financial products available to SMEs [13]. A similar observation has been made in all subsequent EBRD Transition Reports.

Availability of venture capital and stock market financing which is related to the level of financial market development, is lower as a rule in transition economies than mature markets and constitute a restraint for new ventures in these markets [9]. In fact, according to Eurostat (2009) [15] data, early stage venture capital investments in transition economies have been much lower than average among the "old" 15 European Union countries. Research indicates that the availability of start-up venture capital in countries such as Poland, Hungary or Czech Republic is very low [33].

Equity financing was severely affected by the financial crisis. A sharp decline in venture capital and growth capital occurred between 2008 and 2009. In 2010, equity funding had not recovered to its 2007 level, despite an overall positive economic trend (OECD, 2012a). Countries with high growth rates for venture capital in 2011 include Denmark (+80%), Hungary (+62%), the Netherlands (+56%) and Canada (+30%). On the other hand, a strong decrease was observed in Portugal (-80%), New Zealand (-62%), Switzerland (-42%), Sweden (-25%) and Ireland (-11%). For half of the countries in the OECD Scoreboard, the level of equity investments in 2011 was still well below the pre-crisis period (2007), averaging about 5% of total financing. This suggests that the uncertain economic climate continued to act as a drag on equity investment. It should be noted, however, that trends in venture capital investment are difficult to analyse because of the extreme volatility in the data. In particular, just one large deal can cause volatility in countries where the market is not very developed. Furthermore, for most countries, the data are available for venture and growth capital invested in *all enterprises*, irrespective of the size class. Interestingly, in 2011 a significant growth in volumes was recorded for some countries that collect data specifically on SMEs, such as Italy (+ 65%) and Russia (+20%) [34].

The completion of a successful venture capital deal in a transition economy must confront two major problems. The first concerns the deal's progression through different stages of the venture capital process. The second problem relates to corporate governance. The most common concern for venture capitalists is an entrepreneur's use of company assets (especially financial resources) for personal purposes as well as financial reporting and accountability and regulatory compliance [24]. As in developed market economies, venture capitalists may not be appropriate for all types of enterprises, but they may have a particular role to play in supporting those enterprises with significant growth prospects. Although classically associated with new and/or small firms, venture capitalists have increasingly come to play a major role in the financing and monitoring of established firms such as management buy-outs and turn-around cases. In principle, venture capital firms may thus have a role to play in financing and monitoring enterprises which have been privatised as independent entities and which may need further development capital or aid in restructuring, as well as a more conventional role in supporting new firms [47].

According to the "Access to Finance" survey released by the European Commission and European Central Bank in November 2013, access to finance is still among the top concerns of the EU's small and medium sized enterprises and younger and smaller firms are the most badly affected. About one third of the SMEs surveyed did not manage to get the full financing they had planned for during 2013 and 15% of survey respondents saw access to finance as a significant problem for their companies. Companies believed that bank financing conditions worsened during 2013, with respect to interest rates, collateral and required guarantees. Reports of loan denials underline the generally negative perception by SMEs of bank lending possibilities. In total about one third of the SMEs surveyed did not manage to obtain the full bank loan financing they had planned for during 2013. A total of 13% of their loan applications were rejected, while 16% of companies received less than requested. In addition, 2% of enterprises declined a loan offer from the bank because they found the conditions unacceptable. Finally, 7% of SMEs were too discouraged to ask for a loan, because of anticipated rejection. This was particularly the case for young companies: 11% of those who have been in business between 2 and 5 years did not apply for a loan expecting a rejection. Indeed, younger and smaller firms were more likely to obtain only part of the finance they request, or to be rejected outright. The highest rejection rate was among micro companies employing fewer than 10 people (18%) and among SMEs active for less than 2 years (28%). In comparison, only 3% of loan applications from large enterprises (those with 250 or more employees) were rejected. Insufficient collateral or other bank requirements such as guarantees is most often reported obstacle that companies face when seeking bank financing, followed by interest rates being too high. Alternative, equity financing, was used by only 5% of SMEs in the survey period. In general, SMEs feel less confident to talk about finance with equity investors or venture capital than they do with banks. The main challenge concerning this source of financing is its lack of availability or prices being too high [16].

Access to finance was mentioned as the most pressing problem by 40% of SMEs in Cyprus, 32% in Greece, 23% in Spain and Croatia, 22% in Slovenia, 20% in Ireland, Italy and the Netherlands, compared to 7% in Austria, 8% in Germany or 9% in Poland. Rejection rates for loan applications were also highest in Greece and the Netherlands (31%), followed by Lithuania (24%). Ireland (16%), Greece and Cyprus (15%) also accounted for the highest share of companies who were so discouraged that they did not even apply for a bank loan. About 85% of all loans are still derived from banks. Half of the loans obtained in the last two years were for less than €100,000. While bank financing has decreased overall, the survey confirmed that SMEs are still strongly dependent on bank financing since banks provided 85% of loans in the past two years. More than half of surveyed EU SMEs had recently used one or more bank products: 32% of companies used bank loans and 39% used bank credit line or overdraft facilities. Bank loans are also the preferred option for 67% of firms looking for an external financing solution to facilitate growth [16].

Table 1 illustrates overall decline of bank financing for SMEs in developed countries.

Table 1: Growth of SME Business Loans, 2007-2011, year-on-year growth rate, as a percentage

Country	2008	2009	2010	2011
Outstanding SME business loans (stocks)				
Canada	-0.1	3.7	-0.9	5.0
Chile	11.3	6.9	8.8.	13.1
France	4.8	0.3	5.4	5.4
Hungary	10.3	-7.6	-11.1	0.3
Ireland	n.a.	n.a.	n.a.	0.9
Italy	2.1	1.2	6.6	-1.9
Korea	14.4	5.0	-0.5	3.2
Norway	25.7	-7.7	4.2	n.a.
Portugal	9.2	0.9	-1.6	-4.0
Russia	n.a.	3.7	21.9	19.1
Serbia	47.0	2.3	7.1	5.5
Slovak Republic	32.4	-0.5	0.1	n.a.
Slovenia	16.6	-2.9	15.4	1.3
Sweden	7.2	20.4	-21.4	n.a.
Switzerland	5.9	5.3	1.3	3.2
Thailand	9.5	7.4	7.2	3.0
Turkey	10.6	-1.6	50.7	29.3
United Kingdom	7.9	3.0	-7.4	-7.4
United States	3.6	-2.3	-6.2	-6.8
New SME business loans (flows)				
Czech Republic	-14.3	-15.0	-14.8	3.6
Denmark	-13.7	-19.2	22.9	-2.4
Finland	2.6	-16.3	-16.5	-4.8
The Netherlands	-5.0	-24.2	5.1	17.6
Spain	-9.5	-26.3	-20.0	-17.2

Source: OECD, compiled from National Scoreboards [34]

The European Commission combats problems with access to finance using specifically targeted programmes, with increasing focus on SME access to finance. In the previous European Union financial framework (2007-2013), the Entrepreneurship and Innovation Programme (EIP), one of the three specific programmes of the Competitiveness and Innovation framework programme (CIP), with a budget of €1.1 billion for financial instruments, has helped to mobilise over €14 billion of loans and €2.3 billion of venture capital for SMEs across Europe. Serbia had access to this programme but used it to a limited extent. The new Multi-annual financial framework for the period 2014-2020 proposes an increased amount of funding for SMEs. For the first time ever, the Commission has proposed a dedicated financing programme for SMEs: COSME – EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises. COSME will have a budget of EUR 2.3 billion (at current prices) over the next seven years. Moreover, the new research and innovation programme, Horizon 2020, will significantly expand the budget for SME innovation activities (from less than €7 billion for the period 2006-2013, to almost €9 billion for the period 2014-2020) and support ambitious SME innovation projects that are driven by market insight and business potential. In addition, a significant part of the Structural Funds will be destined for SMEs and Innovation linked to the SBA. A joint financing instrument with the participation of the EIB Group will also be dedicated to SMEs [14].

COSME will facilitate and improve access to finance for SMEs through two different financial instruments, available from 2014:

(1) The Loan Guarantee Facility will fund guarantees and counter-guarantees for financial intermediaries (e.g. guarantee organisations, banks, leasing companies) to help them provide more loan and lease finance to SMEs. This facility will also include securitisation of SME debt finance portfolios. By sharing the risk, the COSME guarantees will allow the financial intermediaries to expand the range of SMEs they can finance. This will facilitate access to debt finance for many SMEs who might otherwise not be able to raise the funding they need. From 2007 to date, more than 240,000 SMEs have already benefited from a guaranteed loan or lease thanks to the CIP, the current programme supporting business competitiveness.

(2) The Equity Facility for Growth will invest in funds that provide venture capital and mezzanine finance to expansion and growth-stage SMEs in particular those operating across borders. The fund managers will operate on a commercial basis, to ensure that investments are focused on SMEs with the greatest growth potential.

Small and medium size enterprises development in Serbia and potential impact of venture capital

Micro, small, medium enterprises and entrepreneurs (SMEs and entrepreneurship) in the Republic of Serbia are a very important segment of business, due to the flexibility of the organisational forms and their efficient adaptation to frequent changes in the business environment, enabling the creation of a large number of jobs. This is confirmed by data for the year 2012, with a total number of enterprises in the Republic of Serbia amounting to 83,631, of which micro enterprises accounted for 86.2%, with 10.7% small businesses, 2.5% medium-size and 0.6% large companies. An impressive 99% of all companies belong to the segment of small and medium-sized enterprises, providing 67% of the jobs [34].

From the standpoint of the company, financial planning involves many important decisions and dilemmas, such as the decision on whether to finance business from own or borrowed resources, or how much capital should be obtained from bank loans in order to establish an optimal capital structure, etc. Micro, small, medium enterprises and entrepreneurs can obtain funding from various sources such as loans from commercial banks and companies legally authorized to offer short-term and long-term loans, to finance working capital, fixed assets, exports, current liquidity, refinance obligations and loans to other banks, overdrafts or investment loans. There are leasing companies that provide financial leasing services, as well as factoring companies, that are quite important for small and medium sized enterprises since they offer a way of overcoming the problems of current illiquidity and provide fast and secure payment of claims. SMEs are relatively informed about these, more traditional, ways of financing. However, newer forms of financing for SMEs, such as business angels, private equity or venture capital are still largely unexplored, with a low level of awareness and knowledge about these alternate forms of finance.

Many studies show that companies in Serbia are not sufficiently informed about the available funding opportunities and different forms of financing. For instance, research conducted by USAID in 2011 [44] shows that 70% of all SMEs in Serbia are financed from their own sources and that 80% of the surveyed enterprises did not plan to take a loan in 2012 (see Table 2). This indicates that SMEs find loans to be very expensive, and the procedure required to get a loan lengthy and complicated. These companies frequently lack knowledge in finance; they are focused on their primary business (usually trade or production)

Table 2: Financing SMEs and entrepreneurs: Scoreboard for Serbia

Indicators	Units	2007	2008	2009	2010	2011
Debt						
Business loans, SMEs	EUR million	2 861	4 205	4 300	4 603	4 857
Business loans, total	EUR million	13 422	17 986	18 155	18 436	18 619
Business loans, SMEs	% of total business loans	21.3	23.4	23.7	25	26.1
Short-term loans, SMEs	EUR million	1 035	1 403	1 516	1 569	1 405
Long-term loans, SMEs	EUR million	1 826	2 801	2 784	3 034	3 452
Short-term loans, SMEs	% of total SME loans	36.2	33.4	35.2	34.1	28.9
Government loan guarantees SMEs	EUR million	10.6	9.5	2.6	1.7	
Government guaranteed loans, SMEs	EUR million		10.5	2.6	2.2	
Direct government loans, SMEs	EUR million	21	40.3	370.4	530.8	400.6
Loans requested, SMEs	EUR million	3 163	5 132	4 998	6 454	5 245
Loans authorised, SMEs	EUR million	2 663	3 948	3 641	4 877	4 058
Loans authorised to requested, SMEs	%	84.2	76.9	72.8	75.6	77.4
Non-performing loans, SMEs	EUR million	236	457	810	1 010	1 204
Interest rate, SMEs	%	14.56	15.76	16.18	14.99	16.31
Interest rate, large firms	%	10.97	12.69	12.93	11.79	12.33
Interest rate spread	%	3.58	3.07	3.24	3.19	3.98
Collateral, SMEs	% of SMEs required to provide collateral on last loan	75.8	80.4	79	79.4	79.4
Equity						
Venture and growth capital	EUR million	0.1	1.3		13.2	
Other						
Payment delays	% of SMEs waiting more than 60 days for payment			34	31	31
Bankruptcies, total		1 792	1 884	2 173	2 483	2 763
Bankruptcies, total	Year-on-year growth rate, %		5.1	15.3	14.3	11.3
Bankruptcies, total	per 1 000 firms	18.3	17.8	19.4	22.3	25.9

Source: OECD Scoreboard 2007-2011

and they consider completing forms and collecting data required by the banks to be a challenging task.

The Figure 1 (data acquired from the World Bank website) indicates how high interest rates in Serbia compare to those in the Netherlands [43].

According to the Report on small and medium-sized enterprises and entrepreneurship 2011 [29], there are several reasons hampering SMEs' access to adequate financing:

- SMEs have difficulty posting collateral that is acceptable to lenders. Many SMEs don't think strategically about how to manage and maintain their assets for borrowing needs.
- A variety of psychological and knowledge-related factors affect borrowing behaviour. Risk aversion is made worse by loan conditions that require personal guarantees and extensive over-collateralization.
- SMEs often lack the capacity to present their business to lenders. The challenges are compounded if they have limited or no formal credit history, are weak in financial reporting and business planning, or cannot unwind business finances from their household finances.

The confluence of these constraints has led to a large, and possibly widening, financing gap for SMEs that has created a serious economic problem. While virtually every country in the European Union and many others around the world have acknowledged the vital role SMEs in driving economic recovery, Serbian SMEs are increasingly dependent on economic recovery to survive. Without better access to finance, SMEs cannot spread risks that undermine macroeconomic stability. At a minimum, without better access to finance, SMEs cannot absorb public sector job losses or generate revenues that could soften the impact of fiscal reforms. Since access to bank loans is obviously limited (for a number of factors) it is necessary to develop alternative sources of financing and venture capital is definitely an ideal tool for many of the

SMEs that need long-term financial stability and substitute for expensive, short-term loans.

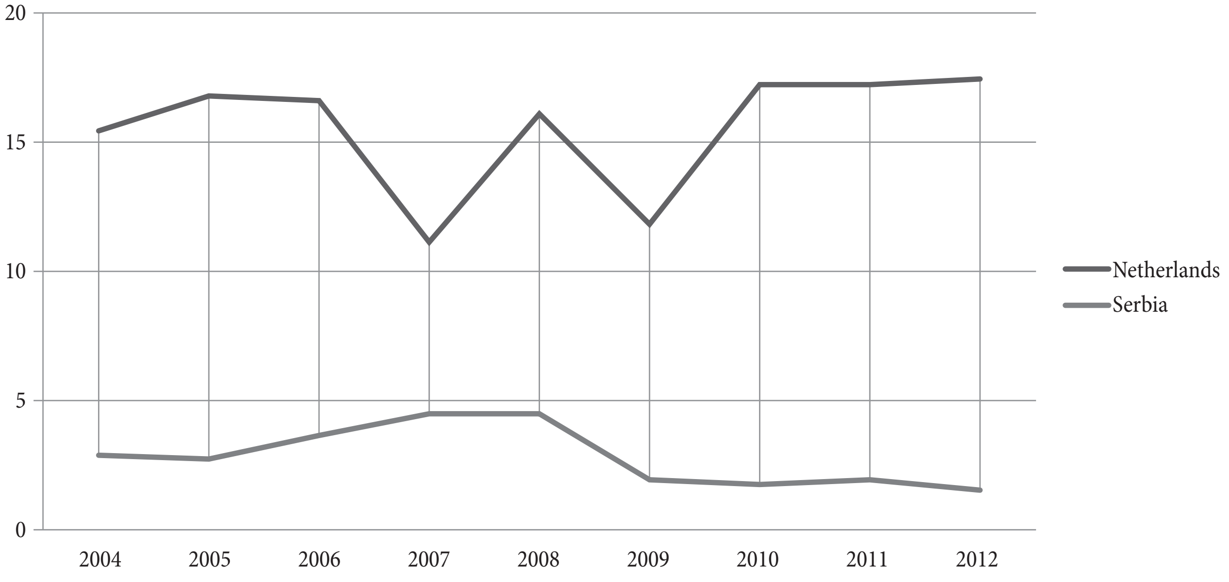
There is a wide consensus in both the Serbian Government and international financial institutions that SMEs should drive Serbian growth in the years to come and that lending to this segment should be rendered cheaper and simpler. Since the onset of economic transition in Serbia in 2001, several funding programmes targeting micro, small and medium enterprises and entrepreneurs have been developed through national support programmes and international funding programmes to enable easier access to financing for SMEs.

