

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

RISKS OF DELAYED REINDUSTRIALIZATION

Rizici zakasnele
reindustrijalizacije

Abstract

2012 was a tough year for Serbia because transition was not completed yet and the economy went sharply into reverse. Last year the accession process to the EU slowed down and economic growth shrank by 2%, which is much more than expected.

Deterioration of macroeconomic fundamentals during the crisis 2008- is evident. The labor market has been hit hard by the recession. The unemployment rate, which stood at 14.4% before the crisis, is gravitating around 25% during the crisis. Projections are even more discouraging, as it is expected to stabilize at 28% in the following three years. Persistently high unemployment has dampened consumption (investment and final).

Now Serbia's economy is faced with the second dip of double-dip recession. Transmission mechanisms of deeply embedded structural imbalances are accelerated by global stress factors. Public sector and great majority of private sector are loss makers. Banking industry is profitable but in downturn negative prospects are affecting its deteriorating performances. Households suffer from low income and high unemployment.

This paper investigates the influence of the structural imbalances on the investor's risk appetite and potentials for recovery. The analysis includes an in-depth look at Serbia's economy through several different lenses. We take a view that is both broad and deep, striving to drill down into several key issues, but mainly from business perspective. Proposed anti-crisis program has two purposes, financial consolidation and reindustrialization through expansion of commodities production (energy and food primarily) in the first stage as well as manufacturing in the second stage. The role of the state and the importance of the public sector are also taken into equation via industrial policy in energy sector.

Our work is structured into four parts. The first part addresses the strategic audit of Serbia's economy. We present key macroeconomic and vulnerability indicators and adverse trends in the main sectors. The second part examines global economic prospects with a special emphasis on alternative economic models. The third part considers reindustrialization as a way of rethinking the current economic model. Finally, we put energy sector as priority one for economic recovery in the risk analysis framework in the fourth part.

Key words: *double-dip recession, risk, industrial policy, real economy, reindustrialization, technological platforms, manufacturing, energy sector*

Sažetak

Za Srbiju je 2012. godina bila teška pošto tranzicija još nije završena dok se u privredi beleže ireverzibilni tokovi. Prošle godine usporeno je pristupanje Evropskoj uniji dok je privreda zabeležila negativan rast od 2%, što je bilo gore od očekivanja.

Očito je da je tokom krize koja traje od 2008. godine je došlo do pogoršanja makroekonomskih osnova sistema. Recesija je teško pogodila tržište rada. Stopa nezaposlenosti koja je bila 14,4% pre krize, u krizi gravitira oko 25%. Projekcije još više obeshrabruju pošto se za naredne tri godine očekuje da će se stopa nezaposlenosti stabilizovati na 28%. Visoka nezaposlenost konstantno smanjuje potrošnju (investicionu i finalnu).

Privreda Srbije je u drugom talasu recesije sa duplim dnom. Globalni stres faktori ubrzavaju mehanizme prenošenja negativnih uticaja duboko ukorenjenih lokalnih strukturnih neravnoteža. Javni sektor i veći deo privatnog sektora stvaraju gubitke. Bankarstvo je profitabilno ali kriza i negativna očekivanja utiču na pogoršanje njegovih performansi. Sektor stanovništva pati od niskog dohotka i nezaposlenosti.

Ovaj članak istražuje uticaj strukturnih neravnoteža na apetit investitora za rizikom i mogućnosti oporavka. U pitanju je dubok pogled na privredu Srbije iz različitih perspektiva. Dubok i širok pristup treba da omogući da se prođe u nekoliko ključnih problema, dominantno iz poslovne perspektive. Predloženi antikrizni program ima dva cilja, finansijsku konsolidaciju i reindustrijalizaciju na osnovu povećanja proizvodnje sirovina i repromaterijala (primarno energije i hrane) u prvoj fazi, kao i industrijske proizvodnje u drugoj fazi. Uloga države i važnost javnog sektora takođe su predmet analize posredstvom industrijske politike u energetici.

Naš rad je podeljen u četiri dela. Prvi deo obuhvata strategijsku reviziju privrede Srbije. Ukazaćemo na ključne makroekonomske indikatore i indikatore ranjivosti kao i na negativne trendove u glavnim sektorima. Drugi deo daje izgled za globalnu privredu sa posebnom osvrtom na učinkovitost mogućih privrednih modela. Treći deo analizira reindustrijalizaciju kao način da se promeni postojeći privredni model. Konačno, u četvrtom delu biće analizirani rizici u energetskom sektoru kao sektoru koji je prioritetan za ekonomski oporavak.

Ključne reči: *recesija sa duplim dnom, rizik, industrijska politika, realni sektor, reindustrijalizacija, tehnološke platforme, industrija, energetski sektor*

Strategic audit of Serbia's economy: Four sectors, four stories

For more than two decades, Serbia's economy has been a victim of the decomposition of former Yugoslavia starting in 1990 during socialist bloc transition toward the capitalism. The most negative economic consequence of Serbia's geopolitical transition is deindustrialization followed by a growing population risk (depopulation, human resources paradox¹, and population aging). Previous consequences have slowed down economic transition toward the capitalism and accession to the EU.

During the whole period of transition Serbia was, more or less, excommunicated from the EU. Today, from geopolitical perspective, Serbia is stuck in the middle, between the EU and other countries with growing geopolitical influence.

After 23 years of transition from socialism to capitalism, Serbia is country in the so-called "transitionism" [2]. There are many consequences of never-ending transition. From economic perspective two important ones include transitional recession (output gap followed by constant and strong inflation pressure) and low level of competitiveness. The long-standing local economic crisis due to transitionism has raised Serbia's risk exposure. After 2008 Serbia is actually living in a combined crisis: transitional crisis and global economic crisis, which exacerbate each other.

Until 2000 the economic transition in Serbia evolved in a vacuum and without access to foreign capital. That kind of transition led to dramatic drop in GDP followed by mega inflation. The biggest output gap occurred in 1993, when GDP level was at a staggering 40% of its pre-transitional 1989 level. Deeper reforms were initiated once the political scene changed in 2000. However, macroeconomic fundamentals were so deteriorated that the new wave of reforms had only a limited impact on them. Despite accelerated privatization and frenetic institutional reforms primarily in financial sector, Serbia has never reached its pre-transitional GDP level. This is in stark contrast to a vast majority of former socialist countries which are

characterized by output and productivity increase. The overall output gap in Serbia is almost 30% of GDP level in pre-transitional 1989. For comparison average GDP of other transitional countries is 45% higher [3]. Industrial production suffered the most.

Although there are opinions that the industrial revolutions have thus far bypassed former Yugoslavia and Serbia as well (*Lj. Jurčić* rule), the statistics show a significant level of industrialization until the start of transition in 1990. According to *P. Petrović & B. Milačić* [10], in the period 1960-1990 the compound average growth rate of industrial production was quite high (8%). In the same period the number of industrial workers increased from 400 thousand to 1.03 million, and the contribution of industrial production to GDP went up from 17% to 30%. Unfortunately, transition brought irreversibility in terms of deindustrialization. In 2010, the industrial production fell by 60%, approximately 700 thousand workers lost their jobs, and contribution of industrial production to GDP decreased to 15% (see Figure 1).

The whole period of transition was followed by deindustrialization coinciding with enormous depopulation and persistent demolition of tacit knowledge as a key component of human capital. Facts colorfully speak in favor of the previous point. The period since 1960 up to the start of transition in 1990, with the exception of few years, was characterized by annual growth in the number of industrial workers (annual average growth of almost 18 thousand employees). Conversely, with no single exception, each year in the period of transition was followed by decline of twice as higher intensity (annual average decrease of almost 35 thousand employees), with the biggest decline happening in 1999 (almost 90 thousand employees).

After 2000, transition architects were strongly inspired by the financialization of the economy and "strong currency in weak economy" policy platform. The main policy target has been CPI inflation, low and stable. The main policy tool has been inflation targeting. Unfortunately, macroeconomic policies have been set on the grounds that, so far, have not produced macroeconomic stability and conditions necessary for sustainable development.

Without a strong anchor, inflation targeting has never reached proclaimed policy target. Unfortunately,

1 Too many people of the wrong side and not enough people of the right side. On the one hand, the population increased due to inflow of refugees, but, on the other, the tacit knowledge has eroded as a result of brain drain.

relationships between key macroeconomic indicators like inflation, FX rate and wages were strongly dependable on populist attitudes (primarily election cycle) instead of performance of the economy and policy targets.

The inflation is neither low nor stable, and FX movements express high volatility as well as real appreciation, as we pointed out many times in our previous papers [4] and [5]. Volatility in key variables is largely the result of dysfunctional macroeconomic policy with frequently changing targets. Namely, wages are mostly adjusted through inflation, inflation is dependent on FX rate, and wages and FX rate are mostly dependent to political cycles. High costs of capital, unpredictable cost of labor and really appreciated FX rate influence the negative economic expectations. Owing to a populist economic policy without significant investment, output gap was not eliminated, policy targets were not achieved, and the economy stayed impotent and uncompetitive.