The government has established a range of support programmes to help overcome the financing gap, but the effectiveness of these programmes for SMEs is not clear. As evident in the overview that follows, there should be further analysis, leading to a revised approach in structuring and delivering public support to SMEs. Many SMEs are either not aware of all the available programmes, or have had poor experience in dealing with state funds. The following are the most important national institutions that support financing and advisory services for micro, small and medium sized enterprises:

The Development Fund of the Republic of Serbia was established by the Law on the Development Fund of the Republic of Serbia in 2009 (amended in 2010 and 2012), in accordance to which it carries out activities of granting loans, guarantees, purchase of securities, acquisition of legal-based equity, including the conversion of receivables and other activities on behalf of the Republic of Serbia, or on its own behalf and on behalf of the Republic of Serbia. Development Funding intended to grant priority finance to programmes whose implementation results in job creation, export promotion, and a faster return on investment. The range of services offered by the Development Fund includes loans to companies, among which are short-term loans for temporary working capital in order to boost competitiveness and liquidity of the domestic economy, investment loans and loans for working capital, promotion of balanced regional development (which is done through the Government Programme for the encouragement and development of businesses in underdeveloped municipalities and government programmes to invest in labour-intensive sectors of manufacturing industry in underdeveloped municipalities), long-term loans to entrepreneurs, long-term loans for beginners as well as start-up loans for businesses and sole proprietors, long-term loans for women entrepreneurship, etc. In September 2013, the portfolio of the Development Fund of the Republic of Serbia was made public on the website of the Ministry of Economy in line

Figure 1: Comparison of lending interest rates in Serbia and the Netherlands

Lending interest rate %	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Netherlands	2.80	2.80	3.50	4.60	4.60	2.00	1.80	2.00	1.60
Serbia	15.50	16.80	16.60	11.10	16.10	11.80	17.30	17.20	17.40



with the transparency of public funding envisaged by the Law on the budgetary system [27]. A high-level analysis of the portfolio would indicate that many investments were made in loss-making state enterprises and to refinance troublesome large private enterprises, leading to a conclusion that the selection criteria and risk management should be strengthened for this institution to reach the intended goal of supporting economic development.

The Agency for Foreign Investments and Export Promotion (SIEPA) was established based on a Law on Foreign Trade, in order to facilitate export of Serbian companies and to promote investment opportunities by assisting foreign investors to start a business in Serbia. The range of services that SIEPA provides to its clients (with particular emphasis on supporting small and medium-sized enterprises) involves providing information on foreign markets, connecting Serbian companies with potential partners abroad, organising participation in trade fairs abroad, organising business meetings between local and foreign companies, organising individual visits to local companies by foreign buyers, study visits abroad and visits to trade fairs, seminars and training for local companies, and sector analysis. Until December 2013, SIEPA also administered financial incentives for investors but the decree providing the legal basis for such incentives then expired and no new subsidies to investors have been envisaged in the adopted 2014 budget of the Government of Serbia. As is the case with the Development Fund, further analysis is required to assess the cost and benefits of investor subsidies, as a basis for a more effective policy in the future to support growth.

The Agency for Export Credit and Insurance of the Republic of Serbia (AOFI) is the official export credit agency founded by law in 2005. The main activities of AOFI are insurance of short-term receivables and export financing for Serbian export-oriented enterprises. Advantages of AOFI are favourable interest rates and simple procedures for exporters' working capital financing, efficient domestic and international factoring services which allow exporters to overcome current liquidity problems, export credit insurance against commercial risks to foreign debtors for goods delivered or services rendered, as well as the issuance of guarantees (for participation in tender, refund of advance payments, performance bonds, maintenance during the warranty period). AOFI's mission is to increase the exports of Serbian enterprises through financing and insurance of export projects, which should result in increased competitiveness of the domestic economy and penetration of new markets. AOFI pursues a strategy to improve the conditions of the exporting economy and to ameliorate the export structure of the Republic of Serbia. Amendments to the Law on AOFI were approved by the Government of Serbia in December 2013 but are still awaiting adoption by the National Assembly. The amendments, when adopted, would enable AOFI to act as fund of funds for venture capital funds, and to support them financially, with 20-40% stake in their overall financing. The Government of Serbia budget for 2014 envisages cca 35 million euros for this purpose. A working group for the Law on Venture Capital is also drafting this complementary legislation to regulate venture capital operations in Serbia. These legislative changes are required to attract higher level of venture capital to Serbia.

The Republic of Serbia Innovation Fund was established by Innovation Law in 2006 to encourage and manage financing for innovation in Serbia. Innovation Fund has a mandate to co-finance innovation through cooperation with international financial institutions, organizations, donors and the private sector. The international independent Investment Committee comprising international industry experts from areas of early stage technology development, finance and venture capital, entrepreneurship, business development and applied science makes the financing decisions. Initial administrative and funding capacity was built with aid of Innovation Serbia Project, financed by the European Union Instrument for Pre-Accession Assistance (IPA) funds for Serbia and administered by the World Bank. The project includes implementation of financial instruments stimulating R&D in commercial enterprises by the Innovation Fund through Mini Grants Program, supporting early stage, private, micro and small enterprises that have technological innovation, potential for creation of new intellectual property, and meet a clear market need, as well as Matching Grants Program, designed to assist existing micro and small companies to develop their research and development activities, establish collaborations with strategic private sector partners, attract investors and bring their innovation to the market, with the goal to increase private sector investment in the technology development and commercialization resulting in new or improved products and services. Funding is provided in conjunction with company trainings in intellectual property rights protection and management, business development and fundraising.

Additional support to SMEs, either financial and/or advisory, is provided by the National Agency for Regional Development of the Republic of Serbia and its network of regional agencies, as well as by the National Employment Service, Vojvodina Investment Promotion Agency and Vojvodina regional funds [For more, see 29].

Donor-funded credit lines have been a more effective form of assistance provided to the Serbian business sector. Nonetheless, as with government funding, many SMEs are not fully aware of these programmes and face challenges in accessing support. Many market participants believe that access to credit programmes is practically limited to larger companies that already have an existing banking relationship [29]. The following are the most significant international support programmes for financing SME segment: World Bank (WB) programmes are a very important source of financial assistance to developing countries around the world, created to reduce poverty and encourage development and growth. According to the World Bank data from the 2012, WB financed 39 projects in Serbia in the period 2001-2011 in the amount of nearly $2 billion. It is important to point out that the micro-credits are granted up to the amount of €10,000, while the maximum loan amount for small, medium enterprises and start-up projects amounts to €50,000.

European Bank for Reconstruction and Development (EBRD) has been operating in Serbia since 2001, and in the period until the 2011, it has invested over $3 billion in Serbia, of which the largest percentage was directed to local infrastructure and transport (35%), followed by financial institutions (27 %), manufacturing, trade and agribusiness (23%), and finally energy (15%). There were 176 approved projects. EBRD Local Enterprise Facility (LEF) is a delegated facility for equity, quasi-equity investments and tailor-made debt financing established jointly by the EBRD and the Italian Government in 2006 and targeting Western Balkans, Turkey, Bulgaria and Romania. Developed to support financing needs of dynamic local enterprises, LEF has provided €400 million of capital provided jointly by the EBRD (€380 million) and the Italian government (€20 million), with total cumulative commitment of €298.5 million and a total of 114 projects implemented by late 2013. Key objectives are as follows: (1) Enhancing competitiveness and product quality by strengthening market competitiveness and improving the quality of goods and services provided; (2) Restructuring by introducing new, replicable products and technologies to achieve better use of labour, higher productivity and efficiency improvements; and (3) Setting standards for corporate governance by encouraging investee companies to apply higher standards of corporate governance and business conduct. The latter is particularly valuable for the market development in the Western Balkans.

In addition to investments in financial institutions, an important project aimed directly at SMEs is the Business Advisory Services Programme (BAS), aimed at providing business advice to micro, small and medium-sized enterprises to improve their business. Research conducted by the EBRD for the period 2008-2011 shows that the companies that used BAS programme increased the number of employees, revenue, productivity, provided external investment and they usually reuse consultants provided to them by BAS. In addition, financial support is also available to finance projects such as: drafting a business plan, marketing plan, website development, the development and improvement of information systems, improving financial accounting and control systems, and improving the organisational and management structure.

The European Investment Bank (EIB) is an institution that deals with the financing of projects in EU member states, the countries that are in the process of European integration, as well as partner countries. EIB support is reflected in the possibility of providing direct loans and credit lines to intermediary banks whose end-users are small, medium enterprises and local governments. These funds may be used for the purchase, rehabilitation or expansion of fixed assets, the development of the distribution network in the country and abroad, as well as for the providing permanent working capital. EIB has been providing favourable credit lines to banks in Serbia since 2001.

The Government of the Republic of Serbia received a donation in the amount of €15 million from the European Union to finance small and medium enterprises and entrepreneurs in 2001-2002. After two years, all funds were invested in firms, and the timely repayment of principal and interest has been established which enabled revolving loan fund to continue its operations. By the end of 2013, the total European Union funding allocated for the SME sector support amounted to €70.4 million (of which €50.5 million in grants for development projects and €20 million invested in credit lines for SMEs). The amount of individual loans ranges from €20,000 to €200,000 and funds are distributed through intermediary banks. Loans are granted for a maximum period of 5 years, with a grace period of up to one year. Loans can finance the purchase of equipment and machinery for the manufacturing of goods, services, construction of facilities to accommodate production capacity, with the obligation of the user to fund at least 20 % of the project with own funds. As noted above, the European Union has also developed the new Programme for the Competitiveness of Enterprises and SMEs (COSME), the first ever Commission programme that is exclusively dedicated to supporting SMEs, and in which Serbia will participate.

Bilateral programmes are also a way in which many countries can provide assistance to Serbia by supporting private sector development, which is very important from the point of view of the possibility of exchanging experience and knowledge in order to assist the segment of micro, small and medium sized enterprises. In this regard, it is interesting to note the donation of the Kingdom of Denmark through LEDIB Local Economic Development in the Balkans, which aims to support the development of the segment of micro, small and medium-sized enterprises and entrepreneurship in region of Nis (Nisavski okrug) by financing loans for investment and working capital through the intermediary bank [30]. There is also an Italian SME Credit Line that provides favourable loans and partial grants for purchase of Italian equipment [21], and a German KfW finance programme, for instance supporting investments in energy efficiency.

Venture capital development in Western Balkans and Serbia

As underscored by SPEA, venture capital and business angels are prepared to take the highest level of risk, expecting the highest level of return in comparison with other financial sources. This is a very important issue because in Serbia, according to the National Bank, 94% of total financial assets are concentrated in the banking sector. This leads to the conclusion that Serbia is characterized by the existence of a financial gap, leaving companies start up and expansion phases uncovered. The financial gap poses a serious problem for achieving dynamic economic growth because it is impossible to obtain further financial resources following the initial phases of business development [40].

The first equity finance deal came to Serbia with Overseas Private Investment Corporation investment in Serbia Broadband (SBB) in late 2000, while the first fully private equity deal was made in 2003, with the Imlek acquisition by British private equity fund Salford. Until 2013 there have been 22 deals reaching a total of €280 million. Fourteen private equity funds with 22 investments reaching €180 million in equity stakes have been identified. These funds invested an additional €100 million in technological improvements, organizational changes expanding product lines, and the development of marketing and support services. Notable private equity investments were also made in manufacturing (U.S. Darby Fund invested in copper mill Sevojno and cables manufacturer Novkabel as well as bread manufacturing Klas) information technology industry (Unicredit bank bought equity stake in Comtrade), but also in agriculture where EBRD was particularly active, buying equity in Victoria Group and Farmakom, and in a couple of state-owned banks (Komercijalna banka, Cacanska banka). There are several benefits in addition to financing, obtained by companies that got EBRD as equity partner: they improved their corporate governance, became more visible for potential strategic partners and acquired significant expertise support from EBRD. Nonetheless, in a transition economy impacted by the global financial crisis, these companies are still struggling to succeed, which also indicates that equity finance is not necessarily more successful than bank finance though it increases chances for company successful restructuring and growth. Yet, the SPEA 2012 research report concluded that equity driven companies in Serbia during the financial crisis showed performance above average [40].

During the 2009-2011 period when the Serbian economy was hit severely by the world economic and financial crisis, more then 400,000 people lost their jobs, GDP dropped and the demand for Serbian products on regionally and globally deceased. According to SPEA, during this period, according to the information available to the public, private equity backed companies have increased their total assets from €814 million in 2009 to €882 million in 2011 which is an 8.25% increase. However, if we look at the entire period, we can see a drop in total assets, and if we compare the years 2011 and 2010, it stands at 8%. An average private equity deal in Serbia includes close to €9 million for an equity stake and an additional €4.5 million invested into the company to improve performance. Looking at the sectors, most of deals were closed in food and beverage industry (9), followed by IT (6), telecommunications (2) and financial intermediary (2). If we look at the size of companies, private equity invested in eleven large, five medium and seven small sized companies. Only one company has gone bankrupt. The biggest growth increase was in the telecommunication, broadband and Internet sector. These companies have increased their assets from €202 million in 2009 to €240 million in 2011. Companies involved in food and beverages increased their total assets from €594 to €605 million. On the other hand, if we look at total equity, in the same period private equity backed companies recorded a drop in total equity in 2010 compared to 2009, and an increase in 2011 compared to 2010. During the entire period, companies have reduced total equity by 18%, falling from €315 million to €257 million in 2011. Private equity backed companies were successful if we look at net revenue obtained from goods and services sold, because during this period companies increased net revenue from €732,000 to €807,000. At the same time, companies recorded a drop in net income from €61,186 in 2009 to €32,354 in 2010, and an increase to €54,671 in 2011. In terms of employment, private equity backed companies have cut the number of employees by 4.22% in the 2009-2011 period, largely due to the staff cuts in the food and beverages industry. Employment in financial intermediaries, telecommunication, broadband and Internet companies increased by 16.94% in the same period. Information gathered from publicly available sources shows that eleven out of twenty companies had a constant increase in net income. Furthermore, six companies were experiencing net income and net loss, and two companies are having a constant increase in net loss. Along with increase in net revenues, companies increased total equity and total assets during the observed period. Speaking of employment, three out of twenty companies showed an increase while the rest were variable, increasing and decreasing [40].

However, when it comes to the SME segment private equity investors are usually less interested. The reason is that investment requires about the same time and effort to produce an analysis and put the structure together, while the potential upside (due to small amount to be invested) is usually limited in absolute terms. Therefore, venture capital appears as much more appropriate mechanism to support the development of SME segment, when they need long-term financing. The key obstacle in the early stage of development of venture capital in Serbia (apart from lack of appropriate legislation and practice) is the nature of the owners of small business who find it quite difficult to surrender part of their ownership to somebody they usually do not know well, so building trust among parties is of extreme importance here.

As noted above, the Innovation Fund has been an important source of capital for innovative companies, creating an important basis for future growth, which could be aided by the venture capital fund growing out of the regional initiative supported by key European financial institutions in the framework of Western Balkan Enterprise Development and Innovation Facility (WB EDIF), comprising a set of complementary measures for improving access to finance for SMEs and assisting economic development in the Western Balkans. The programme has been launched in December 2012 in collaboration with the European

Investment Fund, the European Commission and the European Bank for Reconstruction and Development – and the Western Balkan region. The WB EDIF aims to promote the emergence and growth of innovative and high-potential companies, as well as the creation of a regional venture capital markets. The intention is that €145 million of initial capital pulled together under WB EDIF would translate into over €300 million of finance benefitting SMEs based in the Western Balkan countries.

WB EDIF, which is coordinated by the European Investment Fund (EIF), consists of four pillars:

(1) WB EDIF Guarantee Facility provides guarantees to local financial intermediaries to encourage them to build up new portfolios of SMEs loans and thereby improving access to finance. It is managed by EIF and there are negotiations under way to select the intermediary in Serbia based on an issued call for proposals.

(2) Enterprise Innovation Fund (ENIF) supports innovative SMEs in the Western Balkans in their early and expansion stage by providing equity finance through local funds management companies. Private Manager for ENIF will soon be selected and fund registered, becoming operational in 2014.

(3) Enterprise Expansion Fund (ENEF) supports the expansion of SMEs with a high-growth potential established in the Western Balkans. This fund is in the process of registration and will be managed by the EBRD, becoming operational in early 2014.

(4) Technical Assistance Facility will enable Governments of the Western Balkan countries to obtain technical assistance under WB EDIF to implement policy reforms in order to create a favourable regulatory environment to benefit innovative and high-growth SMEs in the region [45].

Conclusion: Expected venture capital developments in Serbia

Private equity investment is at an early stage of development in Serbia but demonstrating positive results, confirming data presented in the introductory literature overview based on data analysis from other, especially transition economies. Serbia stands to benefit both from entrepreneurial private ventures, as well as important regional initiatives supported by the European Union such as the Western Balkan Enterprise Development and Innovation Facility (WB EDIF), whose innovation and expansion investment funds are expected to start operations in 2014. In addition to WB EDIF, Serbian companies can benefit from the new EU Programme for the Competitiveness of Enterprises and SMEs (COSME), the first ever Commission programme that is exclusively dedicated to supporting SMEs and that will have an equity facility, which will also stimulate the supply of venture capital, with a particular focus on the expansion and growth phase of SMEs. In addition, equity financing, an especially important option for high-growth young enterprises, will be stimulated. Education of local financial institutions and SMEs in Serbia about how these programmes function and how proposals should be prepared will be a vital factor ensuring greater success of applications to advertised calls for proposals. As an important building block in this process, EU-funded Integrated Innovation Support Programme, operating between October 2011 and December 2013, delivered innovation promotion and investor-readiness trainings to 462 companies across Serbia. Such trainings should be continued, as well as business forums such as the Belgrade Venture Forum.

At the same time, a pipeline of possible investment projects should be constructed, with the active involvement of relevant business associations such as SPEA and the Government. The Best Technological Innovation Award and the Innovation Fund company beneficiaries may be a significant part of that pipeline. Improved management of business incubators across Serbia could further strengthen the potential project pipeline. In conjunction, the legal framework should be upgraded, both by enacting the amendments to the Law on AOFI and the Law on venture capital funds as discussed above, and by regulatory reform to improve the business climate. Indeed, according to a recent World Bank report, *Back to Work; Growing with Jobs in Europe and Central Asia* [3, pp. 188-190], improving the business environment could yield potentially large payoffs in private sector development, both in easing the entry of new firms and in facilitating the exit of inefficient firms. The report also confirms that access to finance is one of the strongest determinants of successful start-ups.

People who succeeded in borrowing money are 60 percent more likely to be actual entrepreneurs, while firms with access to credit to finance their investment activities also tended to grow faster.

The EU's Small Business Act (SBA), adopted in June 2008 and updated in February 2011, focuses on actions most likely to aid SMEs cope with the economic crisis. The SBA has brought SMEs into the centre of the political agenda. EU Member States have taken a significant number of policy actions in favour of SMEs (in total some 2400 measures in the past three years). Furthermore, the Entrepreneurship Action Plan, adopted in January 2013, sets a comprehensive and ambitious agenda in order to reignite the entrepreneurial spirit in Europe. It consist of three pillars, (1) the insertion of entrepreneurial education and training in all levels of the educational systems, (2) the further improvement of the business environment and (3) the promotion of entrepreneurship among specific groups, such as women, seniors, migrants, the unemployed and young people. Serbia, as an EU candidate, also strives to comply with the Small Business Act and has used this framework, as well as EU 2020 and Regional Western Balkans 2020 Strategy, to draft the new Strategy for Entrepreneurship and Competitiveness, 2014-2020, which is currently in public discussions and awaiting adoption by the Government. A crucial part of the draft strategy and accompanying action plan relates to access to finance and these regulatory measures, if successfully implemented, would be conducive to venture capital development.

As the European Commission has concluded, "To provide greater, sustained access to finance, it is necessary to reduce market barriers that prevent the flow of private capital to SMEs. Obviously, in the current economic environment, increased risk aversion and deteriorating business fundamentals negatively affect access to finance for all businesses. But only within the context of market-based solutions can enough finance be mobilized to serve the growth needs of economically productive SMEs." As a struggling transition economy, Serbia needs to focus its efforts on enhancing the business environment while educating companies – and potential entrepreneurs about entrepreneurship, innovation and the role of venture capital in facilitating growth.

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Ana S. Trbovich

is Dean and Associate Professor at the Faculty of Economics, Finance and Administration-FEFA. She teaches and writes on European Integration, Strategic and Public Administration Management. She holds a PhD (Fletcher School of Law and Diplomacy), two Masters Degrees (Fletcher School; Kennedy School of Government, Harvard) and BA (Tufts University, triple-major in Economics, International Relations and French Literature). Specialized in EU policies at IEP, France. As Partner at EuroBalkan Advisors (EBA), she manages projects and consults for private sector and international organisations. From 2002 to 2006, Dr Trbovich served as Assistant Minister of International Economic Relations, coordinating Serbia's EU accession and foreign investment policies, and in 2013/14 as Special Advisor to Minister of Economy in charge of entrepreneurship and competitiveness policy, including venture capital development. She serves on boards of several business associations in Serbia and the Belgrade Philharmonic.

Ana Drašković Malešević

is CEO at Serbian Export Credit and Insurance Agency (AOFI). Prior to assuming this role, Ana was Director at Telenor Serbia, Head of the Representative Office and Vice President for Citibank, assuming responsibility firstly for Serbia and later extending it to Bosnia and Herzegovina, Macedonia and Montenegro. She also worked at the World Bank (Serbia Country Office), JP Morgan in London, and at the National Bank of Serbia as Chief of the Cabinet to the Governor. Currently a doctoral candidate at the Faculty of Economics, Finance and Administration-FEFA, Ana holds MA in International Relations from the University of Westminster, and BSc in Economics from Belgrade University.

Jelena Miljković

is a Researcher and Teaching Assistant for the courses Transition economy and Capital markets at the Faculty of Economics, Finance and Administration (FEFA), Belgrade. She holds a Bachelor degree from FEFA and Masters in Finance and Investment Banking from Lincoln University. She is a PhD candidate at Singidunum University. In 2006, she was awarded "Zoran Djindjic scholarship" and completed a six-month internship at Commerzbank, Frankfurt in department for Financial institutions-Central and Eastern Europe. She has published several articles in her field of professional expertise and is currently working as a World Bank consultant at the Ministry of Economy of Serbia.

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Edvard Jakopin
Ministry of Regional Development and Local Self-Government
Department of Strategic Analyses and Research
Belgrade

REGIONAL INEQUALITIES AND TRANSITION: THE CASE OF SERBIA

Regionalne nejednakosti i tranzicija u Srbiji

The free market does not guarantee social results, but only economic.
(George Friedman, the founder of the analytical agency Stratfor)

Abstract

Market laws boost efficiency and contribute to economic growth and the rise in productivity, but they do not warrant stability and balance of distribution. Transition stagnation directly affects regional and social stability of the state. The focus of the paper is on three interrelated research parts which analyze: (a) interdependence of transition economic growth and regional and social inequalities in Serbia, (b) interdependence of the speed of transitional reform processes and inequalities, and (c) the degree of the impact of recession blows on regional and social inequalities.

Given that one of the greatest EU's challenges is how to achieve the highest possible social and regional equality in the following period, the paper presents an attempt to bring back into the public focus new concepts of the social state, social inclusion, and regional and social cohesion.

Key words: *regional inequalities, transition stagnation, middle class*

Sažetak

Tržišni zakoni povećavaju efikasnost i doprinose privrednom rastu i povećanju produktivnosti, ali ne garantuju stabilnost i ravnomernost u raspodeli. Tranziciona stagnacija direktno utiče na regionalnu i socijalnu stabilnost države. Fokus rada je usmeren na tri međusobno povezane istraživačke celine u kojima su analizirane: (a) međuzavisnost tranzicionog privrednog rasta i regionalnih i socijalnih nejednakosti u Srbiji, (b) međuzavisnost tranzicione brzine reformskih procesa i nejednakosti, i (c) stepen uticaja recesionih udara na regionalnu i socijalnu nejednakost.

S obzirom da je jedan od najvećih izazova EU kako postići što veću društvenu, regionalnu i socijalnu jednakost u narednom periodu, rad predstavlja pokušaj ponovnog vraćanja u fokus javnog diskursa novih koncepata socijalne države, društvene uključenosti, regionalne i socijalne kohezije.

Ključne reči: *regionalne nejednakosti, tranziciona stagnacija, srednja klasa*

Introduction

One of the greatest challenges for the EU in the period to come is how to achieve the highest possible social equality. All forecasts suggest that the EU is likely to face rather low rates of growth and unemployment in the long run as it will be overtaken by countries with dynamic economic growth (China, India). Social standard, the social state, education, health care, and, in general, social inclusion will not be something that can be taken for granted [9, pp. 86-98]. Therefore, in the focus of the "new growth paradigm" is social equality, and not economic growth.

The major problem in the EU is the trend of increasing inequality [2, p. 9]. Two parallel processes are underway – on the one hand inequality among states is in decline and, on the other, within states inequalities are growing [1, pp. 10-11], [20], [2]. The convergence of states in the EU has evolved at the expense of the issue of an ever stronger trend of weakening cohesion within states themselves. The major directions of the new growth paradigm are focused on the well-being of citizens, protection of the weakest and reforms of the public sector, and not exclusively on economic growth through boosting the output.

The research into interdependence of growth and inequality, transition speed and inequality has come up against key dilemmas: does more inequality stimulate economic growth or not? Does the policy of equal revenues stimulate economic growth? Or, does growth in itself generate more equality? [20] Theoretically speaking, a high level of inequality in revenues, like in Russia and Ukraine, is detrimental to growth and the "development of a wealthy middle class is of fundamental importance for the consolidation of capitalism" [13, pp. 12-13]. High levels of inequality can prevent the middle class from strengthening as the size of the middle class is important for successful transition. Examples of some countries, such as Russia, suggest that after privatization some interest groups that hamper further transition have been created. On the other hand, the middle class has an interest in the continuation of reforms and establishment of the rule of law. The poor, to the contrary, are in favor of the return of communism because their economic position in the course of transition deteriorated [8, pp. 7-10].

Views that sustaining a degree of balance in income is good for economic growth are rather widespread. An opposite opinion is that development initially requires a sufficient amount of inequality, i.e. welfare needs to be concentrated in the hands of the few so that they could invest in capital and build up new industries. [14, pp. 20-26]. Such a view has its roots in a traditional standpoint that large industrial systems are the major drivers of development. However, the experience of Poland confirms the opposite: entrepreneurial activity and comprehensive social investments in education and health care have become major drivers of growth (in 1996 Poland had almost 2 million private entrepreneurs and more than 125,000 private commercial companies). A response to the question as to whether growth generates inequality also cannot be one-sided. The experience of Poland stands in contrast to that of Russia (the increase in earnings caused the abolishment of jobs and created more inequality). It can be concluded that the policy of the government determines the degree and forms of inequality.

What is the link between transition speed and inequality? There are some cases when sluggish reforms caused more inequality (due to large initial macroeconomic imbalances). Innumerable regression analyses show that if two countries have the same volume of reforms (measured, for example, by EBRD transition indicators) and the same starting conditions, the country that had by 10% higher growth of inequality (Gini coefficient) had a lower rate of GDP growth by about 1%. In Czech Republic, which had better starting conditions than Poland, Gini coefficient rose by 0.03 more than in Poland, while the annual growth rate of GDP in Czech Republic was by about 1.6 percentage points lower than in Poland. Similar to Czech Republic, Hungary saw the growth of inequality and had an average annual growth rate of GDP of about 2.4 pp lower than Poland [15]. Poland is a typical example of a transition country that rapidly completed its reform tasks, boosted its economic growth, and reduced inequalities through the system of targeted social transfers.

The paper consists of two connected parts: the first is centered on transition effects in key dimensions that generate the problem of regional and social inequality in Serbia, and the second on transition forms of regional disparities and social inequalities in the entire transition period after 2001. The recession period since 2009 is analyzed in greater detail, the focus being on trends of inequality and the position of the middle class. The conclusion sums up results of the following tested hypotheses:

Hypothesis 1: Does growth in itself generate inequalities? Does regional and social inequality create macroeconomic vulnerability?

Hypothesis 2: Do inequalities increase during the period of transition reforms?

Hypothesis 3: Has recession led to declining inequalities?

Transition stagnation

Competitiveness position in the region

In comparison with most developed global economies, the EU as a whole has progressed in the establishment of an inclusive and sustainable society, but substantially lags in the critical area of smart growth, which raises the question about its innovation capacities, the ability to raise competitiveness, and its potential to sustain high growth and a rising standard of living. Serbia records lower scores than other candidate countries (see Table 1), including the adjacent member states Bulgaria and Romania, in almost all the areas included in the index of competitiveness Europe 2020 [5]. Although Serbian economy has made a lot of progress in its digital agenda in relation to 2010 by boosting its performances to the level comparable to that of Bulgaria and Romania, it takes sweeping reform efforts to enhance the business environment, and education and training as the basis for smart growth. Still, the first priority needs to be the establishment of institutional capacities in the country.

In the WEF's *Competitiveness Report 2013-2014*, which includes 148 countries, Serbia is ranked 101st and with GDP per capita of USD 4,943 is at the foot of the group of 31 countries (GDP per capita of Serbia is among the lowest in Europe and 6.5 times lower than the EU-27 average) which through improvement of efficiency aim for boosting the overall competitive position – *Serbia is the least competitive country in the European continent*. Serbia records oscillating developments on the competitiveness scale – the progress by 2008, followed by the period 2009-2013 that was marked by continuous inertia of government capacities in adopting strategic programs and pursuing fundamental reforms that would invigorate economic activity and stop the rise in unemployment. Almost all of the countries adjacent to Serbia are in the second development stage except for Hungary (63) and Croatia (75) which are moving to the group of the most robust economies that already includes Slovenia (62). On its way to reaching an average level of development of the EU, Serbia needs to raise the efficiency of state institutions, ensure macroeconomic stability, enhance the ease of doing business and foster innovation, within which there is not a single indicator that demonstrates a competitive advantage.

The first priority must be to build up institutional capacities in the country, the area for which the largest portion of EU funds is allocated. A substantial room for improvement remains in the area of inclusive growth, and that with respect to rigidity of the labor market (characterized by incompatible productivity and earnings,

Table 1: Regional competitive position 2013

Index Europe 2020	Serbia		Bulgaria	Romania	Croatia
	Rank	Value			
	32	3.53	3.76	3.79	4.01
Subindex A: SMART GROWTH	*32*	*3.45*	*3.69*	*3.64*	*3.86*
1. Business environment	32	3.12	3.55	3.44	3.30
2. Digital agenda	31	4.10	4.30	4.08	4.72
3. Innovation	31	2.79	2.96	2.89	3.14
4. Education and training	32	3.81	3.95	4.14	4.27
Subindex B: INCLUSIVE GROWTH	*31*	*3.69*	*3.98*	*4.02*	*3.89*
5. Labor market and employment	28	3.53	4.32	4.00	3.55
6. Social inclusion	28	3.85	3.64	4.03	4.24
Subindex C: SUSTAINABLE GROWTH	*30*	*3.49*	*3.61*	*3.97*	*4.83*
7. Environment sustainability	30	3.49	3.61	3.97	4.83

Source: [24]

weak employee-employer relations, and a high rate of youth unemployment). The labor market needs to be flexible in order to ensure reallocation of employees from one economic activity to another, fast and at a low price, and ensure movement and adjustment of earnings without social unrest and strikes. This is particularly important for countries that are recovering from the global economic crisis.

The analysis of transition competitiveness shows that in Serbia no marked changes to its structure have taken place, which is why the country fails to reach higher ranks in the global rankings that other countries of the region boast. Over the past 7 years on average Serbia has been more competitive than 30% of countries only, which means that it is not only unable to sell its products (on the EU market primarily) but also that due to *macroeconomic instability* (rank 136), *institutional constraints* (126), *inefficiency of the market of goods* (132) and *underdeveloped infrastructure* (90) it is unattractive to potential investors. Knowledge as the most important and an indispensible driver of economic activity is not appreciated enough, and thus *Serbia is notorious for its "brain drain"* (146th position – by the indicator Country capacity to retain talent it is better ranked only than Venezuela and Myanmar, and 147th – by the indicator Country capacity to attract talent, it is ahead of Venezuela).

Results Serbia scored this year demonstrate it is urgent all state entities acted jointly in speeding up structural changes, and undertook priority measures in most critical areas, primarily those where sub-indexes are ranked above the 120th position (as much as 45 sub-indexes). Even with 3 pillars with a rank higher than last year one can notice that marked improvement has been recorded only within one or two sub-indicators, while values of other sub-indicators deteriorated.

Serbia is in a very adverse competitive position as according to most indicators it is below the average of countries that belong to the second development stage, which means far from the average of the EU member states (see Table 2). Unless there is modernization of production capacities and constant investment in education and promotion of the expertise of workforce, Serbia cannot improve its efficiency in some other economic spheres, nor can it reach a higher development degree. In the long run human capital and technology are two key factors that determine sustainable economic growth and a competitive position of an open market economy.

The most critical fields are Institutions (pillar 1), Macroeconomic environment (pillar 3), Business sophistication (pillar 11), and Innovation (pillar 12), within which there is not a single competitive advantage.

Table 2: Most critical fields of Serbia 2013

	Pillar	Rank
Protection of minority shareholders' interests	1	144
Burden of government regulation	1	142
Efficiency of state corporations	1	138
Efficiency of regulative in settling disputes	1	137
Volume of HR training	5	140
Buyer sophistication	6	143
Extent of market dominance	6	142
Effectiveness of anti-monopoly policy	6	141
Strength of local competition	6	138
Country capacity to attract talent	7	147
Country capacity to retain talent	7	146
Cooperation in labor-employer relations	7	144
Introducing new technology to a company	9	137
Nature of competitive advantage	11	145
Willingness to delegate authority	11	141

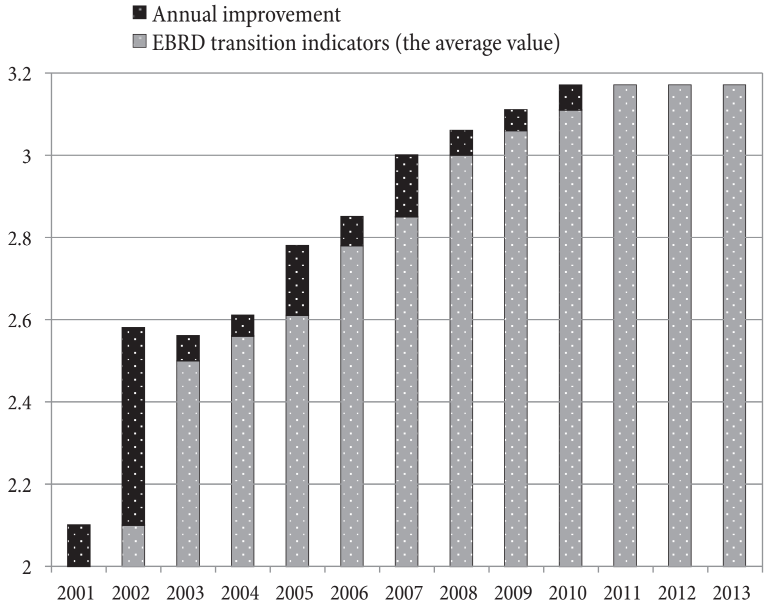
Source: [24]

Reform stagnation

Structural reforms in the transition region of SEE, after slowing down in the crisis period 2008-2009, are still faced with major challenges [10]. In 2013 reform stagnation continued, and deterioration of transition indicators was evident both on the sector and the state level. At the level of states, for the first time since 1990 the EBRD analysis has shown that the number of deteriorations (of transition indicators) surpasses the number of improvements. In the field of market and trade three indicators in Hungary and two in Slovakia deteriorated, mostly due to a larger stake of the state in the energy and insurance sectors, which had an adverse effect on the trust of domestic and foreign investors. The upgrade was made only in Croatia, in the field of large-scale privatization, owing to the sale of several shipyards that was a precondition for the EU membership.