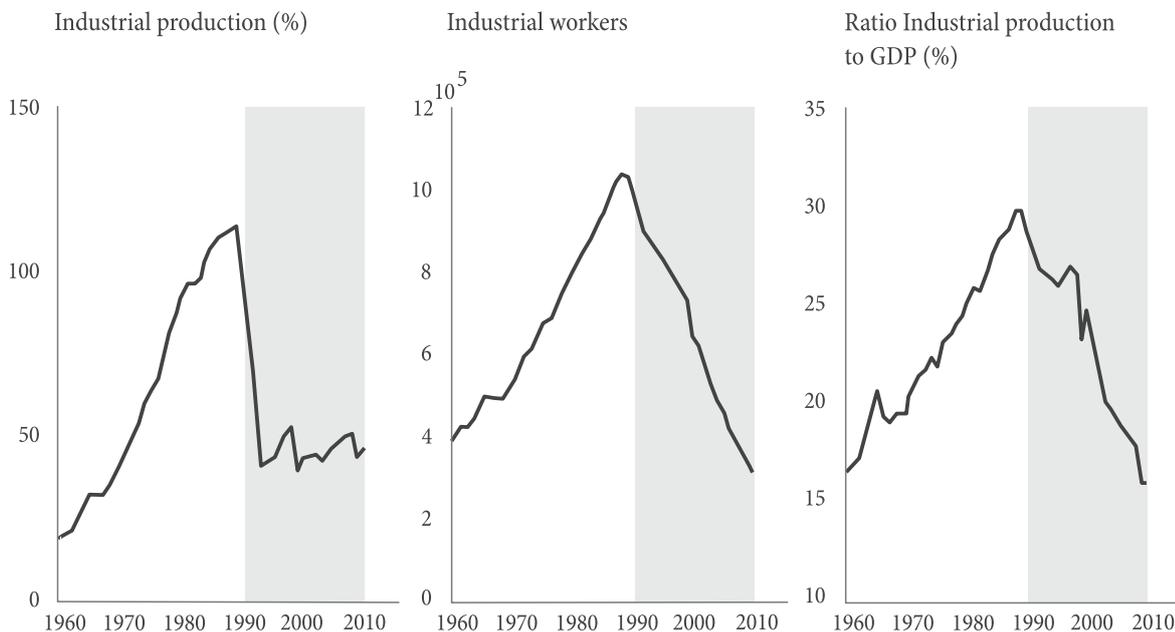
In the latest period disappointing figures have been augmenting. Structural imbalances are getting deeper and macro buffers are getting bigger. In an impotent economy public expenditure is rising absolutely and relatively. Low competitiveness influences unemployment increase and growing indebtedness. If Serbia's policy makers really intend to stop this chain of deterioration, they will have, first of all, to choose a macroeconomic anchor. Without

a cohesive anchor, whether it is an inflation tide to that in euro zone, or wage and pension policy connected with productivity growth, economy will not reach a sustainable path of economic recovery.

No doubt, after 2000, reindustrialization was below the radar of the transition model. Foreign currency proceeds from FDI (privatization and green-field investment) and equity investments fueled this model. Paradoxically, the FX rate really appreciated for most of this period due to surplus in foreign currencies causing the import to become more attractive compared to the export. This contradiction also encouraged quick money investors, adversely affecting reindustrialization and misdirecting investments toward short-term government's papers, services and rent-seeking businesses (real estate and retailing in particular). No matter how big, FDI and equity investments never surpassed the annual level of remittances (EUR 3-4 billion per annum) during the whole period. During the crisis when FDI and equity investments vanished, remittances remained almost exclusive source of capital inflow. The twin deficits (current account and budget) were inevitable.

Under inflation targeting the central bank is reducing money supply whenever inflation threatens to rise above the target. In practicing inflation targeting monetarists focused on short-term interest rate rather than on money supply. By controlling short-term interest rates, the

Figure 1: Industrialization and deindustrialization, 1960-2010



Source: [10, p. 22]

central bank was able to move money supply by pushing or polling currency through open market operations. The implicit effects of such policy are high interest rates, really appreciated FX rate, and erosion of currency reserves. Government’s deficit spending drives up interest rates and undercuts investments in private sector (crowding out). Namely, when the government runs deficit, it obtains the difference by borrowing from the open market, competing with borrowers from private sector and as result, drives up interest rate.

Figure 2 portrays the benchmark of policy rates in Serbia and some relevant economies. Double-digit or near double-digit policy rate is totally out of trend during the downturn.

Serbia’s economy is, from manufacturing perspective, impotent and, from macroeconomic perspective, largely out of tune. These conditions are combined effect of geopolitical cataclysm and economic collapse during the 1990s, as well as misconceptions embodied in the transition strategy after 2000. The impact of these factors still echoes, due to absence of the proactive actions needed to keep pace with other countries in transition and the prevalence of reactive actions to maintain macroeconomic

stability during the time of crisis. The key macroeconomic indicators for the last ten years presented in the Table 1 confirm the aforementioned qualifications. Trends are fully indicative and portray the effectiveness of institutional setting and efficiency of policy tools.

Table 2 provides vulnerability indicators of Serbia’s economy in 2012, the last year of the analyzed period, divided in three segments: operational, financial, and competitive performances. For each indicator, the first column represents value and second column indicates the reference point.

Deeper understanding of situation could be revealed through sector-by-sector analysis. It is evident that the structure of Serbia’s economy is a case of “fourth sectors, fourth stories”.

The performance of the financial sector (banks and insurance companies) is far better than the performance of non-financial sectors (corporate sector, public sector, and household). But, such position is unsustainable.

From real economy perspective the financial sector is bank-centric since capital market is shallow. Confidence in the banking industry is gradually rising despite the crisis. In 2009, first year of crisis, savings rate rose from 14% to

Figure 2: Policy rate benchmark, 2008-2012

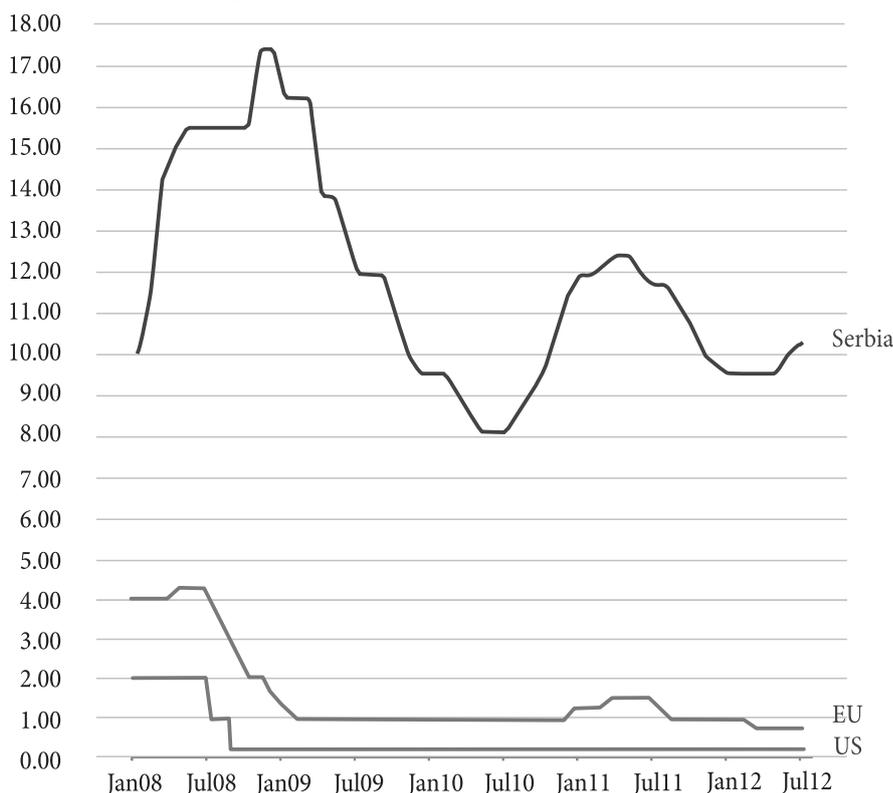


Table 1: Macroeconomic indicators, 2002-2012

Indicators	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
Consumer prices inflation, in%	14.8	7.8	13.7	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2
Unemployment rate	13.3	14.6	18.5	20.8	20.9	18.1	13.6	16.1	19.2	23	22.4
Current account balance, in % of GDP	-4.2	-7.8	-13.8	-8.8	-10.1	-17.7	-21.6	-6.6	-6.7	-9.2	-8.3
Budget deficit/surplus, in %	-4.3	-2.6	-0.3	0.3	-1.9	-1.7	-1.7	-3.4	-3.7	-4.2	-5.0
Public debt, in %	72.9	66.9	55.3	52.2	37.7	31.5	29.2	34.7	44.5	48.7	59.2
External debt, in %	58.7	55.9	49.8	60.1	60.9	60.2	64.6	77.7	84.9	77.5	85.6
RSD/EUR FX rate (period average)	60.66	65.13	72.70	83.00	84.10	79.96	81.44	93.95	103.04	101.95	113.45

Selected data from NBS database

19% of GDP. The ratio of corporate to retail banking moves slightly toward domination in retail banking. Significant part of revenues originates from operation with the central bank and treasury (repo papers and state bonds). The fact that the majority of credits are euro-denominated does not eliminate credit risk. The FX risk in case of devaluation automatically transforms into a default risk for debtors. The policy rate is extremely high in comparison with other relevant economies, which is predominantly a consequence of macroeconomic fundamentals and monetary policy. The main stress factors come from the public and corporate sector. Consequently, the current structural portfolio and revenues in financial sector are not sustainable, due to fault lines in non-financial sectors.