Serbia has not made any considerable progress for the third year in a row (see Figure 1). Transition indicators remained at the level of 2010, and thus an average transition progress grade remained unchanged (3.17), and in comparison

Figure 1: Transition speed in Serbia, 2001-2013



Source: Author's calculations on the basis of the EBRD reports (2001- 2013)

with adjacent countries it was higher only than the value for BiH (3.00). According to EBRD indicators (see Table 3), Serbia straggles behind most of the adjacent countries in the area of large-scale privatization, governance and restructuring of companies, and implementation of the competitiveness policy.

The largest transition lag occurred in large-scale privatization, governance and restructuring, and competitiveness policy. There are still 419 companies awaiting privatization, 153 companies undergoing restructuring, and around 900 companies with the minority share of state-owned assets. The transition indicator of *governance and restructuring of companies* in all the countries of the region is at its lowest. Although the enforcement of bankruptcy legislation has improved, not much has been done when it comes to the strengthening of competition and corporate management, and thus in Serbia the value of this index is rather low (2.3). In the area of *large-scale privatization* Serbia also straggles behind other adjacent countries (index of 2.7; for countries in the region it ranges from 3.0 in BiH to 4.0 in Bulgaria and Hungary). In order for the index to reach a higher value, it is necessary for more than 25% of assets of large companies to be in private ownership (55% of assets of large companies in 2012 were active in only 16 PE of republic interest). Large-scale privatizations are mainly at a standstill.

Table 3: EBRD transition indicators

Serbia		Bulgaria		Romania		Croatia		Macedonia		BiH		Hungary	
2001	2012	2001	2012	2001	2012	2001	2012	2001	2012	2001	2012	2001	2012
Large-scale privatization													
1.0	2.7	3.7	4.0	4.0	3.7	3.7	3.7↑	3.3	3.3	3.3	3.0	4.0	4.0
Small-scale privatization													
3.0	3.7	3.7	4.0	3.7	3.7	4.3	4.3	4.0	4.0	2.7	3.0	4.3	4.3
Governance and restructuring of companies													
1.0	2.3	2.3	2.7	2.0	2.7	2.7	3.3	2.3	2.7	1.7	2.0	3.3	3.7
Competitiveness policy													
1.0	2.3	2.3	3.0	2.3	3.3	2.3	3.0	2.0	2.7	1.0	2.3	3.0	3.7↓
Price liberalization													
4.0	4.0	4.3	4.3	4.3	4.3	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.0↓
Trade and foreign exchange system													
2.7	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.0	4.3	3.0	4.0	4.3	4.0↓

Source: EBRD Transition Reports 2001-2013

Credible measurement of industrial competitiveness is particularly pertinent to transition. According to the UNIDO's CIP index[1], Serbia is rather low positioned in relation to the EU average [22]. The sub-index *capacity to produce* ranks Serbia by 71 positions lower than the EU average, the sub-index *capacity to export* by 31 positions lower, the sub-index *industrialization intensity* by 17 positions, and *export quality* by 29 positions lower than the EU average in the global rankings.

Reform stagnation is indicated also by the research into business environment, and the dynamics of creation of a regulatory environment that is conducive to doing business. The deterioration of the rank (from 87th position in 2012 to 93rd position in the world in 2013) was largely due to the raising of VAT, which further boosted costs of doing business of companies (see Table 4). On the other hand, thanks to major structural reforms some countries have managed to improve their doing business and lessen the effects of the global economic crisis.

Table 4: Ranking of transition countries by conditions for doing business

	2012	2013
Macedonia	36	25
Slovenia	31	33
Montenegro	50	44
Slovakia	43	49
Hungary	52	54
Bulgaria	57	58
Romania	73	73
Croatia	88	89
Albania	82	90
Serbia	87	93
BiH	130	131

Source: [23]

For years now the lowest rank and 182nd position in 2013 Serbia scored for the process of obtaining licences and various permits (for construction, access to electricity, telephone, permits from various inspectorates, etc.). A very low rank of Serbia is conditioned by high costs of issuing construction permits, expressed as % of GNI per capita. While in the EU on average it takes 98% of GNI/capita (most in Ireland, 446%, and least in Slovakia, 7%), in Serbia entrepreneurs need to pay 14 times higher a value than GNI/capita or 1,433% (only 10 countries out of Europe have higher costs), while in countries outside the EU costs equal: in Montenegro 1,159%, in BiH 1,100%, in Croatia 646%, and in Macedonia 512% of GNI/capita [23].

1 Competitive Industrial Performance Index 2012-2013 through its three dimensions and a combination of eight quantitative indicators shows the extent to which each country is able to produce and export competitive products.

Educational lagging

The most relevant international research on the degree of reforms in education is PISA – *Programme for International Student Assessment*, which enables the assessment of the quality, legitimacy and efficiency of the education system, but it also serves to monitor the quality of changes in the education system. In many countries data provided by PISA tests have become not only key indicators for the assessment and monitoring of the progress in the quality of education but PISA is also used as the EU indicator of social inclusion, IT literacy, and poverty. A large number of countries use PISA results as indicators of education development and in their strategic documents they plan on raising the level of PISA performance (all the OECD countries, Japan, Croatia, etc.). In our country, PISA performance is used as an indicator in the implementation of the Strategy for Poverty Reduction.

According to PISA 2012 (see Table 5), the quality of education in Serbia is still below the average of OECD countries [18, p. 5], [7], [10], [11], but the difference is smaller compared to 2009. Compared to countries of the region, reading, mathematics, and science literacy of students from Serbia is higher than that of students from Bulgaria, Romania, and Montenegro, while it is lower than that of students from Hungary, Slovenia, and Croatia (see Figure 2).

Despite some positive changes in the period 2006-2012, there are still major lags in some segments:

- In the segment of reading literacy the percentage of students who reached the level of functional literacy in 2012 was 67%, at the level of 2009 (76.5% of girls and 57.2% of boys) but *11.9% of students in Serbia were below the first level of literacy* (in OECD countries 5.5%): 17.8% of boys and 6.0% of girls. In comparison with OECD countries reading literacy of students from Serbia was lower by *50 points, which*

Table 5: PISA – changes 2006-2012 in the region

	Reading literacy		Mathematics literacy		Science literacy	
	2012	2006-2012	2012	2006-2012	2012	2006-2012
Serbia	446	*45*	449	*13*	445	*2*
Croatia	485	*7*	471	*4*	491	*5*
Slovenia	481	*-13*	501	*-3*	514	*2*
Montenegro	422	*30*	410	*10*	410	*9*
Bulgaria	436	*34*	439	*25*	446	*7*
Romania	438	*42*	445	*30*	439	*11*
Hungary	488	*6*	477	*-14*	494	*-8*
OECD average	496	*7*	494	*0*	501	*0*

Source: Author's calculations on the basis of the [18]

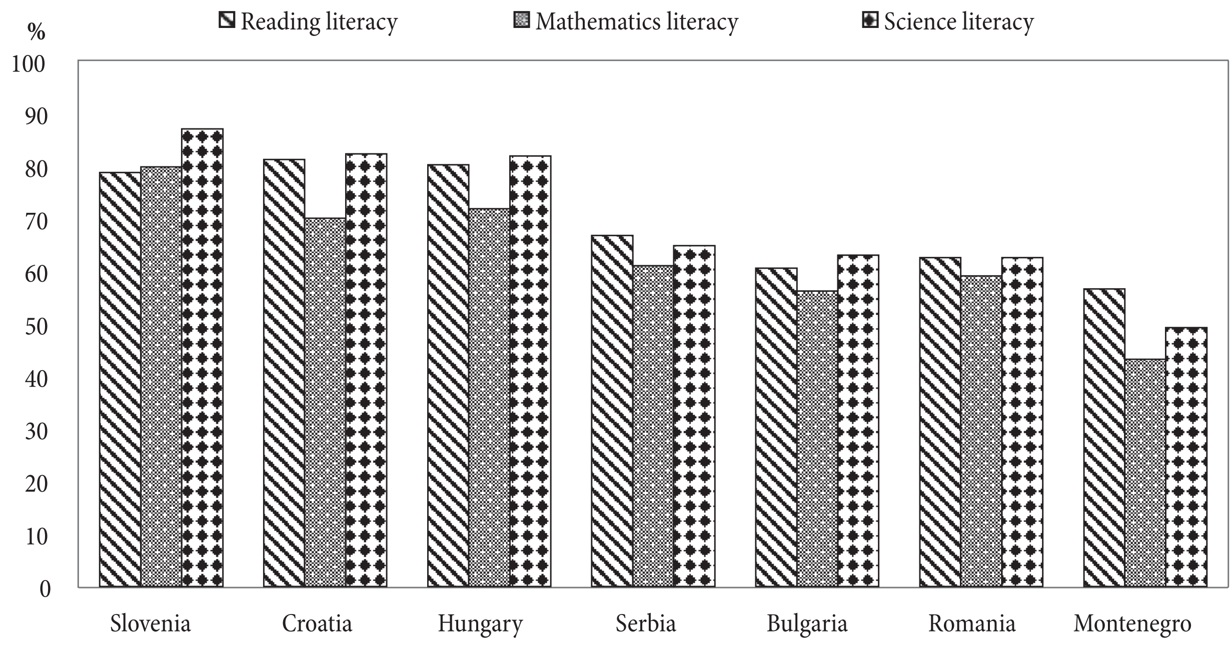
is equal to an effect of somewhat more than one year of schooling in OECD countries;

- When it comes to mathematics literacy, 61% of students from Serbia reached the level of functional mathematics literacy but *15.5% of students from Serbia are below the first level of literacy* (9.1% of students in OECD countries): 16.5% of girls and 14.5% of boys. In comparison with OECD countries mathematics literacy of students from Serbia is lower by 45 points, which is equal to *an effect of more than one year of schooling in OECD countries.*
- As regards science literacy, 65% of students reached the level of functional literacy in the domain of science, *10.3% of students in Serbia do not possess scientific knowledge* (in OECD countries 4.8%): 11.1% of boys and 9.6% of girls. In comparison with OECD countries, science literacy of students from Serbia is lower by 65 points, *which is equal to an effect of 1.5 years of schooling in OECD countries.*

Transition and the quality of life

The comparative research of the quality of life in Europe [6] presents the issue of inequality in quite a different light, especially after recession blows in the period 2009-2011. EQLS not only enables the monitoring of changes in a society but it can also determine new trends and developments in the future. The research into the quality of life in transition countries has been done in the following segments (see Table 6): (1) subjective well-being, (2) health and mental well-being, (3) living standards, (4) work-life balance, (5) public services, (6) trust and tensions, (7) participation and exclusion, and major findings thereof are:

Figure 2: Education reforms in the region 2012 – functional literacy



Source: [18]

- Life satisfaction in Serbia is below the EU average, as well as below some countries of the region. The level of optimism steadily increases with income, starting from 44% in the low income group (the first 25% of household distribution) to 68% in the high income group (the last 25% of household distribution). The proportion of people feeling optimistic about the future has a positive correlation with average satisfaction with the economic situation in the country and with trust in government.
- Satisfaction with health is at the level of the EU average. Unemployment, poverty and social exclusion adversely affect mental health [11]. Mental well-being of the population increases with income. The citizens of Serbia and Bulgaria are least satisfied with the standard of living in the EU. The misery index (the sum of the unemployment rate and the rate of inflation) is among the highest in Europe.
- Serbia has the highest proportion of people suffering from work-life conflict (80%) of all the countries surveyed. This relates to inflexible working time arrangements and inefficient work organization. In addition, Serbia, like other transition countries, has a relatively large proportion of working age women (49%) who are not in the labor force.
- Of the public services asked about in the EQLS, people in Serbia give highest quality rating to childcare (6.1), similar to the EU average. The quality of health services is rated lower, while the lowest rankings in Serbia are given to social services.
- The research has shown that the degree of trust in public institutions is largely linked to the perception of corruption in the public sector. A relatively low degree of trust in local authorities distinguishes transition countries from nearly all EU countries where people have a greater level of trust in local authorities than they do in national institutions. With regard to social cohesion, tension is the largest between the rich and the poor (48%).

The perceived social exclusion index is high (higher only in Bulgaria, Greece, and Cyprus). The sense of exclusion is considerably stronger among older people but the largest differences relate to income levels.

Transition economic gap and regional disparities

The entire area of SEE by its economic strength is at below 50% of the EU. Serbia is at 35% of the EU (GDP by purchasing power), Bulgaria at 47%, and Romania at 49% of the EU (see Table 7).

Table 6: Indicators of the quality of life

Indicators of the quality of life	Croatia	Macedonia	Montenegro	Serbia	Extremes among 33 surveyed countries		EU-27
					Minimum	Maximum	
Subjective well-being							
Life satisfaction (1-10)	6.8	6.7	6.9	6.3	Bulgaria 5.5	Denmark 8.4	7.1
Happiness (1-10)	7.3	7.2	7.6	7.1	Bulgaria 6.3	Iceland 8.3	7.4
Optimism about the future	56%	65%	70%	60%	Greece 20%	Iceland 87%	52%
Health and mental well-being							
Satisfaction with health (1-10)	7.3	7.7	8	7.4	Lithuania 6.5	Cyprus 8.4	7.3
Mental well-being (0-100)	62	68	66	54	Serbia 54	Denmark 70	62.5
Living standards							
Satisfaction with standard of living	5.9	5.8	6.1	5.3	Bulgaria 4.7	Denmark 8.3	6.9
Difficulty making ends meet	29%	18%	17%	31%	Denmark 3%	Greece 50%	17%
Work-life balance							
Work-life conflict (% women)	74%	78%	79%	85%	Italy 44%	Cyprus 86%	59%
Women, economically inactive, willing to work (%)	73%	65%	62%	58%	Turkey 57%	Iceland 91%	70%
Public services							
Cost as a problem to see a doctor	5%	5%	9%	14%	G.Britain 1%	Greece 28%	8%
Trust and tensions							
Trust in local authorities (1-10)	3.3	4.1	3.9	3.3	Serbia 3.3	Luxemburg 6.7	5%
Participation and exclusion							
Index of perceived social exclusion (1-5)	2.4	2.4	2.3	2.5	Denmark 1.6	Cyprus 3.0	2%
Civic and political involvement	31%	22%	16%	19%	Turkey 8%	Iceland 61%	25%

Source: [6]

Table 7: Transition gap and regional disparities (NUTS-2) 2012

Country	GDP per capita (PPS), EU=100 national level	richest region	poorest region	richest : poorest
Bulgaria	47	75.3	27.2	2.8:1
Czech	79	175.3	66.0	2.7:1
Hungary	66	108.5	39.6	2.7:1
Poland	66	97.0	40.9	2.4:1
Romania	49	111.1	29.4	3.8:1
Slovenia	82	104.7	71.9	1.5:1
Croatia	61	78.3	44.3	1.8:1
Serbia	35	60	21	2.9:1

Source: Author's calculations on the basis of the Eurostat and RSO

The group of medium developed transition countries (Hungary, Czech Republic, Poland, and Croatia) is at 2/3 of the EU, and Slovenia stands out with GDP PPS of above 80%. However, intra-regional disparities vary: in Serbia they are larger (2.9:1) than economic disparities in Slovenia and Croatia (1.5:1 and 1.8:1), and at the level of economic inequalities in Bulgaria, Czech Republic, and Hungary. The greatest regional economic disparities are found in Romania (3.8:1).

Economic downturn and a deteriorated macroeconomic balance in the period 2009-2012 affected regional economic developments as well, but at various intensities. The economic lag of all regions mounted in comparison with the EU average (see Table 8).

The Region of Belgrade, as the most developed region, is at 60% of the EU, while the Region of Southern and Eastern Serbia as the least developed region in the EU is at only 21% of the EU.

Table 8: The trend of regional lagging - GDP PPS p.c. (EU-27=100)

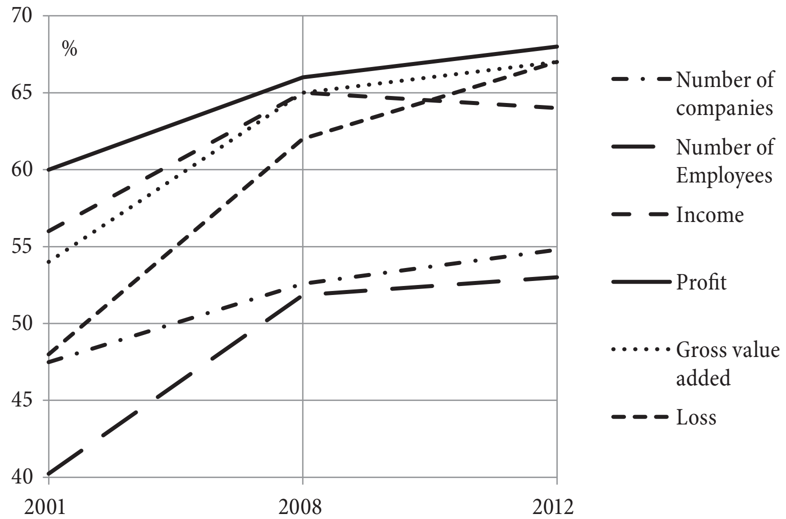
Regions	2009	2010	2011	2012
Belgrade Region	65	61	60	60
Region of Vojvodina	34	33	35	35
Region of Sumadija and Western Serbia	26	24	23	23
Region of Southern and Eastern Serbia	23	22	22	21

Source: Author's calculations

One of the greatest challenges of the policy of regional development of Serbia is the long-term trend of rising regional inequalities and the concentration of economic activities in Belgrade and Novi Sad [12]. More than a half of employees in Serbia work in these two cities, while the share of other economic indicators develops around 2/3 (see Figure 3).