The corporate sector in Serbia is burdened with numerous structural buffers. Since the global credit crunch in 2008, illiquidity problem in the local market has become

the biggest issue for real economy and it keeps escalating. The lack of long-term sources of financing complicates the unfavorable financial structure. Consequently, enterprises are relying on expensive short-term borrowing, spontaneous financing (account payables), as well as other operating liabilities (liabilities towards employees, state, etc.).

Growing indebtedness is another serious problem. Due to increasing demand for short-term credits, the costs of debt rose considerably. Precisely, it tripled in the period since the beginning of 2008 crisis. Today, more than 80% of credits are euro denominated. Hence, due to highly volatile FX rate, FX losses and other financial expenses arising from currency clauses have become too heavy burden constantly eroding profitability of real economy. Two main consequences of the above-mentioned is the reduction of equity component in financial structure and rise of financial leverage beyond tolerable risk exposure.

Table 2: Vulnerability indicators, 2012

Performances	Indicators	Reference point	
Transitional output gap	30%	0%	Operational performances
Okun index (inflation + unemployment)	34.6%	<12%	
Twin deficits			
▪ Current account	8.3%	<5%	Financial performances
▪ Budget	5%	<3%	
Indebtedness			
▪ Public debt/GDP	59.2%	<45%	Competitiveness
▪ Foreign debt/GDP	85.6%	<90%	
▪ Foreign debt/Export	215.7%	<220%	
Credit rating			
▪ S&P	BB-/negative	investment rang > BB	
▪ Fitch	BB-/negative	investment rang > BB	
Export (goods)/GDP	29.4%	>50%	
Currency depreciation (2012/2011)			
▪ Nominal	-9.9%	<-5%	
▪ Real	-5.7%	<-3%	
Global competitiveness index	95 th of 144	65 - SEE average	
Corruption perception index	80 th of 176	59 - SEE average	
Ease of doing business	86 th of 185	60 - SEE average	
Economic freedom index	94 th of 177	62 - SEE average	

Selected data from NBS database

Another problem refers to net working capital squeeze. The gap between necessary long-term financing, on the one hand, and long-term investments, on the other, has become deeper each year since the beginning of the crisis. The financial distortions from the balance sheets have their effects in the P&L. Increase of financial and other costs reduced profitability. Combined with the demand decline, distorted financial structure influenced profitability decrease and the increase of the number of loss-makers.

All the prevailing problems in the real economy (private and public) in Serbia mostly stem from the absence of long-term sources of financing under competitive terms. In the conditions of global economic crisis, systemic risk rises, the economy becomes much more fragile, and the collapse of few entities or even one big player due to rising indebtedness could provoke the domino effect and bring the economy into an imminent threat of default.

Figure 3 portrays the most important aspects of financial health of the real economy. The analysis and interpretation were based on data base presented in [9]. Due to the lack of official data for 2011 and 2012, we analyze the figures for three years before and three years after the 2008. Unofficial data for 2011 and 2012 are undoubtedly following the same adverse trend.

Capital market has never been shallower and it is in retreat. Market capitalization in numerous listed companies (privately owned and state owned) is lower than their book value. This means that their expected return on equity is lower than factual rate of return.² From investor's point of view, of course, such situation might look like a tempting deal, but despite that, M&A activity is not particularly intense, suggesting that the level of systemic risk is too high.

As regards the public sector, pricing policy and operational inefficiency are the main causes for concern. Full cost pricing is not being practiced. Also, with the so-called "party property" as the ultimate model for governing public companies, efficiency pays the price. Political party proxies governing public companies do not exclusively follow principles of economic efficiency, but

also specific party interests. This leads to sub-optimization and corruption. The boomerang effect of such behavior is an overall motivation decline. In other words, employees lack confidence in managers, managers lack confidence in the board of directors (party proxies led), board members lack confidence in owners (state), and foreign investors have confidence in no one. This is a typical negative-sum-game. In the public sector, especially in network technologies like electricity and telecommunications, the role of independent, non-executive directors in the board of directors is necessary for full implementation of ethical and efficient corporate governance. Also, full cost pricing is a prerequisite for value creation and capital increase.

The number of households in Serbia totaled 2.5 million, so it is a small market even when compared to many CEE countries. At the end of 2012 the average salary equaled EUR 422 and the average pension amounted to EUR 230. Extremely adverse fact refers to the ratio of employed to inactive and unemployed population (0.57). The amount of savings of around EUR 8 billion is dramatically lower than in comparable CEE countries. In Croatia, for example, this figure is at least four times higher with almost a half smaller population.

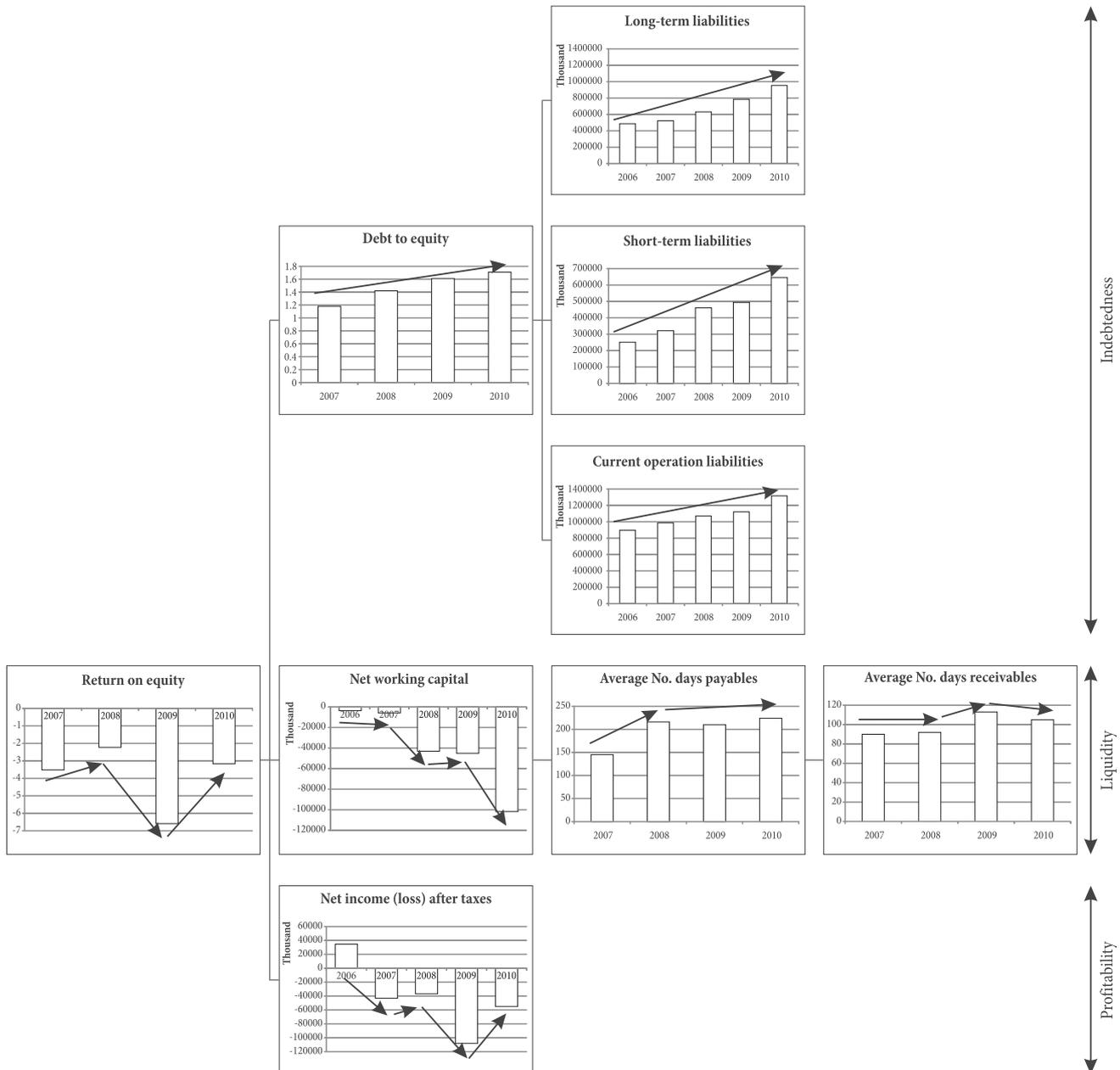
The banking sector is one of the strongest pillars of Serbia's economy. It is considerably viable, thanks to solid and growing confidence, as well as a constant and significant flow of remittances. The sector is stable, as a result of conservative regulation and high obligatory reserves. It is dominated by universal banks.

Capital adequacy ratio is particularly high in Serbia where it has stabilized on 21.0% level in 2011. Since the global meltdown in 2008 the assets of the banking sector have risen each year by an average of 25%, to reach around EUR 26 billion in 2011 which is more than 80% of the country's GDP. Interestingly, the value of these aggregated assets of Serbia's banks is practically incomparable with countries with similar population. For example, in Denmark respectable figure is EUR 920 billion.

During the crisis profitability in banking industry has declined. The main reason for that is very high level of impairment costs (the gap between an asset's value on the balance sheet and its recoverable amount). Depreciating assets have strongly hit profitability. In 2011 the volume of

² For example, market capitalization for *Metalac Group*, company listed on Belgrade Stock Exchange in mid-February 2013 was EUR 18.2 million. According to official financial statements for 2012, net worth of this company is EUR 50 million and net profit EUR 5.4 million.

Figure 3: Abridged real economy performance, 2006-2010



Source: [9]

the write-offs and other impairment costs in CEE equaled 24.4% of the revenues generated by the banking industry. In Serbia, the equivalent figure in 2011 was 19.6% (excluding Agrobanka whose EUR 300 million write-off pushes this ratio to 37%). The same ratio for Q3 2012 is 24.2%.

The banking sector is small but it is growing. Matrix presented in Figure 4 comparing asset growth rates with loan-to-deposits ratio in banking industry puts Serbia in the top-left quadrant of CEE countries. Previous figure could indicate a sector relative attractiveness considering the growth potential. But, in-depth analysis reveals

opposite conclusions. The banking industry growth is not sustainable due to bad macroeconomic fundamentals.

More than 4/5 of banking assets in the country belong to foreign-owned banking groups mostly from the EU, which have needed financial aid following the global economic crisis and have been forced to dispose of foreign assets, including well-performing banks. Lack of any large-scale foreign interest has meant that banking transactions have mainly involved divestment. Banking crisis in the EU is deep and needs time to be solved. Foreign banks will continue to leave domestic market through

capital hedge due to their strategic refocus and limited opportunities for them to gain the scale on local market needed to fulfill their targets. Consequently, a heavy wave of asset deleveraging by the larger players is expected, involving non-performing loans (NPLs) and non-core loan portfolios. The level of NPLs is a growing issue. In 2011 NPLs level in Serbia of 19% was the highest in CEE.

Taking all the above facts into account, it can be concluded that future of banking industry will be demanding in terms of profitability. Figure 5 with more details illustrates drivers of profitability from revenues, costs and equity perspectives. The cost of risk has risen sharply, especially in the last two years. According to [1, p. 76], the cost of risk amounted to 2.8% in 2011, up from 2.3% in the previous year, placing Serbia among those countries with the highest level of provisions in CEE region. Also, revenue relative to assets contracted throughout the period at the annual rate of 8%. The cost-to-income ratio remained stable at the same time, causing profitability to fail. The overall effect of previous movements is a decreasing bank's appetite for new loans.

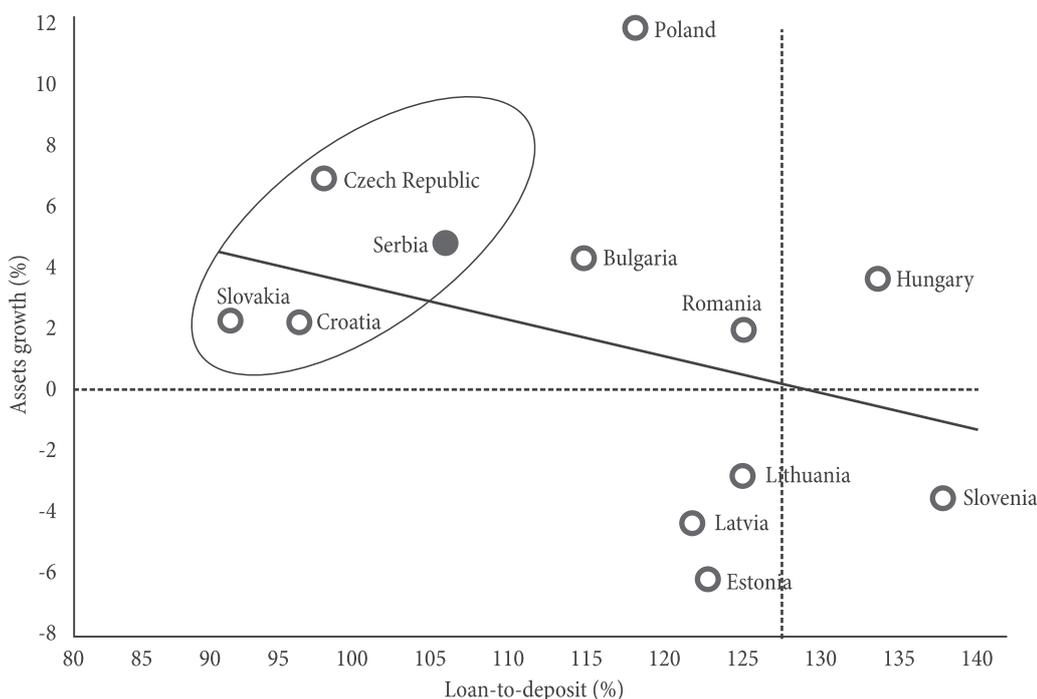
Another problem that the banks are facing is a lack of liquidity. Before 2008, the interbank market was very active and banks were lending money with great

confidence. During the crises the situation has changed and many smaller banks have serious problems in finding sources of liquidity other than deposits.

Situation in banking sector in 2012 could be qualified as "so far, so good – reasonable good". Deteriorating macroeconomic fundamentals are limiting banking industry's ability to grow up to its top line. Long-term prospects for banking industry are not impressive because the traditional sources of income are becoming much more restricted than before the crisis. The availability of mortgages is limited due to problems with long-term financing. Retail and SMEs lending are weak, due to high risk resulting from macroeconomic fundamentals. Deposits have significantly decreased as a result of intense competition in those markets with high loan-to-deposits ratio. Under these circumstances, profits have plummeted. Consequently, banks are seeking other sources of financing and revenues. In this situation repo operations are growing source of revenue and repo rate is the most important driver of profitability.

In 2012 the economy has dropped by 2%. Industrial production declined by 3.5%, while food production dropped by 8%. Reversal capital flows (mostly in financial sector) also contribute to the contraction of the economy. Last year

Figure 4: Impact of loan-to-deposits ratios on banking industry development in CEE



Source: [1, p. 9]

capital migration from financial sector is at least EUR 2 billion. Structural imbalances from the past influence the current macroeconomic performances. The economy has been stuck in crisis mode, without significant investments. Episodes of recovery (growth of 1% in 2010 and 1.6% in 2011) were actually jobless recovery. Unemployment is too high (gravitating around 25%). Unemployment of youngsters is above 50%.