The analysis of regional disparities at the level of districts (NUTS-3) shows the real scale of regional disparities in Serbia (see Table 9). In the period 2006-2012 extreme values increased slightly, namely the composite Development Deficiency Index (DDI – comprises five development dimensions and 13 representative indicators) shows that the ratio of Belgrade and Toplica districts from 6.8:1 in 2006 increased to 7:1, i.e. the Region of Belgrade was 7 times more developed than the Toplica District. An even more worrying trend is that values of DDI for as many as 21 districts registered a drop in comparison with 2011.

Figure 3: Regional economic concentration – Shares of the City of Belgrade and South Backa area in Serbia, 2012



Source: Author's calculations

Table 9: Transition extreme ranges in municipalities

Indicators (Serbia =100)	2001			2008 No. of municipalities			2012		
	>100%	<50%	Extremes	>100%	<50%	Extremes	>100%	<50%	Extremes
Earnings per employee	31	43	1:13.4	14	62	1:12	13	58	1:10.7
Employment rate	36	17	7.8:1	18	31	8.8:1	16	20	8.3:1
Unemployment rate	42	20	1:6.7	26	53	1:5.7	33	54	1:4.6
Budget revenues/capita	13	51	16:1	12	45	5.5:1	13	14	4.5:1

Source: Author's calculations on the basis of the RSO

The analysis of individual and synthesized indicators for the measurement of regional disparities provides an integral picture of regional development of Serbia [12]. Distinctive socio-demographic and economic development has several levels – the Danube-Sava concentration, the undeveloped area, the developed centre, and the underdeveloped periphery (see Figure 4).

The regional analysis of ranges of extreme values at the local level confirms the hypothesis about the reduction of regional disparities in times of recession (see Figure 5). Extreme ranges of representative indicators in the transition period in 2008-2012 were in decline but still at a high level, and thus in 2012 the range in earnings was 1:11, the employment rate (8:1), the unemployment rate (1:5), and in budget revenues per capita 5:1.

Asymmetries of regional competitiveness

The European Union has promoted regions as places most natural to manage economic development, pursue an adequate social policy, and take care of environment. One of the most important objectives is to boost overall competitiveness and it can be achieved only through enhancement of regional competitiveness and reduction of regional disproportions. Therefore it is necessary to thoroughly know, first of all, the economic basis of the region (enterprises, sectors, qualifications, and human resources), as well as to be familiar with specific factors of development of the region in order to be able to make this area attractive for investment that would boost overall competitiveness. The intertwining of the strategy and operational performance of a company, and the quality of

Figure 4: Development Deficiency Index 2012

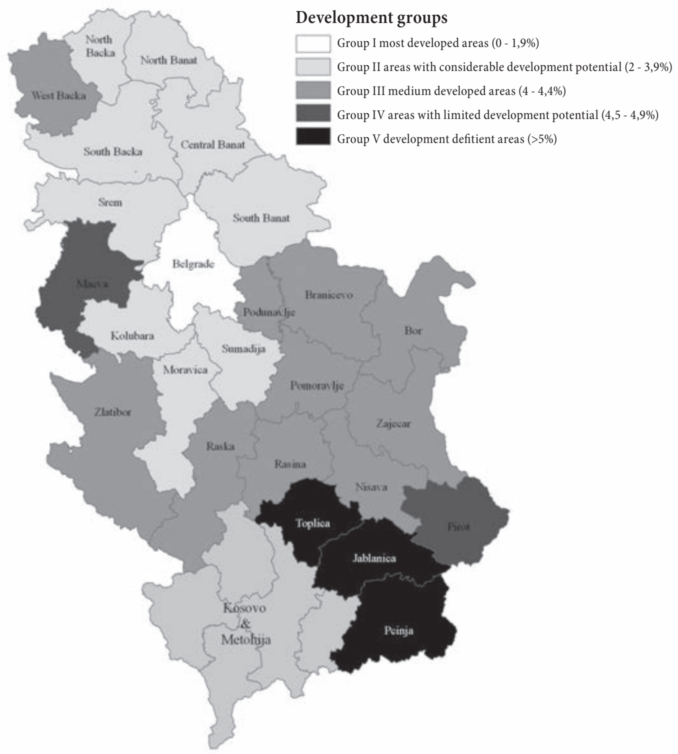
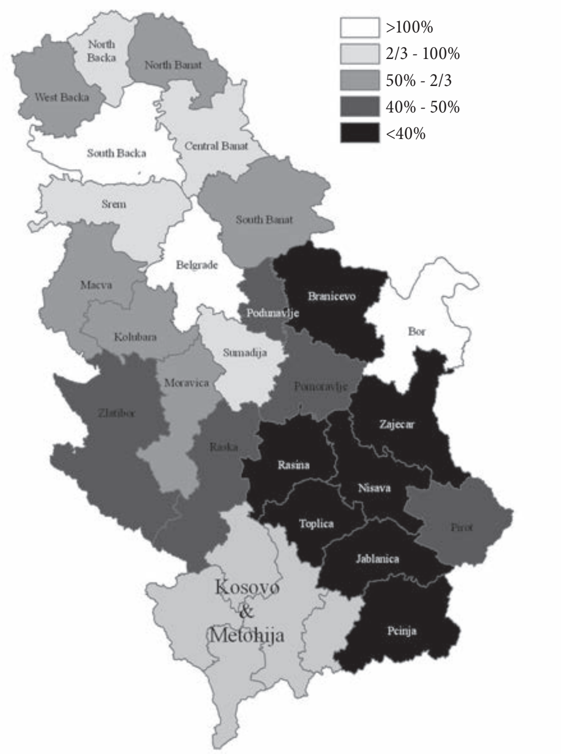


Figure 5: Regional distribution of income p.c. 2012



the business environment is a key factor that determines regional competitiveness. Levels of productivity, employment, investments, the degree of openness of an economy, as well as the availability of highly educated population are most important for the growth of competitiveness.

The analysis of regional gross domestic product per capita points not only to the degree of development, but is also an indicator of regional productivity and efficiency (see Table 10). The northern part of Serbia is more productive than the southern part, the Region of Belgrade is most productive, and the generated GDP per capita is 71.4% above the republic average, followed by the region of Vojvodina with 2.6% above the average of Serbia, while other two regions are far below the republic average.

The greatest contribution to labor productivity in 2012 was that of the Belgrade Region and the South Backa District, the total of 62%. Although GVA per employee was below the average of Serbia, the contribution of Nisava and Srem districts to overall productivity was rather significant compared to other districts owing to a larger share in total employment.

Table 10: Trend of regional productivity

Regions	GDP/capita (Serbia =100)			
	2009	2010	2011	2012
Belgrade	179.4	177.8	172.2	171.4
Vojvodina	95.2	96.8	99.5	102.6
Sumadija and Western Serbia	71.4	69.9	67.3	67.6
Southern and Eastern Serbia	63.3	63.9	63.1	63.3

Source: Author's calculations on the basis of the RSO

The regional analysis of external trade balance shows that largest shares in exports and imports were of the Region of Vojvodina (37.3% and 31.2%) and the Belgrade Region (24.7% and 46%), while the share of other two regions in exports was about 38.0%, and in imports about 22.8%. The indicator of export per capita shows that the Pirot District stands out.

The composite indicator of the level of regional competitiveness[2] for the period 2007-2012 points to:

- Large differences in levels of district competitiveness,
- The trend of declining regional disparities to the level of competitiveness: the ratio of the highest and the lowest value in 2012 was 1:7 (in 2007 1:29),
- In addition to the Region of Belgrade and the South Backa District, the most competitive districts in 2012 were Sumadija District (owing to the growth of exports and investments) and the Pirot District (owing to an enhanced level of education and the growth of exports),
- The largest improvement of the level of competitiveness was in Bor District (in relation to 2007 by 12 positions),
- Of 4 districts in 2007, Jablanica and Pcinja were still at the lowest competitiveness level,
- Regions with lowest performances are in the south of Serbia,
- All regions have development potentials, but some of them have better preconditions for attaining objectives.

Regional inequality and the middle class

Each research of transition inequality is focused on changes to income or consumption of the middle class. The middle class is a propeller of growth of every economy. The UN estimates clearly indicate that in 2050 the share of the middle class will equal almost a half of the global output [19, p. 14], by far exceeding the group of most developed countries G-7. In only ten years the share of the middle class in Europe and the US will decrease from 1/2 to less than 1/3 of the global output (from USD 1.8 bn to USD 3.2 bn in 2020).

Who belongs to the middle class? The definition of the UN and the OECD is rather broad and within the middle class subsumes everyone who earns or spends in the range of USD 10-100 a day. The UN stresses that in large states (China, India) this issue is tightly related to the process of industrialization of the state and the reason why poor states do not develop faster than rich ones. The strongest arguments are provided by the Feldstein-Horioka paradox, i.e. a long time ago detected high correlation between domestic savings and investments (the term paradox is used as the capital does not flow to underdeveloped countries although the rate of return is the highest).

The research of inequality and the status of the middle class in Europe mainly rely on similar methodological models, of which most representative ones are the descriptive and the quantile analysis, the Gini coefficient, Theil index,

2 A synthetic index that contains representative standardized indicators of productivity, exports, investments, and the level of education by districts

and standard deviation [16, p. 7]. The transition analysis of family households in Serbia is focused on the change of the economic power of households due to various economic developments. The income reflects the real economic power of households. A balanced distribution of income is consistent with the efficiency of economy in the long run. Extreme inequality in income distribution adversely affects poverty reduction and economic growth of the country [21].

By applying the OECD equivalence scale one can approximate an average household income in Serbia for the period 2006-2012 (see Figure 6). An average household income was rising constantly in the period 2006-2009, reaching its maximum in 2009, and then in the period 2009-2012 it was in constant decline, and thus in 2012 it was at the level of 2006. In 2012 an average income of family households in Serbia fell sharply, a consequence of the second recession wave of the economic crisis and an economic downturn.

How did the middle class income develop? The standardized categorization of the series of household classes includes the first four deciles of income distribution; the middle class comprises a part of distribution from the fifth to the ninth decile, while the high class relates to the part of distribution that belongs to the tenth decile.

Throughout the transition period the income distribution was balanced, as confirmed by the Gini coefficient and Theil index, as well as standard deviation of income (see Table 11). The second recession wave led to higher inequality of income distribution, whereby the rise in inequality of 2011/2010 is larger than the rise of 2012/2011.

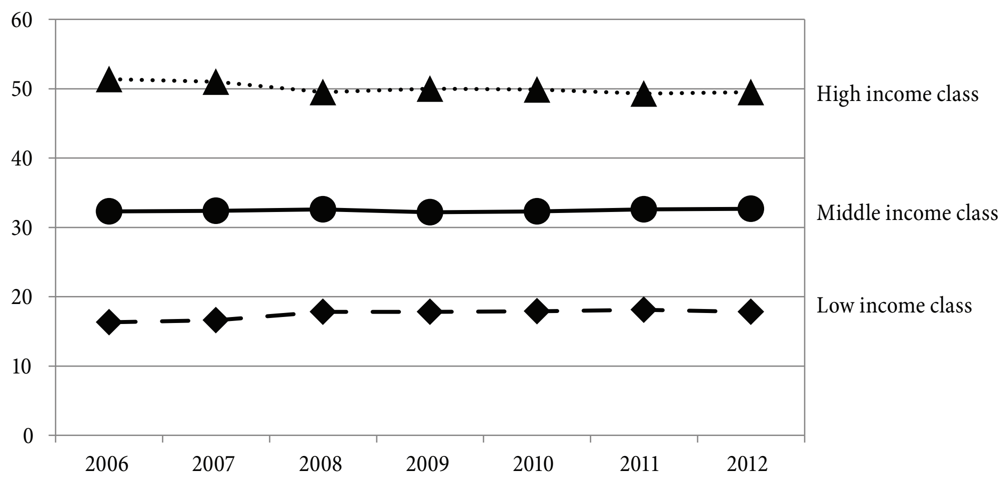
Table 11: Indicators of inequality in income distribution

	2006	2007	2008	2009	2010	2011	2012
Gini coefficient	0.353	0.338	0.301	0.300	0.296	0.299	0.301
Theil index	0.242	0.211	0.163	0.151	0.148	0.159	0.158
Standard deviation (RSD)	17167	15685	12110	11359	10735	12257	10466

Source: Author's calculations

Recession waves affected the constellation of income classes, both in Serbia and in adjacent transition countries (as best illustrated by changes to the share of income classes, and the ratio of the tenth and the first decile of income distribution). On the other hand, the analysis of the cumulative relative change of the income in the period 2008-2012 shows that in Serbia there was no redistribution of income among the three income classes. Countries in the region experience somewhat different tendencies: in Bulgaria and Romania changes were significant and related to the redistribution of income at the benefit of middle and low income class, while in Hungary a portion of the total income spilled from the high to the low income class. By analyzing the EU member countries, which have "felt" significant effects of the global economic crisis, one cannot make a clear conclusion as to changes to the

Figure 6: Changes to standardized income classes of households



Source: Author's calculations on the basis of the RSO (2008-2013).

position of economic classes. In France changes are almost non-existent; in Greece, Italy and Spain the high income class is growing stronger at the cost of a lower share of the low class, while in Germany the middle and low income classes grew stronger (see Table 12).

A very much used indicator of inequality between the richest and the poorest household groups (the ratio of the value of the tenth and the first decile) suggests that Serbia saw a moderate rise in inequality. In Bulgaria and Romania inequality in income distribution is decreasing (a negative difference in the period 2008-2012), while in Greece, Spain, and Italy inequalities increased (see Table 13).

The Gini coefficient as the indicator of the change in inequality in the period 2008-2012 did not change markedly in any of selected transition countries, except in countries that are hit hardest by the economic crisis (Spain, Greece, and Italy).

Approximation of regional inequalities and income and consumption indicates a substantial reduction of inequality for all four macro regions (see Figures 7-8). Largest inequalities in terms of both income and consumption are detected in the region of Vojvodina (Gini 0.276 and 0.305), and even larger than differences at the national level (Gini 0.267 and 0.302). Significantly lower are inequalities in the region of Belgrade (the fall in the Gini coefficient with

Table 12: Change of the share of income classes in the period 2008-2012

	Bulgaria	Hungary	Romania	Serbia	Germany	Greece	Spain	France	Italy
Low class	1.0	-1.0	1.2	0.0	0.8	-1.0	-1.8	-0.3	-0.5
Middle class	1.2	0.0	2.4	0.0	1.3	1.3	0.4	0.0	-0.2
High class	-2.1	1.0	-3.2	0.0	-1.9	1.2	1.5	0.5	0.6

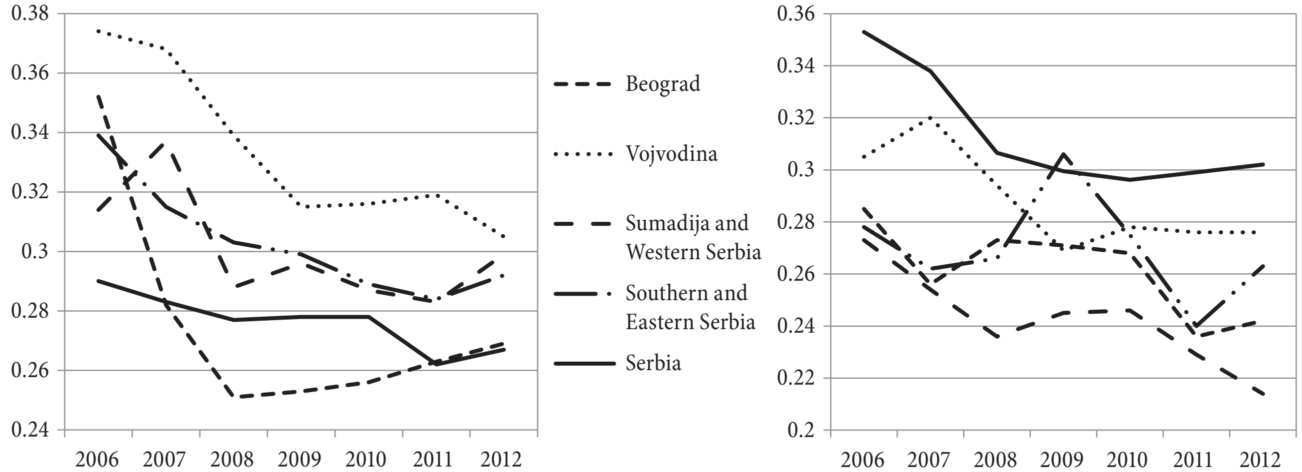
Source: Author's calculations on the basis of the Eurostat (2008-2013) and RSO (2008-2013).

Table 13: The ratio of the tenth and the first decile and Gini coefficient 2008-2012

	2008		2009		2010		2011		2012		Difference	Difference
	X:I	Gini	X:I	Gini	X:I	Gini	X:I	Gini	X:I	Gini	X/I deciles	Gini
Bulgaria	11.5	0.359	9.7	0.334	9.6	0.332	11.4	0.350	11.0	0.336	-0.4	-0.023
Hungary	5.3	0.252	5.1	0.247	4.8	0.241	5.7	0.268	6.0	0.269	0.7	0.017
Romania	12.6	0.360	12.2	0.349	10.2	0.333	10.9	0.332	11.1	0.332	-1.5	-0.028
Serbia	7.8	0.307	7.2	0.300	7.4	0.296	6.7	0.299	8.0	0.302	0.2	-0.005
Germany	8.1	0.302	7.1	0.291	7.1	0.293	7.2	0.290	6.6	0.283	-1.5	-0.019
Greece	10.6	0.334	10.6	0.331	9.8	0.329	10.9	0.335	13.9	0.343	3.4	0.009
Spain	10.6	0.319	15.7	0.330	18.8	0.344	16.1	0.345	16.5	0.350	5.9	0.031
France	7.0	0.298	7.0	0.299	7.1	0.298	7.4	0.308	7.1	0.305	0.1	0.007
Italy	8.8	0.310	8.9	0.315	9.1	0.312	10.5	0.319	10.1	0.319	1.3	0.009

Source: Author's calculations on the basis of the Eurostat (2008-2013) and RSO (2008-2013)

Figure 7-8: Regional inequalities income and consumption



Source: Author's calculations on the basis of the RSO (2006-2013).

income from 0.285 to 0.242, and with consumption from 0.352 to 0.269), which is particularly significant as in the structure of consumption in Belgrade consumption is by 25% higher and income by as much as 30% higher than the average of the Republic. The least developed region of Southeast Serbia registered the smallest fall in inequality.