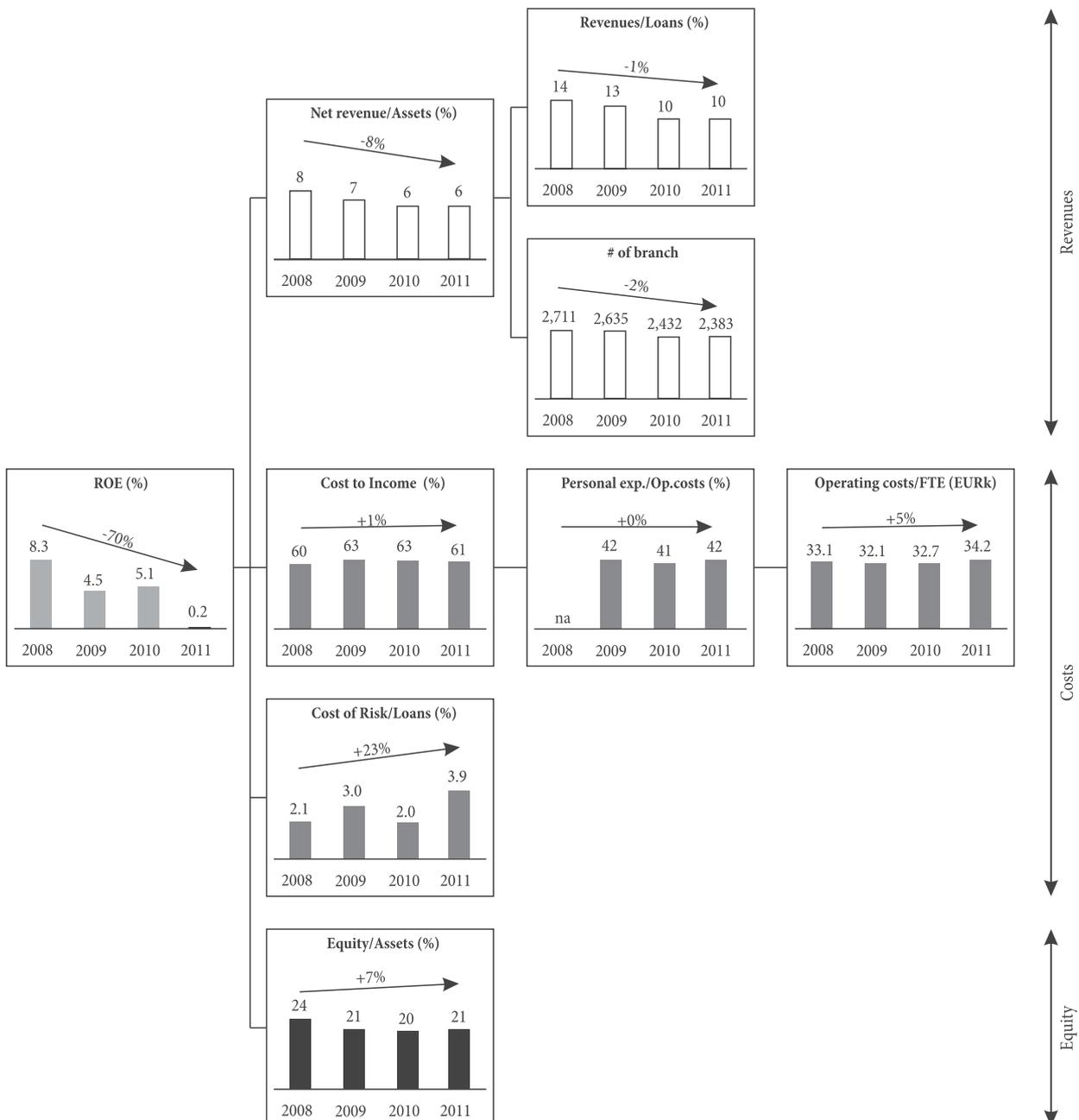
Austerity measures did not meet budget targets. Budget deficit in 2012 was 5%. In the current account

there are mixed signals. Export is doing well but import declined. Import fell much more than export because investment flow slowed down.

Public debt doubled approaching the red line of 60% of GDP. This year EUR 5.5 billion of fresh capital is needed for maintaining external liquidity. The most optimistic projection is that the economy could attract EUR 3 billion in FDI for that purpose.

Another negative surprise is political tensions with Kosovo. Under those circumstances, a significant

Figure 5: Drivers of profitability in Serbia's banking industry, 2008-2011



Source: [1, p. 77]

level of export (about EUR 2 billion) in that direction is in doubt.

In contrast to above-mentioned figures, the Government expects in 2013 a modest growth of 2%. The reasons for such optimism are new macroeconomic measures as a consequence of refocusing on some reaction policies, fiscal stimuli, and some relaxation of monetary stance. But still, this is significantly lower growth than in the pre-crisis period.

Geopolitical repositioning of Serbia is at the top of the agenda of the new Government. The compatibility of institutional setting with the EU is still the leitmotiv of Serbia's political leadership. However, due to the 2008-recession (sometimes called Great Recession), which has hit the EU, the actual investment inflow from that region will certainly not be sufficient. There is an interest of some investors from other regions, but a negotiation process is long and a considerable amount of time is required to put decisions into effect.

Economic recovery is a prerequisite for country's political stability and geopolitical repositioning. The situation is very time-sensitive. Before recovery, fiscal consolidation is necessary. Also, competitiveness improvement is an absolute must. Reindustrialization is the only guarantee of economic recovery and sustainable employment. Reindustrialization requires "3Rs", including investment in *real economy*, monetary model based on *real exchange rate*, and public finance following *real budget* doctrine.

Global economic prospects

Every crisis ends only when the buffers are closed, or when asset prices, debt levels, and factor incomes regain equilibrium. But this will take some time and depend on the remedies implemented. Once the balance is achieved, the appetite for investment on both domestic and global level will intensify. Without industrial policies encouraging investments in tradable sectors Serbia will be long time a hostage to the fallacies and inabilities of global players.

On the global level, there are some early signals of recovery. Deleveraging process in banking industry in high income countries has ended. Capital flows (FDI, portfolio investments, bank lending, ST debt, bonds flow) as % of

GDP remain stable on the global level and have rebounded to developing countries. In the last year bank lending and bond issues are increasing because credit default swap rates and sovereign bond spreads have declined.

The last WB outlook [14] indicates that in medium term (2013-2015) a moderate growth of the global economy is achievable target (see Figure 6). We are living in multi-speed world. The growth is much stronger in developing countries than in high income countries. But, pre-crisis growth rates are not to be regained in the medium term in both groups. The global growth stems from developing economies. In high income countries recovery is slow and fragile. In these countries a firm hand on the tiller is required in order to eliminate current macroeconomic imbalances.

Currently, on the global level financial flows, trade flows and commodities prices are significantly higher than at the start of the crisis. But the crisis is not over yet. The risk of reversibility is evident, and it manifests in higher inflation pressures due to implemented remedies (monetary expansion and fiscal relaxation). Sustainable solutions depend on energizing investment and trade flows. Basic prerequisite for this strategy is competitiveness based on productivity growth. Emerging phenomenon is that South-to-South trade and investment flows overcome West-to-South ones. This is a dramatic change in trade and investment flows. BRICS and "next 11"³ developing economies are doing very well in comparison with high income ones. These economies have fiscal space and capacity to stimulate the growth with monetary measures. These economies are following the heterodox approach [4] in economic policies (industrial policies lead, monetary and fiscal policies follow). This approach to economic policies could be a good blueprint for other economies in crisis.

Thanks to the developing economies, the global risks in 2012 are much more balanced than one year ago. In the future projections, there is not so much pessimism like in the previous period. However, the global risk should be regarded with the utmost caution especially bearing in mind externalization of the existing buffers in high

3 According *Goldman Sachs*, this group of fast-growing economies includes: Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey, South Korea, and Vietnam

income countries through money printing (or quantitative easing), currency war, etc.

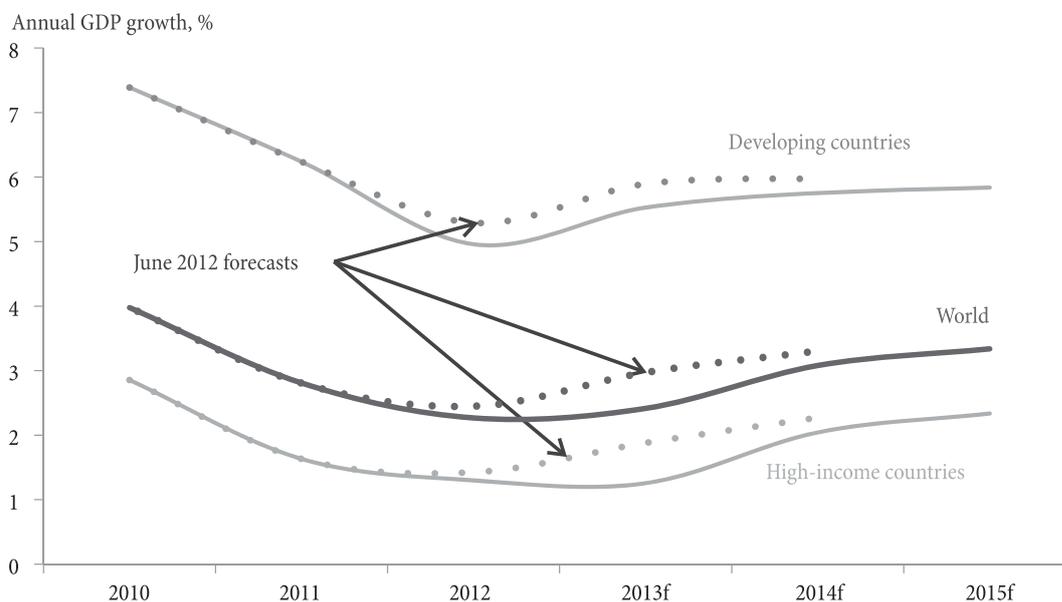
Realizing that in the global economic cycle every downturn transforms into recovery brings no comfort for policy makers in Serbia. Unfortunately, the anti-crisis policy platform of developed economies has limited impact on Serbia's one. Precisely, anti-crisis policy measures from developed countries cannot be implemented in Serbia due to limited fiscal space and high level of indebtedness. Strictly theoretically, majority of these measures are expenditures by their nature, which assumes substantial increase in the budget deficit (double digit in many cases). To finance fiscal cliff, the government must raise money by issuing bonds. If the central bank absorbed government bonds, it would be a money printing. Expansionary monetary policy and fiscal stimuli are more likely to generate government bond volatility and FX rate fluctuations than to guarantee a return to growth. By doing this, the state strives to re-inflate bubbles from financial sector. Moreover, purchasing of government securities by the central bank outdoes monetary expansion and incites a fear of inflation, placing upward pressure on interest rates (and crowding out). The consequence of these policy measures is the crisis irreversibility (double-dip recession).