Social cohesion

The concept of social inclusion presents an integral part of the social process in the EU that aims for including various factors and forms of deprivation some individuals and groups are exposed to. Social cohesion presents a society's ability to provide for all of its members the access to systems that have a crucial impact on human development (health care, education, social protection, etc.) in order to create conditions for each citizen to develop their full potential, which would result in the strengthening of social capital i.e. common welfare.

Serbia is characterized by major regional social discrepancies manifested through dimensions of social exclusion and deprivation. The analysis of the composite index of social cohesion[3] in 2012 points to the following characteristic segments of high regional heterogeneity (see Figure 9):

- Disparities at the level of Serbia by the composite index show that social cohesion of the population in the municipality of Sokobanja is four times larger than that in the municipality of Zitoradja;
- Regional disparities in disbursed earnings are very prominent (the ratio of municipalities of Lajkovac and Arilje is 2.5:1);
- An average pension is almost three times higher in Belgrade than in the municipality of Malo Crnice;
- The access to social welfare services in Uzice is 24 times more favorable than in Svrljig;
- The availability of health care services in the municipality of Krupanj is 9 times lower than in Cuprija.

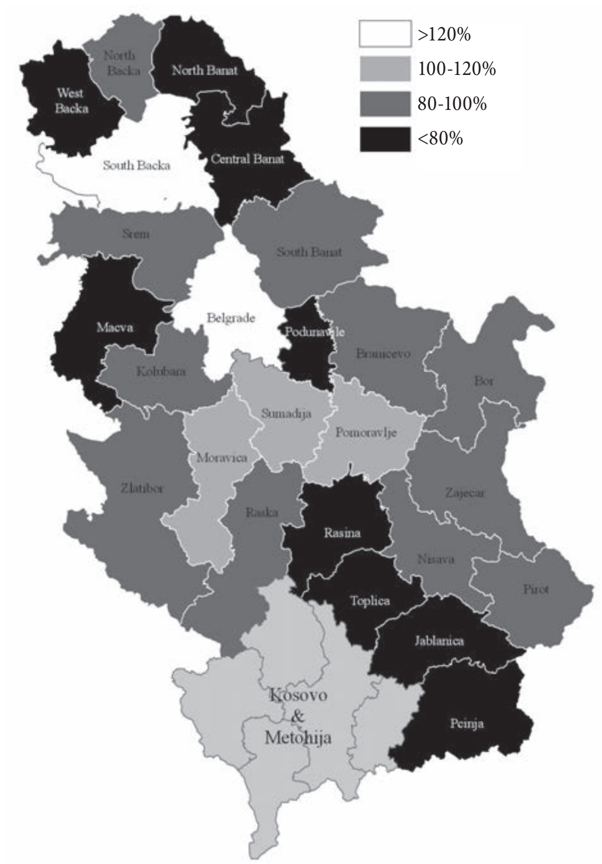
The transition regional analysis for the period 2002-2012 (see Table 14) shows that only the population of the city of Belgrade registers high, above average values of the composite index of social cohesion and the highest growth trend. Other regions register a drop in the composite index, which is particularly marked in the region of Southern and Eastern Serbia (-13%). The comparative analysis of selected dimensions of social cohesion has shown that at the territory of these districts there is a mixture of problems, such as: high unemployment, low earnings and pensions, the rise in the coefficient of economic dependence, the rise in the number of beneficiaries of social welfare benefits,

Table 14: Social cohesion index 2002-2012 (Serbia=100)

Area	2002	2008	2012
Belgrade Region	129.2	150.0	141.7
Region of Vojvodina	99.8	90.7	96.4
Region of Sumadija and Western Serbia	101.6	86.5	93.0
Region of Southern and Eastern Serbia	91.8	81.2	79.5
Districts (25)	97.1	87.1	88.9
Cities (23)	102.1	105.7	106.9
Municipalities (122)	91.6	72.9	73.5
UDA (46)	81.9	65.6	64.3

Source: Author's calculations

Figure 9: Composite index of social cohesion 2012



3 Includes 4 dimensions presented through 7 representative indicators.

and the fall in the number of newly built flats. Still, a key impact on the living conditions of individuals is that of differences as to the level of revenues.

Conclusion

Although all transition models forecast that inequality will mount, in practice it varies from country to country, depending on effects, the volume, and the speed of key transition determinants, changes to distribution of earnings, employment, growth of entrepreneurship and applied social and regional models.

Economic growth in the transition period 2001-2008 in Serbia was among the highest in Europe (an average GDP growth rate of 4.9%), but the high growth did not stem from any marked changes to the economic structure. Growth in Serbia was based on the state of low technological equipment, declining employment, and inadequately employed labor. The dynamics of structural changes since 2001 has not ensured establishment of a new industrial structure based primarily on high-tech industries that would provide qualitative growth and stronger competitiveness of foreign markets [10].

On the other hand, high economic growth was not conducive to reduction of regional and social inequalities in Serbia that have constantly been on a high level (*hypothesis 1*). The trend of regional economic concentration in 23 towns (more than 80% of the total newly created value, assets, revenues, income, employment), of which shares of cities of Belgrade and Novi Sad equaled more than 60%, determined all forms of regional and social inequalities in Serbia. The rate of poverty risk is the highest in Europe (24.3%), persons aged below 18 are most exposed to the poverty risk (30.0%), while the lowest rate of poverty risk is registered with people older than 65 (19.5%). The compact extremely undeveloped area in Serbia (25 municipalities have constantly been extremely undeveloped for more than 40 years, which equals 25% of the territory and 11% of the population) is faced with intensive processes of depopulation (over the last two decades averagely -10,000 persons a year), extremely high unemployment (more than 60%), economic backwardness (rising losses, the economic share is less than 2%). In a climate of high regional and social inequalities, macroeconomic vulnerability mounted (*hypothesis 1*).

The analysis of interdependence of the transition speed of structural reforms and inequalities clearly shows that in periods of rapid transitional reforms, regional and social inequalities increased (*hypothesis 2*). The largest positive leaps of transition EBRD indicators were registered in 2002 (0.48), 2005 (0.17), and 2007 (0.15), when inequalities were the highest. In the period 2010-2013 when no positive changes whatsoever were registered, inequalities were decreasing. What is also interesting are results of interdependence of the coefficient of efficiency of privatization, and regional and social inequalities: most developed regions had much better coefficients of privatization and much better Gini improvements and, vice versa, the least developed region of Southern and Eastern Serbia had the weakest coefficient of privatization, inequality decreased least, and it had the lowest composite index of social cohesion (see Table 15).

Economic recession only further deepened the problems in Serbian economy (in the period 2009-2012 an average GDP growth rate was at -0.7). A large decrease in aggregate demand, the decline in economic activity, and the mounting of non-liquidity of enterprises, coupled with an additional burden put on debtors through dinar depreciation, have led to the plunge of output in the first half of 2009, which also created the decrease in the number of the employed

Table 15: Interdependence of transition and regional inequality

Regions NUTS-2	BDP PPS p.c. (EU-27=100)	Coefficient of privatization (Serbia=100)	Difference in Gini consumption 2006-2012	Difference in Gini income 2006-2012	Composite index of social cohesion
Serbia	35	100.0	0.023	0.051	100.0
Belgrade	60	112.1	0.082	0.043	141.7
Vojvodina	35	112.5	0.070	0.029	96.4
Sumadija and Western Serbia	23	92.2	0.014	0.059	93.0
Southern and Eastern Serbia	21	74.7	0.047	0.015	79.5

Source: Author's calculations

and earnings, and thus in 2009 the rate of fall of -3.5% was registered. Overall labor productivity of Serbia in 2012 fell to the level of 2009. Regional inequalities in the course of recession in the majority of regions decreased, although there are differences between most developed and least developed regions (*hypothesis 3*). At the level of the state, income inequalities are larger (Gini 0.300) than inequalities with consumption that in the course of recession decreased (Gini coefficient fell from 0.277 to 0.267, and Theil index fell from 0.242 in 2006 to 0.158 in 2012). The most developed region of Belgrade in the course of recession lessened income inequalities (Gini from 0.273 to 0.242), but inequalities in consumption increased (Gini from 0.253 to 0.269). In undeveloped regions inequalities are falling (the example of Southern and Eastern Serbia where Gini of income fell from 0.306 to 0.263). These conclusions are supported by the analysis of the trend of regional extremes (extreme ranges in earnings per capita fell from 1:12 to 1: 10.7, with the unemployment rate they fell from 8.8:1 to 8.3:1, and with local budget revenues they fell from 5.5:1 to 4.5:1, etc.).

The analysis of interdependence of transition effects and regional-social inequality has its demographic dimension as well, since changes to the age structure of the population affect redistribution of consumption through the raising of the share of public consumption on pensions and health care for the elderly, i.e. reduction of public consumption for working age population and children. The raising of the age limit of the population substantially increases challenges in the definition of the new social model of the EU. Over the past 50 years life expectancy lengthened by 15 years, which directly impacts on the health care systems [21]. The focus of the new social model of the EU will be on the development of a more inclusive labor market, whereby the priority focus will be on the young, women, and the elderly.

Transition development of regional and social inequalities in Serbia in the following period will depend primarily on: (a) the speed of transition reforms (post-privatization restructuring, structural reforms, investments), (b) educational reforms [3, pp. 83-84], and (c) regional models of endogenous growth [4, p. 38] and social inclusion. The focus of structural reforms will certainly be on areas where the degree of inclusion gap is the largest: institutional reforms [3, p. 90], reforms on the labor market, and reforms in education [7, p. 40], [17, p. 12].

By changing the regional economic structure, the state forms its future economic development. Over the previous period there has been no anticipated reindustrialization, the growth of output of tradable goods, and economic recovery of Serbian economy. Not only that a more efficient economic structure with new, competitive products has not been established, but products that were produced some twenty years ago are no longer produced. The target of regional interventions should be:

- Reduction of regional disparities,
- Structural reforms in regions with the focus on highly productive export industrial products,
- Regional economic diversification so as to improve regions' resistance to external shocks,
- Greater social cohesion, and improvement of the quality of life,
- Maintenance of cultural and social diversity.

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Edvard A. Jakopin

is Assistant of Minister of Regional Development and Local Self-Government, Head of the Department for Strategic Analysis and Development Research. During the period 2001-2011 he was Director of the Republic Development Bureau. He obtained all the academic titles (BSc, MSc, PhD) at the Faculty of Economics in Belgrade. He has written numerous scientific papers in the field of macroeconomics, economic development planning, structural changes, competitiveness and regional modeling. He has been the project team leader in various research projects and studies: the National Strategy for Economic Development of Serbia 2006-2012, the Strategy for Regional Development of the Republic of Serbia 2007-2012, Industrial Policy of Serbia 2011-2020, etc. He is national representative at the European Association of Development Research and Training Institutes, and since 2004 he has been a member of the EADI Executive Board. He is a member of the Board of the Serbian Association of Economists and an associate member of the Scientific Society of Economists.

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Goran Petković

University of Belgrade
Faculty of Economics
Department of Business Economics and Management

Stipe Lovreta

University of Belgrade
Faculty of Economics
Department of Business Economics and Management

Renata Pindžo

Singidunum University
Faculty of Economics
Finance and Administration (FEFA)
Belgrade

CONSUMER PROTECTION POLICY IN SERBIA IN THE AREAS OF TOURISM AND COMMERCE

Politika zaštite potrošača u Srbiji u oblastima turizma i trgovine

Abstract

Despite the dilemma of the state or the market, some market relations, such as consumer protection, are traditionally regulated by state intervention. Modern tendencies in the development of market processes, as well as changes in culture and technology, create the need for improving the existing public policy. This particularly applies to the area of consumer protection, which is in the focus of this paper. We analyse, in addition to traditional travel packages, the so-called dynamic packaging of tourism services in modern online market. However, the traditional package holidays in new market conditions require a new regulation of consumer protection, to what the whole world witnessed during the recent volcanic eruption and/or revolutionary events in the Middle East. Still, in transition countries, such as Serbia, sophisticated advancement of certain market regulation segments cannot be effective without an effective implementation of the basic regulation, such as in this case, the Bankruptcy Law.

Key words: *consumer protection, commerce, tourism, travel package, travel guarantee, insurance*

Sažetak

Uprkos dilemi država ili tržište, neki tržišni odnosi, kao što je zaštita potrošača, tradicionalno su regulisani državnom intervencijom. Savremene tendencije u razvoju tržišnih odnosa, kao i tehnološke i kulturne promene, uzrokuju potrebu za unapređenjem postojeće državne politike. Kao uže područje zaštite potrošača, analizirana je zaštita putnika koji koriste paket aranžmane. Pored tradicionalnih paket aranžmana, u savremenoj *online* turističkoj ponudi se pojavljuje tzv. dinamičko pakovanje turističkih usluga. Međutim, i tradicionalni paket aranžmani u novim uslovima zahtevaju nova rešenja u regulisanju zaštite potrošača, u šta se ceo svet uverio tokom nedavne vulkanske erupcije ili revolucionarnih promena na Bliskom istoku. Ipak, u tranzicionim zemljama, kao što je Srbija, sofisticirana unapređenja pojedinih segmenata tržišne regulacije ne mogu biti efikasna bez efikasne primene osnovnih zakona, kao što je u ovom slučaju, stečajno zakonodavstvo.

Ključne reči: *zaštita potrošača, trgovina, turizam, paket aranžman, garancije putovanja, osiguranje*

Consumer protection as part of the public policy in tourism and commerce

Again, along with the escalation of the economic crisis on a global scale "the market vs. the state" issue has gained importance, although this question is important even if the market is functioning well [30, p. 11]. It can be said that the dilemma between government intervention and market forces is actually a false dilemma. This attitude may arise after reviewing the theoretical literature or based on experiences in the implementation of the economic policies of developed countries. On the one hand, the efficient management of trade flows can be entrusted only to the market and competition between retailers in the battle for consumers [28]. On the other hand, government intervention is necessary, but as a factor correcting market mechanism, directing its actions. This is especially important during periods of intense modernization, change and increased competition. Then, there may be a weakening market transparency endangering the interests of consumers [18].

There are a growing number of interested stakeholders at the various levels of marketing channel for the development of the mediators in the modern economy. The point where an integrated management process at the macro and micro level starts and ends up is the consumer [18]. This applies to intermediaries (traders) in goods and services, including tourism services. If we take into account the interests of different stakeholders, from consumers through intermediaries, manufacturers, service providers, and various agents that stimulate transactions, it is logical to assume that among them there are potential conflicts, especially [15]:

- Between different organizational institutions of retailing;
- Between the retail methods;
- Between retailers and consumers;
- Between retailers and their suppliers, and
- Cultural conflicts and conflicts related to the environment.

Listed conflicts appear in the trade of goods and (tourism) services and cause conflicts between corporate and public policy. In the new conditions of global and unpredictable market, conflicts are manifested in a special way and special content. The complexity of disputes increasingly creates the need to respect the interests of the growing number of stakeholders, both at the corporate and the state level. Accelerated concentration and fierce competition caused conflict behavior in the following segments: the tendency for increasing market share to unprecedented proportion, striving for a privileged position among the members of the marketing channel, and effort to pursue the concentration in order to place small traders and small trade formats in a subordinate position, up to the extinction.

The retail trade development demonstrates two very important trends. First, when it comes to retail goods, there is a continuous and strong growth of large-scale retail chains simultaneously in a number of different national markets. On the basis of growth, purchasing power of retail chains strengthens, but on the same basis the distance between retail top management from the customers is rising. This dissociation from market requests more intense and more meaningful fight for customers in order to defend market position and achieved level of a turnover that is necessary for grown company to survive with high fixed costs [14, p. 118]. Second, when it comes to sales of (tourism) services, retailers remain fragmented and controlled by suppliers, often wholesalers (tour operators). The battle for customers is becoming imperative in the fragmented retail, largely fought at the local level and often at the level of retail formats. A number of micro-marketing activities and the emergence of multi-channel marketing are increasingly coming to the fore [17, p. 213].

Modern marketing shifts the focus from simple sale to a full accomplishment of the customer's needs and expectations. Thus, the focus is not only on how to sell a product or tourist services, but increasingly on how to predict and fulfill consumer needs [16, p. 124]. Marketing is evolving from traditional mass marketing aimed at an average buyer to the specific offer that is directed towards the individual customer. The above evolution gives rise to the concept of CRM, aimed at attracting and retaining customers, as well as fostering good relations with them. Individualized relationship with customers is expanding as well as the individual treatment of all other key stakeholders. This approach produces a rich database and enables the retailers of goods and tourism services to offer personalized packages [3].

Customers actively participate in the new products and services creation, so creating new value, and the purchase becomes much more efficient and cost-effective [9]. With the development of CRM concepts, new questions in the field of legal and ethical standards arise. It becomes very challenging to formulate an answer to the question whether retailer or travel agency treats all customers equally, putting significant effort to provide the best service to some customers. This is because it is known that some consumers attach greater importance and some less. Distinct, individual clients' treatment opens some questions and dilemmas in developing long-term relationships with customers and other stakeholders [21].

The latest trend exposed, i.e. individual and differentiated treatment of customers, assures us that the challenges of the free market functioning are becoming more and more complex. The role of public policy in market relations regulation, particularly in consumer protection, remains very important in addition to the traditional areas of regulation, such as competition, support to (small) companies, regulation of public procurement, technical regulations, and other aspects of the wholesale and retail trade [13, pp. 469-481]. Consumer protection has a long tradition and is considered to be regulated area of market relations. However, market, competition and technology development cause that areas that are seemingly long settled, request a renewed attention. In the following parts of this paper, the analysis will be focused on the protection of consumers of travel packages.

Consumer protection in tourism: Case studies

Several cases in Serbian and European tourism practice imposed the insurance of travel packages as one of the very important questions that shape relationships between agencies and passengers in contemporary tourism. Let us remind the events of the volcanic eruption in Iceland, as well as two cases of business failure of local tour operators.

From Wednesday14 to Wednesday 21 of April 2010, the ashes thrown into the air by volcanic eruption in Iceland caused a collapse in European air space. During this week, about 100,000 flights were cancelled. Over seven million passengers missed scheduled flights. Total damage to the global GDP was about USD 4.7 billion, of which only the airline industry and tourism had damage over USD 2.6 billion [22, p. 2].

The other case happened at the beginning of July 2010, when Conte, tour operator from Belgrade, collapsed, leaving its' 92 passengers at the airport in Taba, Egypt, but also leaving many others who did not begin vacation without their advance payment. "The people who have paid for vacation packages to the travel agency Conte will not go on a planned vacation. A group of 20 people yesterday did not travel to Crete as they found out at the airport that they are not on the passenger list for the flight" [29]. After the intervention of the Embassy of Serbia in Cairo, Egypt hoteliers validated issued vouchers and enable passengers to be accommodated in rooms and continue vacations. Agency Conte, however, is closed with a loss of license for further work [27].

An article in the media of 21 August 2012, began with the following sentence: "JAT aircraft received a total of 137 passengers, that could not return to Serbia due to the unpaid debt of the agency Trinity travel to the Egyptian airliner. Visibly gloomy, they told reporters that some of them were thrown out of hotel rooms, and while waiting to fly to Belgrade, had to cope alone for food and water" [1]. The day before, on August 20, Takovo insurance company announced the official press release and duly informed the passengers that they are collecting claims for the payment of damages, up to the total sum of EUR 25,000, which is secured sum for Trinity travel agency Belgrade [31].

The negative consequences of these events for involved parties were numerous. On the global level, the damage suffered by passengers, airlines, hoteliers and insurers, were enormous. Trinity agency and Conte agency have lost licenses, which prevents from now on, their owners and/or managers the right to continue engagement in any travel business in Serbia. The owners of the said travel agencies were imprisoned and against them were filed criminal charges [2]. Takovo insurance company withdrew from travel agency insurance business. A number of passengers have been damaged in various ways.

Those who have traveled, experienced at the end of their holiday stress being expelled out from the hotel and faced with uncertain returns. Those who have not traveled, had neither summer holiday, nor most of their money paid in advance. Some travel agencies, that subcontracted air tickets through insolvent tour operators, needed to pay for the second time for transportation of their passengers, and all other agencies have suffered stress that reflected in their work. All passengers, after these events went on holiday in fear. The state budget paid for non-commercial prices for repatriation of Serbian citizens to domestic air carrier, and the carrier was not very happy to organize non-commercial flight in high season. Lawmakers once again faced the requirement that regulations have to be adapted so that the risk of tourist trips becomes adequately covered. The media began to take a special chronicle of passenger complaints and compensation [12].

Regulations governing the travelling consumer protection rights

The international community and states try with different acts to regulate the area of organized travelling and the protection of participants in these activities. The World Tourism Organization of the United Nations General Assembly, in Santiago de Chile, in October 1999, two years after Istanbul meeting where draft document was presented and after careful harmonization process, adopted the Global Code of Ethics in Tourism [34] Resolution A/RES/406 (XIII). This document contains ten principles and it is not binding. However, states can voluntarily comply with generally accepted and reasonable principles.

Global code of ethics in tourism and its articles 6, 7 and 8, in particular, provide a basis for the protection of passengers' rights [35]. Article 6 regulates the obligations of stakeholders in the organization of tourist trips including, among other things, the obligation of the country of origin, the host country, and professional organizations to ensure that the necessary mechanisms are in place for the repatriation of tourists. The same article obliges professionals (tour operators, for example) to honestly inform visitors of the situation in the target country, the conditions of travel, as well as to provide financial compensation in the event of unilateral termination of the contract. Article 7 regulates people's right to leisure and travel, including the right of workers in the framework of employment rights, and the right of persons with disabilities, etc. Article 8 regulates the right of tourists to freedom of movement, access to different places without any discrimination, like the people of the host country, along with the simplification of visa and other administrative regimes. The signing of this document by the representatives of the government and the private sector is constant and is one of the most important activities of the UN Secretary General of the WTO, dr. *Taleb Rifai* [11].

In an effort to develop a more operational instrument for the protection of passengers' rights, the UN World Tourism Organization has decided to form a working team composed of delegates from different countries [36]. The team is preparing a new operational legal instrument for the protection of passengers' rights in case of cancelled travel. It is difficult to formulate multilateral document of this type which could provide financial obligations of the signatory countries governments, so there are difficulties in formulating a document with regard to the obligation of the national budgets. Working team identified four options: a) binding international convention, b) non-binding guidelines, c) two separate instruments d) a single instrument combining a binding and a non-binding part [36]. The aim of the group is to formulate a document that will be able to provide a minimum level of coverage for travelers and tour operators. The group's task is to examine the existing regulations, find a link between them and propose a possible upgrade. Due to the presence of a large number of members from Europe, on the EC meeting in Belgrade it was particularly stressed the need to comply with European directives [25].

The European Union is even in 1990 adopted the Directive on package travel, package holidays and package cruise, which initiated harmonization of the legislation in member states in this area [5]. Article 6 provides that the tour operator or retailer (agency) compensate passengers in case of canceled tour, with two exceptions: the number of travelers below minimum number to travel organized, and *Force Majeure* (as was the case of volcanic eruptions). Article 7 of the Directive states that tour operators and retailers are required to provide proof of sufficient funds to refund the money paid and the repatriation of passengers in the event of insolvency.

Directive, during its validity period, solved many of the incidents, but the development of tourism industry in the twenty years has caused the need to update and modernize, especially after the advent of Internet sales and the emergence of the so-called "dynamic packages". The European Commission has adopted in July 2013 and sent to the European Council a new draft directive, after the reconciliation that began 2009, which has led to a version that protects travelers (and other stakeholders) whose participation in the new type of the travel arrangements is clearly growing [7]. According to the authors of proposal, previous directive is fully protecting only pre-arranged traditional package holidays, whose participation in trade now is only 23%, partially protects users of the arrangements where the agency at a single point of sale "packs the package" for the customer (share in turnover 17%) and does not protect passengers in the case of independent travel arrangements (54%) or in the case of combinations arranged via linked websites (6%).

The text of the new Directive is in the process of the European Council and upon its completion, it is expected to be implemented in the laws of the Member States. Proposal of the Directive may resolve a part of the problems already present in Serbian tourism [7]. This primarily refers to the obligation of the Bidder, provided in Article 4 for the required information, regardless of whether it is a pre-arranged package tour or a package that the customer individually assembled. Among the required information should be highlighted: the basic characteristics of tourism services (destination, category of accommodation, visits and excursions included in the price, but also the language in which services are provided, access for people with limited mobility, etc.), also, the name and address of the organizer and seller of the services, total price, payment method, the minimum number of passengers, information on visas and confirmation that it is a package of services within the meaning of this Directive.

Article 11 regulates situations in which due to unforeseen circumstances it is not possible to organize the passenger service as agreed or return to the starting destination. Tour operator is obliged to offer suitable alternative services in cases where the planned return is not possible, even to bear the costs of their stay up to three nights and up to the amount of EUR 100, until alternative return is not provided.

Furthermore, Article 15 stipulates that the only tour operator or agency (retailer), which participates in the formation of assisted travel arrangements, shall provide guarantee in case of insolvency in order to refund amounts paid in advance or to repatriate passengers. Directives from 1990 predicted this requirement for tour operators and agencies, which proved to be double burden. On the other hand, the need to protect passengers in the so-called "assisted travel arrangements", in which the agent advises passengers, was not recognized. Assisted travel arrangements (*Potpomognuti putni aranžmani*) are different from the packages because the agent in its office or via the Internet, helps the traveler to combine services and directs him/her to the various providers of individual service contracts, as set out in paragraph (9) in the preamble this Directive. The translation in brackets is taken from an official document of the European Parliament in the Croatian language, which gives the draft opinion on this directive [20]. According to proposed Directive, the agent in assisted travel arrangements acts as a tour operator, and therefore, as responsible, assumes liability stemming from that action. Article 17 states information that must be disclosed to the passenger when combining assisted travel arrangements. Directive brings even more simplifications and significant improvements, but those are not in the focus of this paper. Just to mention, less obligations in printing of various brochures (unnecessary cost in terms of online business) or leaving business travel out from guarantees (since insurance relationships are already based on the contractual relations between the two companies).

However, a key problem that Serbian tourists and industry stakeholders are faced with, is regulated by the previously Directive 90/314/EEC. It is the risk of insolvency. In such a situation, usually, tour operator takes money from passengers in advance and do not meet its obligations to its suppliers, among which are the most sensitive airlines and hoteliers. When risk estimate of further cooperation with such organizer is too high, carriers refuse to accept passengers for two reasons. One is to put pressure on the tour operator to make the payment, and the other is to reduce the risk of new cost if the payment fails. In such a situation, as we have already shown, Article 6 of the Directive envisages compensation and Article 7 sufficient evidence of security for the refund of money paid over. How is it regulated by Serbian legislation?

Law on tourism since 2005, as well as after latest changes, has regulated the protection of consumers introducing travel guarantees [41]. Article 52 of this Law stipulates that two types of travel guarantees are condition for obtaining the tour operator's license. First, in case of insolvency, tour operator must have either an insurance policy or a bank guarantee. Second, in case of damages due to failure to meet the obligations to travelers fully or partially, tour operator must have one of the three optional guarantees, i.e. insurance policy, bank guarantee or cash deposit. Article 53 of this Law regulates the area covered by the two guarantees. Guarantee for insolvency covers the cost of emergency accommodation, food and repatriation of passengers. Guarantee in case of any damage covers those damages arising from unmet, partially met or inadequately fulfilled contractual obligations (e.g., delay, loss of connection flight, etc.) Also, this article recognizes guarantee beneficiaries: travelers and those who, following the prescribed procedure, bear the costs covered by the guarantee (repatriation, e.g.). Furthermore, the same article refers to the bylaw acts that in details regulate this area.

Bylaw that in details regulates travel guarantees has been developed from 2009 and still, it is to be improved. The current version is the result of a compromise and must undergo some changes [23]. Travel guarantees in case of insolvency are regulated by Articles 2-5. The most challenging area, the amount of travel guarantees, regulated by Article 5, is graded and correlated with turnover: up to EUR 50,000 of revenue, insured sum is EUR 25,000, up to EUR 100,000 insured sum is EUR 40,000, and so on, to the last step where for the annual turnover of more than EUR 1,000,000, insured amount is EUR 300,000. This article has provoked great controversy between lawmakers, on one side and business associations and agencies, on the other side. Business community requested relaxation of this article, arguing that high insurance premiums will turn off the small tour operators and increase unemployment.

Not neglecting the interests of the industry, the real problems actually arise from unprotected interests of consumers, and partially, of the state. Consumers are faced with a number of problems. In some cases, insurance companies are avoiding the activation of an insurance policy (the case of Conte), referring to the statements of authorized representatives in the media that "the criminal charges have been filed against the responsible person on suspicion of cheating and damaging the tourists" [27]. According to the Law of Obligations, Art. 920, in terms of intent or fraud, preclusion of the insurer's obligations arise. With reference to this provision, insurers postpone any payments until it is unambiguously confirmed that it is not a crime of intentional fraud of passengers. Bearing in mind the length of the investigation and court proceedings in Serbia, it is almost like release of the insurer from liability.

In some cases, insurance companies have accepted to activate policy, regardless of similar allegations of fraud in the media (the case of Trinity). The reason was more to protect the image of the insurance company as a solid insurer, but a clear legal situation. However, a problem of the amount of insurance emerged. Small agencies, that suddenly in a single season make huge turnover, remain insured for the amount that has to do with last year's turnover (the insurance amount of EUR 25,000). This problem is solved for the newly formed agency, with no balance from the previous year, which compulsory carries a policy of EUR 100,000 (which may be barrier to the establishment of new agencies). For existing small agency, still there is no solution, so that insured amount, however, is hardly enough to cover one airplane flight (e.g. Hurghada – Belgrade). It happened, however, that risky agency sent by plane several groups of tourists. In these planes, some other tour operators were able to book a certain number of seats, as subcontractors, paying in advance partially or fully to risky agency their obligations. Of course, there are also travelers who partially or completely fulfilled theirs commitment to high-risk agency. They remain without a trip and their money at a time when the agency terminates its business. The first problem, the activation policy is somehow resolved with the latest amendments of the Rulebook. Article 12 envisages that the policy triggers the one who bears the cost of default for insured agencies (traveler or someone who, for example, hire a plane), and the insolvency is determined by the act of any of the several state authorities, thus providing the basis for the activation policy. When all damaged persons, however, dutifully file their claims and the policy is activated, limited amount is proportionally divided, so that covers sometimes less than 10% of the real costs.

Comparative analysis of the experiences in travel guarantees

Knowing the problems with liability insurance in travel business, along with the efforts of the ministry in charge of tourism, from 2011, this problem has occupied more and more the attention of the travel agencies. YUTA, the largest professional association of travel agencies in Serbia, in cooperation with the European Association of Tourist Agencies, ECTA, began to explore the possibility of forming a guarantee fund. In fact, after initial resistance to raising the amount of the guarantee, the travel organizers alone, realized that confidence of tourists in all agencies has been declining since citizens were exposed to frequent and deterrent news about the problems that domestic tourists are faced with in distant destinations.

The Ministry itself has formed a working group, supported by a prominent German expert in this field, Professor *Wolfgang Richter*. One of the first steps was to do a comparative analysis of the types of travel guarantees in different countries. A cross-country overview of instruments made on the basis of preliminary material of the working group is presented in Table 1.

Table 1: Overview of the guarantee instruments over the countries

Country	Authority	Type of instrument			
		Insurance	Bank guarantee	Deposit	Guarantee fund
Netherlands	Authority for Consumers and Markets (ACM)				+
Denmark	Travel Guarantee Fund				+
Italy	Department for Development and Competitiveness of Tourism at the Prime Minister's Office				+
Swiss	The Fund Administrator	+			+
France	Financial Guarantee Supplier	+			+
Great Britain	UK Civil Aviation Authority and Committees approved by BIS (Department of Business, Innovation and Skills)	+			+
Norway	The Fund Administrator		+		+
Austria	Federal Ministry of Economy, Family and Youth	+	+		
Croatia	State Inspectorate	+	+		+
Sweden	The Legal, Financial and Administrative Services Agency	+	+		
Spain	DG Tourism of every Region	+	+	+	
Slovenia	Chamber of Tourism and Catering within Chamber of Commerce and Industry of Slovenia	+	+		
Slovakia	Slovak Trade Inspection / state supervisory body	+	+		
Romania	Ministry of Tourism	+			
Poland	Regional Marshall Offices	+	+		
Latvia	Consumer Rights Protection Centre	+	+		
Ireland	Commission for Aviation Regulation and the National Consumer Agency	+	+	+	
Hungary	Hungarian Trade Licensing Office	+	+	+	
Greece	Greek National Tourism Organization (GNTO)	+	+		
Germany	Local competent Trade Office	+	+		
Finland	Finnish Consumer Agency	+	+		
Cyprus	ACTA (Association of Cyprus Travel Agents) and Ministry of Commerce, Industry and Tourism	+	+		
Bulgaria	Ministry of Economy, Energy and Tourism	+			
Belgium	Belgian Federation Ministry of Economy	+			
Czech Republic	Ministry for Regional Development (in charge of tourism)	+			
Malta	Malta Tourism Authority	–			

Source: [38]

Prevailing number, 21 of 26 surveyed countries, require agencies to be insured from liability in operations [6]. In 15 countries, bank guarantees are required, in a way that in 14 cases a combination of the insurance policies and bank guarantees exists, and only in the case of Norway, the bank guarantee is combined with the guarantee fund. Only in three cases, holding of cash deposits is compulsory, while in the eight most developed countries (Scandinavia, Great Britain, Italy, etc.), there is a guarantee fund to cover the costs of damaged passengers. Serbian Law on Tourism defines precisely the most common combination, i.e., insurance policy or bank guarantee, which the tour operator shall obtain during the licensing procedure and maintain all the time. In addition, when it comes to guarantee for damages, the agency, instead of the two mentioned instruments, may choose cash deposit. Despite the prescribed possibilities, since 2010 there have been no cash deposits as a travel guarantee, and only in one case a bank guarantee was obtained. So, all other travel guarantees were insurance policies.