On the other hand, the EU institutional setting developed during the last crisis cannot serve as an adequate blueprint for Serbia because it is too redistributive.

Furthermore, instead of static macro-management concentrated on financial consolidation and inflation control, Serbia desperately needs dynamic micro-management concentrated on investments, in both the public and private sectors. Instead of bureaucratic mindset of the EU, Serbia needs entrepreneurial mindset orchestrated by industrial policies. For Serbia's prospects, the so-called "regulated capitalism" and growth based on tradable sectors in terms of *R. Rajan* [11, pp. 47-8] is the most viable model of capitalism it should strive to.

Despite huge investments in infrastructure and logistics as well commodities (energy and food, primarily), fiscal paralysis is prolonged and stronger growth remains elusive. These investments are pulled by global demand and have potential to eliminate output gap because they have the multiplicative effect on expansion of aggregate supply and its balancing with aggregate demand. When investments increase output, fiscal space is growing. It is important to recall that conceptual approach toward economic policies is critical to investment enthusiasm. This is not a matter of financial capital availability. It is a matter of vision and credibility of government. As FDI's declined during the recession, the model of strong currency in weak economy has become unsustainable. The misconceptions of this model are gone for good. The current situation requires a new approach toward economic policies. New approach is based on industrial policies as

Figure 6: Global economy growth prospects, 2013-2015



Source: [14, p. 2]

a top priority and macroeconomic policies relying on automatic stabilizers in monetary and fiscal fields.

Unlike macroeconomic policies that affect the whole economy, industrial policies are sector specific. Industrial policies are directed at expanding industries with tradable goods by promoting certain sectors for import substitution and/or export-oriented sectors. In the new model of economic policies macroeconomic policy tenets should remain the same – low and stable output gap and inflation.

Reindustrialization: The way of rethinking the current economic model

Those who believe in built-in self-restoring equilibrium in a small market without demographic dividend, with weak and vulnerable economic performances, and high systemic risk in the period of global double-dip recession are condemned to failure. Without a substantial influx of intelligent investments in public and private sectors, Serbia's economy will not survive and recover. Moreover, a continuous volatility in global commodity markets will create a new source of inflationary pressure.

Serbia's real economy is impotent. Risk appetite in financial sector is decreasing. Main indicators of risk aversion in financial sector are high interest rates and significant migration of capital abroad through capital hedge and profit repatriation. An economy in which divestment dominates cannot provide funds for recovery and, most importantly, cannot be sustainable.

During the last economic crisis the prevailing doctrine in theory as well as in policy making is changing. The "great moderation" of invisible hand proved to be an illusion as it always was. Successful economic model involves government and market in a balanced way. Government's industrial policy acts as a corrector of market failures. In the new level playing field government-led industrial policies can be the best way to expand tradable sectors with export and anti-import tenets. Also, the public sector will become more prominent as a major customer for a number of industries. This is due to a rapid increase in spending as a substitute for output gap and demand squeeze in the private sector. But, rising social costs due to unemployment and population aging point to a new future challenge, fiscal cliff.

In search for sustainable solution, a zero step is rethinking current economic model. The new economic model must be driven by new level playing field, still motivated by value creation and reestablished by morality and ethics. The new turbulent context requires a new paradigm. Conceptually, some things remain the same. Macroeconomic stability remains the primary tenet of policy makers, but structural reforms should also be on the radar. Consequently, efforts should be refocused from macroeconomic stability to dynamic management in public and private sector. In case of Serbia this assumes that state investments in infrastructure and commodities would be supported by new regulatory framework in financial sector. The new financial regulation should be conceptualized in a way that minimizes moral hazard and decreases cost of capital in order to maximize opportunities for value creation in real economy.

In the implementation stage, reindustrialization is a first step in the right direction. But it takes time. Industrial policies could correct main structural imbalances and create foundations for sustainable development. Serbia must exploit the fact that the most attractive sectors in terms of growth potential (energy, agriculture, infrastructure, etc.) are in state hands. No economy has developed without industrialization. Today's fast-growing economies tend to have fast growing manufacturing.

Several indicators reveal there was something beyond the last economic crisis that made the current model of capitalism unsustainable. The first is an unfair distribution of wealth and polarization between ultra-rich 1 percent of society and the rest⁴. For many years labor incomes have been losing ground as a percentage of GDP. Although the overall pie is getting bigger, there are plenty of people who will be getting even smaller slice. For this reason, the last financial crisis has also been a demand crisis. In transitional economies shift toward political democracy and free trade capitalism has allowed some people from the bottom of even traditionally egalitarian economies to

⁴ In 2011, the investment bank *Credit Suisse* calculated that there were about 30 million millionaires in the world, people with more than USD 1 million in net assets which is 1/2 percent of the world population. In the same year, this investment bank noted that number of super-rich whom it delicately dubs UHNWI (ultra high net worth individuals) with assets above USD 50 million were 84,700.

rise to the top. Thinking of capitalism as a liberal theology in sense that free market equals free people proved not to work perfectly [7, p. 56]. The clash between growing political equality and growing economic inequality is a sensitive issue especially in the downturn. Moreover, it is sensitive due to the so-called “syndrome of unhappy growth”. C. Graham [8] finds that at any given level of income, economic growth is associated with lower level of life satisfaction. Previous trend could trigger other conceptual extremes, refocusing from growth to redistribution, and from profit reinvestment to tax increase.

Liberal capitalism politicians led by R. Regan and M. Thatcher tended to celebrate their super rich capitalist (or “tycoons”). The Washington Consensus was economic policy platform that created them. Core components of that platform were deregulation (in capital market primarily), tax reduction, and social welfare spending cut. This economic policy platform was exported abroad. Its greatest impact was on emerging economies and economies in transition as well. Income inequality is now higher in communist China than in high income capitalist economies. But, in the new techno-social context of ICT revolution and globalization, being tycoon means being a self-made workaholic, not a rent-seeker. In post-transition countries the word tycoon often has pejorative overtones and it is associated with unfair privatization and rent-seeking mentality (especially when it comes to natural resources).

Super elite is about economics and politics. For example, political decision toward privatization helped to create super elite in former socialist countries. The new capitalists have raised most of the income from technological change and globalization, and the global economic growth they were creating. But, the emergence of neoliberal economic policy platform has been putting even more wind in the sails of rising inequality in income distribution. Today’s super elites are nations themselves in terms that bifurcation between one percent society and the rest has become a conventional wisdom [7, p.58]. Interestingly, the Great Recession 2008- has not imposed further constraints on the new tycoons such as separation of commercial and investment banking, social welfare program and higher taxes, measures imposed in anti-crisis program during the Great Depression 1929-32.

E. Seaz [12] has found that in the recovery stage of the crisis 2009-2010 in the U.S. almost 93% of the gains were captured by top one percent society.

Two of other leading trends that have emerged during the last economic crisis predominantly affect the role of external savings in economic development: decline in FDI volume and growing role of sovereign wealth funds in investments. There are two underlying reasons for this. First, internal sources of financing, through retained earnings and dividends, have evaporated due to recession, while external sources have become inaccessible due to the credit crunch. Second, the risk appetite has been severely affected by serious recession in some countries, particularly developed ones. Consequently, all three types of FDI (market seeking, efficiency seeking, and resource seeking) have seriously been affected. The trend that undoubtedly proves the rise of predominantly Asian countries is a dramatic increase in sovereign wealth funds since 2000, both in number and volume. Growing sovereign wealth funds indicate the future redistribution of capital and power away from the US and EU toward China, Russia, and the Middle East.

Last but not least, the current global market is shifting toward two extremes: commodities and high-end products. In Serbia, commodities expansion is the only alternative for restart. After deindustrialization during the transition, Serbia lost the core competences needed to produce high-end products. Also, in the age of hyper-competition it is too late for massive production of durables.

Commodities expansion (energy, food, raw materials, etc.) is the easiest way to cover the output gap. The future manufacturing assumes new technologies development based on new paradigm of massive customization. Core rules of new paradigm are manufacturing based on lean, clean and green factory and rising social costs due to ongoing structural joblessness and population aging.

For Serbia, infrastructure development and commodities expansion is the first step in elimination of output gap. Expansion of commodities is an engine to the entire economic development. Concessions and building-operating-transferring (BOT) are possible institutional arrangements. Financing by sovereign wealth funds should be targeted. After elimination of output gap, industrial

policy should be concentrated on other issues. First, putting an end to negative trends in the manufacturing, enabling its revival and bringing it back to the functional stage. Second, integrating Serbia into the EU techno-economic space (36 European technology platforms which are complementary and mutually interactive). Third, transforming manufacturing processes in accordance with the new technology paradigm of massive personalization.