Travel guarantee amount varies by country. In some countries, such as Great Britain, the guarantee is relatively low, starting from GBP 6,000 (approximately EUR 7,000) as a minimal payment to the Guarantee Fund for the new agency. Over time, amount of payment declines, but it is accumulated in the Guarantee Fund. Typically, in such situations, there is another restriction – a new agency in UK cannot make turnover more than GBP 40,000, which is to say that from the outset premiums 15% of its risk is covered. In Greece, the insurance premiums are low (about EUR 11,000) and there are no limits of turnover. However, small agencies usually deliver domestic services so that risks are lower. In some countries, the prescribed amounts of insurance are fixed regardless of the size of the agency and may be relatively high (about EUR 120,000 in Spain) or a bit softer (EUR 50,000 in Romania). In most countries, however, the amount of the guarantee depends on the size of the traffic agency and varies from EUR 4,500 (Poland), EUR 10,000 (Austria) to EUR 30,000 (Norway) for small agencies.

In almost all countries guaranteed amount depends on the amount of turnover. Very often, the sum insured is directly expressed as a percentage of turnover. This percentage also, may be prescribed to determine the premium payments (2-3% of turnover), or to determine the minimal percentage of turnover that has to be ensured. Thus, for example, in Slovakia it is necessary to insure at least 25% of turnover, while in Belgium the obligation to ensure that the amount of 100% of turnover from last year.

A large number of different insurance systems have similar disadvantages:

- Travel guarantee level is based on the last year turnover. Germany has solved this lag between last year turnover and current insurance by deciding to introduce compulsory insurance premiums ranging up to 0.28% of turnover.
- New agencies may, thanks to the rapid growth, expose to a risk both travelers and insurers. Therefore, some countries, such as Great Britain, introduced constraints on growth.
- Large agencies that come to the insolvency problem may jeopardize the insurance companies. This applies particularly to large markets in which giant tour operators are generating turnover of several billion EUR. Therefore in Germany, there is the upper limit of insurance to EUR 110 million, while insurer may require from the insured agencies even additional deposits.
- Different types of arrangements cause different levels of risk. That is why some countries have introduced special insurance for tour operators that hire charter flights. This practice exists in Hungary, where a large tour operator must insure 20% of turnover from the previous year, a minimum of EUR 60,000 if it arranges charter flights. More stringent rules apply in Austria, where tour operator with charter flights must cover with warranty 10% of the turnover, but at least EUR 363,000. From this harsh demand were partially spared only tour operators that occasionally "rise" charter flights and prepay the full amount of flight to carriers.

One of the biggest disadvantages of a large number of national regulations on travel guarantees is the rigidity. In fact, it is necessary to bear in mind that the insurance of liability is typical business contract that should be based on mutual risk assessment. Prescribing the sum or percentage of the insurance by the legislator introduces an element of arbitrariness in the contractual relationship. In the economies with developed market and efficient judicial mechanisms, efficient bankruptcy and liquidation procedures, insurance companies and banks normally take this set of standards as a minimum. In individual cases, they are contracting with the insured tour operators even stricter insurance requirements. Therefore, insurance services are more expensive, the price of the packaged travel arrangement is slightly higher, but the security is also on higher level. And it's not just the coverage of the passengers which is the ultimate goal. In fact, the higher is the security for the manager of insured agency (business hedge), the same is that of the providers of guarantees, i.e. insurers, banks and guarantee funds.

Finally, the debate on covering damages caused by liability from operations generally flows in two directions. When it comes to *Force Majeure*, initial total reluctance of insurers to cover unexpected expenses gives way to a reasonable division of risk. Pressure is coming from two directions: public opinion and lawmakers. So, in a crisis situation with the volcanic ash, at the beginning, some of the UK insurers even refused to cover travelers' personal insurance policies (Tesco, Cook, etc.), while others (Marks & Spencer, HBSC, John Lewis, etc.) accepted it [33]. Yet, general attitude during the eruption in New Zealand, two years later, was that the lesson had not been learned, and situation repeated like in 2010, when the travelers, tour operators and hoteliers themselves bore their risks that default insurance did not cover [8]. However, tour operators are covered by their travel guarantee and the guarantors trying to comply with their policyholders are suffering financial pressures. Thus, the British Trust for ensuring travel agents (ATTF – Air Travel Trust Fund), recorded loss in 2010 in the amount of GBP 31.8 million and 2011 as much as GBP 42.3 million. The reason was the failure of a large number of the tour operators (41 in 2011 alone), caused primarily by the revolution in the Middle East and previous problems with volcanic ash [37]. And, that leads to another direction of discussion about travel guarantees, which refers to the risk of insolvency.

Insolvency of the tour operators

Solvency (of banks) is the ability to pay mature liabilities, whereas it is important that there is a sufficient volume of high-quality assets that can cover total liabilities, regardless of when such obligations are yet to be paid [10, p. 850]. Insolvency, in general, occurs when an individual or an organization is unable to meet its financial obligations to the creditor or creditors when obligations are due. The term insolvency occasionally appears in the laws of Serbia, mostly as taken from foreign literature and regulations, which already establishes an indirect relationship with the local regulations in this area. Listing the reasons for the bankruptcy proceedings, legislators in Serbia rather than insolvency introduces the concept of permanent disability for payments, threatening disability for payments and over-indebtedness, in the Art. 11 of the Bankruptcy Law [40].

Permanent disability for payments means that the debtor does not pay the due obligations within 45 days or suspend all payments within 30 days. Threatening disability for payments means that the debtor makes it probable that the existing financial obligations will not be fulfilled. The very notion of threatening disability for payments, as a reason for bankruptcy, introduces subjectivity into the realm of the bankruptcy proceedings. Additional problems come with the over-indebtedness. For the tour operators, which tend to have a disproportionately small property in relation to the turnover, almost any delay in the payment of the liability might automatically be treated as a reason for bankruptcy, according to law. Namely, since the criteria are laid down so sharply, in the Serbian economy characterized by a decrease in business activity, insolvency, business losses and delay in settlement of obligations, the major part of the companies would be eligible for the opening of bankruptcy [19]. In such circumstances, it is almost safe to predict that the opening of bankruptcy proceedings is the exception rather than the rule. This is exactly what has happened with the trip organizers, where the crisis manifested in some indicators always before the bankruptcy proceedings, but only after the outbreak of the crisis in public, bankruptcy was subsequently launched. In such situations, without initiated bankruptcy proceedings, the activation of guarantees in the cases of Serbian travel agencies is quite difficult. What is the case in other countries?

German Civil Code in its article 651 that contains sections starting from (a) through (m), regulates the relations of parties involved in the implementation of package tours, as well as passengers, [4, p. 1600]. For this occasion, section (k) is of particular interest, which regulates travel insurance. Tour operator shall ensure that passengers reimburse the price paid or return to place of commencement of travel "in the event of insolvency or the filing of the petition to open bankruptcy proceedings against the assets of tour operator." Name of the contract is the Contract on insurance of clients' money. Furthermore it is said, in order to meet these obligations, that "tour operator is obliged to provide the traveler directly exercising the right to insurer clients money and also prove the handover of certificates issued or provided by the insurer (an insurance policy)." If an intermediary agency delivers proof of insurance to a traveler, this agency is required to check the validity of this certificate for the entire period of the last trip.

This document, certificate of insurance, allows passengers that, using it as a kind of security, easily "pay" transport to the place of departure from distant destinations, even individually, if the reaction of the insurance company or other institution fails. In practice, however, rarely comes to the individual actions of passengers on package tours. Issuer of this guarantee knows that the individual arrangements (accommodation or return) are rather more expensive than when the same services are being organized for the entire group. Therefore, they are taking advantage of an efficient bankruptcy procedure. At their request, the court shall in a very short period of time (which is measured by hours) designate bankruptcy trustee who immediately takes office. Respecting its obligation to operate in the interest of the company whose bankruptcy trustee, he/she immediately responds to the request of the insurer and usually hires other tour operators, looking for the cheapest way to accommodate and/or return travelers. Detail notes on the new accommodation/transport he/she urgently sends to passengers, often before they become aware that their tour operator is in the problem. Emerging costs of accommodation/transportation shall be borne by the insurer, which in this way ensures that costs are far lower than if the passengers solve it individually by purchasing these services.

Even according to German regulations, amounts to be paid to passengers may be reduced in relation to the amount paid to the tour operator. This happens if the reported damage exceeds the maximum insured sum of EUR 110 million. However, up to this amount, the insurance companies are required to pay the full amount of money to insured clients. This mechanism imposes the obligation of insurers to be very careful dealing with risk assessment of each insured tour operator.

Therefore, in general terms of insurance, which define the contractual obligations of the parties, usually it is very carefully defined the obligations of the tour operator who enters into a contract with an insurer (the guarantor of travel). Thus, the contract of one of the leading insurers, DRS, Munich, it is emphasized the tour operators obligation to make available all required information on its operations, to notify any significant changes in their operations changing the level of business risk or creditworthiness, to notify the insurer of their lending activities, not guarantee the other partners based on their assets without the knowledge of the insurer, and so on. Thus, for example, the tour operator shall, reporting on changes in operations which alter the level of business risk, be sure to inform the insurer of intent, in addition to bus arrangements, if start selling arrangements based on charter flights. In the event of such changes, the insurer has the right to ask for greater collateral and/or premium, to request exclusion from the new risks to their contract or to terminate the contract of insurance.

In any case, the insurer becomes an active partner in the operations of the tour operator. Insurers shall in case of damage pay the full insured amount of money and that motivates them to actively monitor the tour operators before the crisis and in particular in case of the emergence of the crisis. Before the crisis, the insurer estimates preventive operation of the tour operator and its exposure, focusing primarily on debt, undertaking risky ventures (for example, a large group or charter), the mortgage and the like. Insurer contract also limits the size of the advance payment that the insured tour operator can collect from the passengers in order to limit their exposure to risk in the event of insolvency. At the moment of crisis, the insurer is active participant, making efforts to minimize claims for expenses refund, organizing the most economical return of travelers who have already left, but organizing and in the most economical manner departure of passengers who have paid arrangements and expect to travel or to take money back. In this regard, the bankruptcy trustee under the supervision of insurers urgently gets in contact with other tour operators, especially those who are offering the same destinations in order to make a deal and serve the passengers of insolvent tour operator.

Austrian regulation on travel guarantees, unlike the German, regulates stages in insured sum, starting with EUR 10,000 (for EUR 90,000 turnover in the previous year), up to EUR 72.600 for agencies that do not organize charter flights, or EUR 363,000 for those which organize charter flights. Although the Serbian model of travel guarantees is based on this model, there is lack of provisions that Austrian regulations provides. First of all, there is lack of separation of the tour operators regarding the charter flights, with a significantly higher sum insured for more risky charter business. Furthermore, there is lack of obligations of the tour operators, predicted in Article 4, paragraph 4 [26], to report the intended change in turnover of more than 5% , in which case insured sum is connected to the intended turnover (with responsibility if the insured turnover is different from the reported). Also, taking advance payments from clients for travel is strictly regulated. Thus, the advance should not be taken earlier than 11 months before the trip, and amounts over 20% of the price cannot be collected until 20 days before departure, followed by delivering to the client travel documents. Advance payment over 10% of the package price leads to the correction of terms of insurance, caused by the higher the risk exposure of the insurer.

Both examples of Germany and Austria indicate active participation of the guarantor (the insurer) in the assessment and monitoring of tour operators insured business. Also, both examples point to a very high level of guarantor protection against irresponsible tour operators. Tour operators are directed to engage in those business activities which they are capable (primarily financially) to handle. Consequently, the passengers' rights, which were the starting point, are given the highest level of protection.

Recommendations – Instead of conclusion

During the crisis, which may result in the bankruptcy of the tour operator, the choice of actions must be taken very carefully and the implementation must be highly efficient. Official representatives of state institutions and, consequently, the media, must avoid hurried statements or actions that may create an alibi for non-fulfillment of obligations. This primarily relates to statements about fraud of tourists by the tour operators, which may undermine some agency on the basis of rumors (sometimes initiated by competitors) or delay (even cancel) liability insurer to the insurers' policy activation and payment of compensation to passengers.

Rulebook which specifies travel guarantees must get a dynamic component that binds to a change of the insured sum once contracted turnover exceeds the upper limit of turnover. This would mean, for example, the tour operator which for the first time exceeds the cumulative turnover of EUR 50,000 per year, automatically has an obligation to ensure the sum of EUR 40,000. That would prevent small agencies, that either independently or with the help of business partners, suddenly, in one season contract two, three or more flights a week to remote destinations, while, at the same time, their insurance policy barely covers the repatriation of one group.

It can be implemented in the existing regulations the differentiation of the tour operators activities. Thus, it is possible to prescribe a lower guarantees for travel agencies that organize trips within the country, higher guarantees for those that take travelers to foreign countries (bus, train, regular lines of air transportation), and a maximum guarantee for those who are organizing charter flights.

Among the travel guarantee instruments, the guarantee fund as a voluntary instrument of insurance may be introduced as complementary and/or in limited circumstances, an alternative to existing instruments. The establishment of the fund may take some time, until the accumulated amount will be sufficient to cover the risks of active tour operator. However, such an instrument would be good hedging instrument, which, in addition, is quick and efficient instrument to protect the reputation of businesses and the entire tourism industry.

It is necessary to regulate the issuance of "certificates" of insurance or other document to be delivered to passengers prior to departure. With this certificate, the customer can guarantee the payment of the necessary accommodation and repatriation, or to request reimbursement of funds in the event of insolvency or bankruptcy proceedings against tour operator. This confirmation, clearly and in advance regulates the relationship between the three sides (passenger, tour operator and institution that issued the guarantee). Being in the possession of passengers, allows that he/she is protected in distant destinations even if the organized repatriation to the country of departure fails.

Under the current regulations regarding the travel guarantee, it is useful to change the logic of scale of insurance. Instead of the minimum sum insured, depending on the turnover of the tour operator, it is better to introduce a maximum value insured by the insurance companies, obliged to pay the full amount to insured passengers up to this limit. This amount, which in Germany is EUR 110 million in Serbia may be lower, but not below five million. This is the amount that actually protects the insurance company from bankruptcy, limiting upper limit of possible damage. In this case, the insurance company would finally start to deal with the risk assessment of tour operator's business, which makes the essence of the issue of insurance guarantees. Competition will direct them to determining the lower premium, while on the other hand, caution forces them to estimate the maximum possible sum insured. If the stepwise expression of the sum insured is kept, depending on the amount of traffic, it is necessary to prescribe the increase of insured sum, which has already been mentioned.

Finally, it is necessary to improve the basic regulation, in order to stimulate market flows. In case of tour operator insolvency, this is bankruptcy procedure. There is no guarantee instrument, which could be efficient, if there is no authority that can activate it and handle its implementation. In the bankruptcy procedure, it is trustee. It is essential for the trustee to be appointed very efficiently (even in couple of hours), to be obliged and authorized to act quickly and to be responsible for the bad decisions (including delays). And, not to forget, efficient bankruptcy procedure is important to protect interests of consumers, which is discussed in this paper, but also the interests of the suppliers, business partners and even owners of the business. There is no benefit from sophisticated tourism legislation, or any other specialized legislation, if the basic legislation is inefficient.

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Goran Petković

is a Full time Professor of Management and Marketing in Trade at the Faculty of Economics, University of Belgrade, Serbia. He served in the Government of the Republic of Serbia as the State Secretary in charge for Tourism, in the three successive ministries covering this area from 2007 to 2013. He is member of the University of Belgrade Council, and have served as the vice-dean and chairmen of the Council of the Faculty of Economics. His background is in teaching, researching and consulting on retail, distribution, sale and sales management. He is the author of "Positioning of Retail Enterprises" and "Decision Making Models in Commerce". Also he is co-author of several books, among which, to be mentioned "Marketing Channels" (with Lovreta), "Sale and Sales Management" (with Lovreta and Janićijević), "Customer Relationship Management" (with Lovreta, Berman, Crnković, Veljković and Bogetić), "Marketing in Commerce" (with Lovreta), etc. As the consultant, he worked on numerous projects of which the following stand out: "Tourism Development Strategy in Serbia", "Cost of Doing Business in Serbia", "The Competitiveness of the Serbian Econonomy", etc.

Stipe Lovreta

is a Full Professor at the Faculty of Economics in Belgrade. His qualifications and main fields of interest relate to economics of commerce, marketing channel management, commercial management, trade marketing, sales management and trade policies. He was Vice Dean and Dean of the Faculty of Economics in Belgrade. He is full member of the Scientific Association of Economists and also he was a member of the Board (since 1997). He is a member of the Presidency of the Serbian Association of Marketing. He was Editor in Chief of several scientific journals. He is a member of the National Council for the Economic Recovery of the Government of the Republic of Serbia. He has published 15 textbooks and monographs, 250 papers in scientific journals, and 75 papers for national and international conferences. He was the project manager of more than 100 different projects, from management consulting to macroeconomic projects such as the Strategy of Trade Development of the Republic of Serbia and Tourism Strategy of the Republic of Serbia. The most important textbooks and monographs include "Modern Retailing", "Commerce in Modern Market Condition: Comparative Analysis", "Trade Marketing", "Economics of Commerce", "Commercial Management", "Commerce: Theory and Practice", "Sales and Sales Management", "Marketing Channels" and "Customer Relationship Management".

Renata Pindžo

PhD is Assistant Professor of Investment Management and Investment Decision Process at the Faculty of Economy, Finance and Administration (FEFA), Singidunum University, Belgrade. For almost six years, she has been worked as Assistant Minister, in charge for Tourism Sector. Ms Pindžo obtained her BA and MA degrees from the University of Belgrade Faculty of Economics. In May 2011, she obtained her PhD. Dr Pindžo's experience includes more than 14 years in Management Consulting and Financial Advisory Services. She has gained knowledge by providing consulting services to many domestic and international companies, including financial institutions and local municipalities during her engagement in Deloitte and Economic Institute. She was also engaged as consultant by large international organizations (USAID, EAR, DIFID, GTZ) on the projects of restructuring of large Serbian enterprises.

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