Reindustrialization is a way of catching up to the lead-edge technologies. This requires both endogenous and exogenous components of technological development. It assumes using external funds and knowledge on the one hand, and country's own funds and knowledge on the other. Consequently, private-public partnership (PPP) could be the prevailing model of financing in order to build the bridge between key emerging technologies and next generation manufacturing.

Majority of countries today do not produce what is necessary to them, but what they, actually, are able to produce. The reality in Serbia is that around 2/3 of technologies in the manufacturing belong to the second industrial generation and only 5% refers to lead-edge technologies [10]. This is a direct consequence of transition misconceptions. Discontinuity in industrial and technology development caused by the crisis halted development and transfer of the key component of techno-economic development, tacit knowledge.

Therefore, it is necessary that the state gets into creating the needed rudiments for future technological and, hence, manufacturing development. Precisely, the state has to participate or take the lead role in several necessary tasks. First, to create conceptual framework for reindustrialization. Second, to edifice the interactions between industry and science. Third, to define key priority sectors. Priority sectors are ICT, construction, new materials, military, metal processing, life sciences and fashion. Integration in European technological context via European technological platforms is imperative and prerequisite for development of globally competitive manufacturing facilities in Serbia.

Bearing the previous facts in mind, creating technological compatibility and recognition on the EU level is of fundamental importance to Serbia's accession process. European

technological platforms are driving forces for creation of new growth. Also, they help to address major concerns related to the current stage of development like: climate change, sustainable transport, renewable energy, food safety and pro aging. Expansion of commodities is a way of buying the time for development of the key enabling technologies for next generation manufacturing. New technologies development is a time-consuming process and it takes at least 20 years to complete [10]. But it must start right now.

Risk profile in the energy sector

The energy issue is one of the main components of the global and systemic risk since on the global level, and frequently on the local level, supply and demand are not in balance. In the world of ever-rising instability, each economy has to take care of its energy self-sufficiency and sustainability.

For Serbia, there are three main challenges. First, the energy self-sufficiency of the country and tradable character of its products could help eliminate the output gap and boost investments in related sectors. Second, the EU compatibility challenge concerning environmental issues. Serbia has already joined the process of regional and European energy integration and in the years ahead it will have to devote its resources to climate change mitigation and increase the share of energy generation from renewable sources. Third, adoption of new pricing policy. Time of cheap energy is coming to an end and full cost pricing is another radical change Serbia will no longer be able to delay.

In each economy the energy sector represents a sector with considerable implications for industrial development. Several facts lead to the conclusion that future economic growth in Serbia will inevitably lean upon energy production. Namely, the energy sector in Serbia represents the largest sector in terms of capital and revenues. Also, it is a prerequisite for reindustrialization, magnet for foreign investments, as well as the lever of the overall economic and social development.

In the previous section we discussed reindustrialization as an unavoidable path for sustainable economic development. But this process is time-consuming. Buying

some time before the radical shift in performance happens, policy makers must concentrate on two tenets: financial consolidation and elimination of output gap. The most efficient way to reach the previous targets is commodity expansion. Serbia does not have many options. Expansion of energy production is one of them.

Energy sector is capital-intensive one. On the other hand, demand for energy will increase in the future. Energy demand growth in Serbia is expected to be steady, projected at 1.0-1.5% rate in the longer run [13, p. 62]. More importantly, energy is a tradable good with zero marketing costs, which could have a significant positive impact on country's external liquidity position. Finally, geographic position undoubtedly indicates Serbia's vital role in the regional energy market in future. Energy system in Serbia will considerably influence sustainability of energy supply in SEE region. Previous favorable features make energy sector a logical choice for state industrial policy.

Annual demand for primary energy in Serbia is around 15 Mtoe. Today approximately 40% is covered from import. Majority of that refers to oil and gas. Serbia does not abound with energy resources, but thanks to the lignite reserves and hydro potential it satisfies all its internal needs for electricity. Prices of oil and gas are converging towards the EU level. Also, due to Serbian-Russian partnership the problem of supply has been solved and investments in this field appear to be promising. Anyway, there is plenty of room for improvement, especially in electricity segment.

Serbia will soon have to fully open its energy sector for competition as a part of the process of catching up to the EU and legislative alignment. This especially refers to the electricity sector and its areas of generation, retailing, and distribution. In practice, these different areas are often not opened to competition at the same time. In many countries liberalization started from generation which is logically plausible. Yet, there are many other examples where retailing activities were opened to competition before generation and distribution, or with keeping of monopolistic regimes in generation and distribution [6, p. 4].

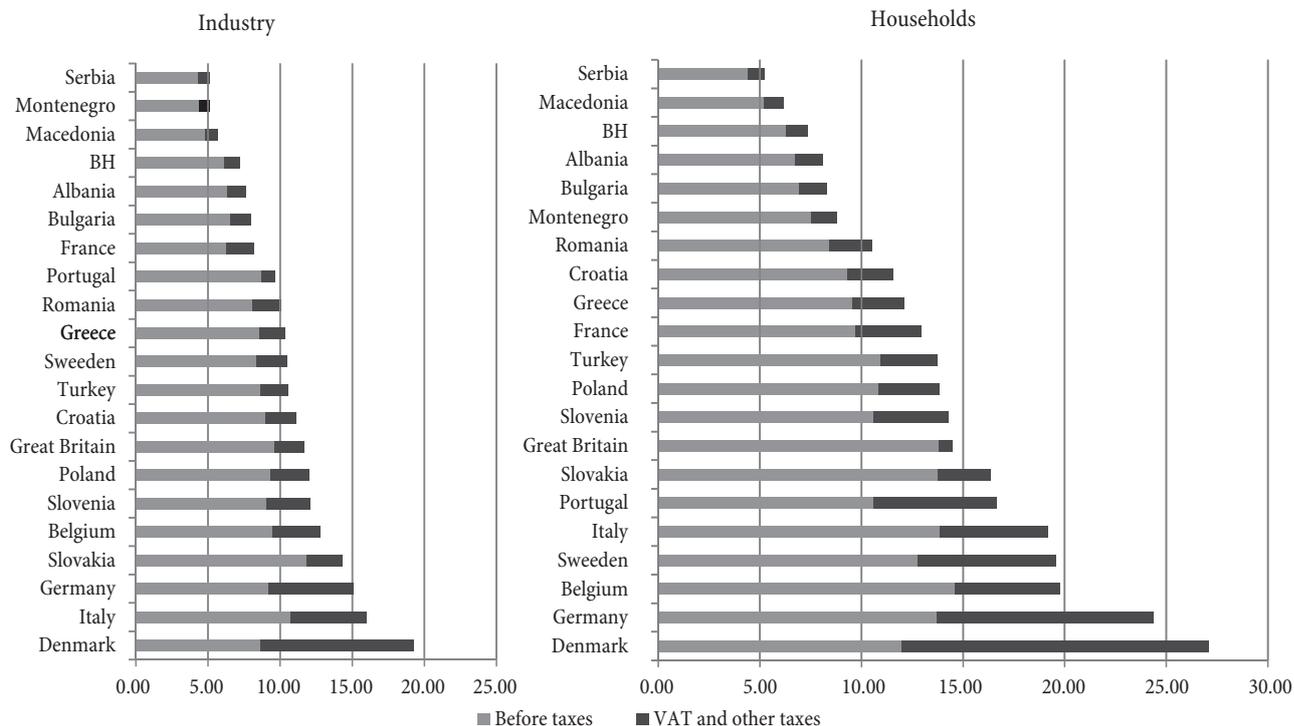
There are two inefficiencies in the electricity sector, in production and in consumption. Electricity sector is still highly regulated but its profitability is far below its

potential due to low price level. Also, the efficiency is below the standards required by the EU. When we say "highly regulated", we refer to the price level since almost all initial activities for market opening have been completed. Up to 2008, conditions were being created for the economy to enter liberalized electricity market. Since 2008, all electricity buyers except households have the right to buy electricity on the open market at market, competitive prices. But, since the domestic regulated prices are in knock-down, not a single buyer has used that right yet.

When electricity is not valued properly, it influences the inefficiency in its consumption. Consequently, reforms are expected concerning both price level and efficiency. Some impressions can be obtained from the electricity price comparison between Serbia and other European countries (see Figure 7). Serbian households, as well as industry pay for the cheapest kWh in Europe. For example, electricity price for households in Serbia is almost two times lower than in neighboring Montenegro. Low price eliminates the pressure on consumers to use their energy more efficiently. The data for 2008 show that the total energy consumption per euro of GDP in Serbia was 67% higher than in EU27 [13, p. 32]. The total energy consumption *per capita* was 60% of EU27 average, while the GDP *per capita* figure was almost half of that, 35% of EU27 average. The low price of energy is the main reason for that.

Electricity represents 28% of final energy consumption and it is produced in large hydropower facilities and thermal power plants burning domestic lignite. Total net installed capacity of Electric Power Industry of Serbia (EPS) power plants is 7.144 MW (excluding Kosovo). Thermal power plants account for 55%, and hydro power plants for 40%. Production structure is varying, depending mostly on hydrological conditions. In principle, electricity produced from hydropower varies from 30% to 35% of total electricity production. The net efficiency of thermal power plants in Serbia is low and the installed capacities are mostly long time amortized. The net efficiency is around 30% lower than in new generation power plants while the average age of plants stands at more than 30 years. Despite these adverse qualities, substantial funds from the EU as well as internal funds have been used for reconstruction and maintenance of the power plants and network system after

Figure 7: Electricity price benchmark, 2010



Source: [13, pp. 43-44]

2000. Thanks to that, EPS managed to increase electricity production from existing capacities for more than 30%.

No doubt, the energy sector as number one priority for reindustrialization requires adequate industrial policy. This policy should take into account fundamental reforms in a way that energy system is structured, managed and financed. But, this industrial policy is associated with several risks. First, systemic risk due to global imbalance between energy demand and supply, which manifests in high price volatility and bilateral arrangements. Second, risks related to full liberalization of the electricity market (expected in 2015) in accordance with the EU directives. After full liberalization, electricity prices in Serbia will most certainly be much higher than today. This is related to another risk of unpreparedness of the economy and households which might lead to political instability. Third, risks related to stable and sufficient sources of financing of capacity expansion and modernization. When the output gap is tremendous, attracting investors will be critical. Chinese investors are active in thermal power segment. EBRD and KfW have already expressed their interest in financing some environmental projects. Also, EIB is interested in investing in electricity transmission system. In gas segment the South Stream project is in progress. Investors from the EU,

China and Russia are not the only ones. Sovereign wealth funds dispose of the largest amount of financial capital waiting for the lucrative options. Attracting them could be the next big assignment for Serbia's government. Fourth, risks related to technical obsolescence and environmental incompatibility of physical capacities. In the last six years power plants have been overhauled, coal production has been increased, pollution reduced, and transmission networks repaired. Still, many old power plants will have to be replaced in the next couple of years as they reach the end of their lifespan or since they do not fulfill the EU environmental standards.⁵ This brings the risks of finding enough financial sources for investment in replacement of old capacities beside the new ones.

Recommendations, instead of a conclusion

In Q1 2013 Serbia's economy is still in confusion and has only come up with partial solutions to structural imbalances. The threat of default is temporarily avoided, but that has again led to an increased indebtedness. In

⁵ According to AERS, it is projected that by 2020 Serbia will have to invest in more than 1700 MW of new capacities, which is almost 25% of current capacity in use

the last period policy makers have applied moderate doses of fiscal stimuli and have taken contractionary monetary stance. But these efforts have not resulted in sustainable improvements of macroeconomic fundamentals because the structural imbalances stayed intact. Inflation has stayed the only policy target. But when huge output gap exists, this target could not be achieved.

Downturn is not a time for setting targets. It is a time for changing economic policy platform and coordinating policy tools.

Serbia's economic crisis, like almost all other economic crises, has deep political roots. The main tenet of the US and the EU as key geopolitical stakeholders of Yugoslavia's transition during the 1990s was to render the regime of *S. Milosevic* irrelevant. Economic sanctions, NATO intervention, and permanent political mediation in searching for final solution have redirected transition toward geopolitical instead economical tenets and, consequently, made irrelevant not only the regime, but Serbia as well. Restart of economic transition after the regime was overthrown in 2000 did not help much.

Serbia should not be irrelevant for its citizens. Intellectuals and business elite, together with professional organizations, have to preserve the future of Serbia fighting with myopic political platforms and populist media against deep social pathologies our society is faced with. Current system, mostly excommunicated from the EU mainstream, is full of pathologies constantly creating non-level playing field. Just like cancer, pathologies are a smaller part of the system, but without their elimination, the system cannot survive.

The economy must be on the top of the list of priorities. Nobel's prize laureate *J. Tinbergen* defined economics as a king social science because the scope of its engagement is defined by politicians. The whole period of Serbia's economic crisis has been largely marked by the absence of an adequate political leadership with the vision and capacity to explain why some economic policy measures suggested from external advisors have turned out to be counter-productive. Instead of sustainable vision for economic development and feasible and efficient anti-crisis program, we are witnesses of permanent political lobbying for selfish interests (group and individual). Consequently,

the new level playing field must be defined by technocrats. It could be based on heterodox approach toward economic policies (industrial policies lead, macroeconomic policies follow) and technological platforms enabling competitive manufacturing facilities in tradable sectors that maintain external liquidity and the sustainable development.

A good strategy for economic recovery requires two key components: adequate vision and the first step in the right direction. Vision for Serbia is based on reindustrialization. The first step is investment in commodities and infrastructure, along with fiscal consolidation. Investments intend to eliminate output gap and bring back the economy on productivity improvement track. Following step includes replacement of inflation targeting with currency board (or "snake in the tunnel" FX). An economy striving to join the EU must have stable currency. Stable and competitive FX rate is monetary automatic stabilizer. Also, money supply, rather than fiscal stimuli, is crucial for recovery. It is well known that when monetary and fiscal policies move in opposite directions, the economy will follow monetary policy (*M. Freedman's* rule). In each recession, the key question for monetary policy is how to boost money supply without increasing public debt and inflation. In order to augment money supply, in our previous article we suggested certain financial instruments [5]. Also, balanced budget should be automatic stabilizer for fiscal policy.

Furthermore, for strategists in Serbia one of the key issues on the reforms agenda is the model of capitalism. Any model of capitalism cannot exist without domestic capitalists. Serbia needs self-made capitalists, risk takers and innovators instead rent-seekers and oligarchs connected to politicians. Also, society should have respect for new capitalist's achievements, not continuous suspicion and blame.

Serbia is an example of how geopolitical transition and wrong strategy of economic transition could worsen technological fundamentals of competitive manufacturing and create zero-sum-game mindset in economic transactions. In such conditions, no macroeconomic policies could improve the situation. But, industrial policies do matter. When it comes to energy sector it is often said "it is too important to be left to an invisible hand".

Structural reforms in economy along with scientification of society are the key levers of reindustrialization. Improved Serbia's manufacturing space based on integration with the EU technological platforms requires mentorship and real projects instead of bureaucratic maneuvering with the statements and promises, and financing of misconceptions. Also, structural reforms require turnaround in economic policy platform toward heterodox one. Is all that feasible? The answer is: yes and no. But, mostly yes. Without that, the risks of delayed reindustrialization will explode.

References

1. Deloitte Center for Financial Services in Central Europe. (2012). *The banking sector in Central Europe performance overview*. Prague: Deloitte.
2. Đuričin, D. (2008). Serbia: from transition to transitionism and back. *Ekonomika preduzeća*, 56(5-6), 155-170.
3. Đuričin, D., & Vuksanović, I. (2011). From macroeconomic stability to industrial policies and back: The case of Serbia. *Ekonomika preduzeća*, 59(7-8), 319-334.
4. Đuričin, D., & Vuksanović, I. (2012). Isn't output more important than inflation in impotent economy: Serbia's economic policies revision. *Ekonomika preduzeća*, 60(1-2), 13-32.
5. Đuričin, D., & Vuksanović, I. (2012). Reduction of systemic risk in Serbia through intelligent risk management in state-owned enterprises. *Ekonomika preduzeća*, 60(5-6), 229-247.
6. Fiorenzani, S. (2006). *Quantitative methods for electricity trading and risk management*. New York: Palgrave Macmillan.
7. Freeland, C. (2012). *Plutocrats. The rise of the new global super-rich and the fall of everyone else*. New York: The Penguin Press.
8. Graham, C. (2010). *Happiness around the world: The paradox of happy peasants and miserable millioners*. New York: Oxford University Press
9. Malinić, D., & Milićević, V. (2011). Performance evaluation of real sector in Serbia. *Ekonomika preduzeća*, 59(7-8), 335-351.
10. Petrović, P. B., & Milačić, V. R. (2011). National technology platforms of Serbia. *Proceedings of 34th International Conference on Production Engineering*, 15-25. Faculty of Mechanical Engineering, University of Nis.
11. Rajan, R. (2010). *Fault lines*. New Jersey: Princeton University Press.
12. Seaz, E. (2012). *Striking it richer: The evolution of top incomes in the United States* (Working Paper Series, Institute for Research on Labor and Employment). UC Berkeley. Retrieved from <http://www.escholarship.org/uc/item/8dp1f91x>
13. Serbian Energy Agency. (2012). *Aktivnosti Agencije za energetiku. Tržište energije u Srbiji: 2005-2010*. Belgrade: SEA.
14. World Bank Report. (2013). *Global economic prospects: Assuring growth over the medium term*. Washington: WB. Retrieved from http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1322593305595/8287139-1358278153255/GEP13AFinalFullReport_.pdf



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 corporate governance and compensation policy. She wrote numerous papers related to the previous topics.