

quarterly monitor

OF ECONOMIC TRENDS AND POLICIES IN SERBIA

Issue 39 • October–December 2014

Belgrade, March 2015

PUBLISHER

The Foundation for the Advancement of Economics (FREN)

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100 copies

Quarterly Monitor of Economic Trends and Policies in Serbia (*QM*) was created by Kori Udovički, who was the Editor-in-Chief of the first six issues of *QM*. For issues seven to twenty three, the Editor-in-Chief of *QM* was Prof. Pavle Petrović. Diana Dragutinović was the Editor-in-Chief of *QM*24. Since issue *QM*25-26 the Editor-in-Chief of *QM* is Milojko Arsić.

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Analytical and Notation Conventions

Values

The data is shown in the currency we believe best reflects relevant economic processes, regardless of the currency in which it is published or is in official use in the cited transactions. For example, the balance of payments is shown in euros as most flows in Serbia's international trade are valued in euros and because this comes closest to the measurement of real flows. Banks' credit activity is also shown in euros as it is thus indexed in the majority of cases, but is shown in dinars in analyses of monetary flows as the aim is to describe the generation of dinar aggregates.

Definitions of Aggregates and Indices

When local use and international conventions differ, we attempt to use international definitions wherever applicable to facilitate comparison.

Flows – In monetary accounts, the original data is stocks. Flows are taken as balance changes between two periods.

New Economy – Enterprises formed through private initiative

Traditional Economy – Enterprises that are/were state-owned or public companies

Y-O-Y Indices – We are more inclined to use this index (growth rate) than is the case in local practice. Comparison with the same period in the previous year informs about the process absorbing the effect of all seasonal variations which occurred over the previous year, especially in the observed seasons, and raises the change measure to the annual level.

Notations

CPI – Consumer Price Index

Cumulative – Refers to incremental changes of an aggregate in several periods within one year, from the beginning of that year.

H – Primary money (high-powered money)

IPPI – Industrial Producers Price Index

M1 – Cash in circulation and dinar sight deposits

M2 in dinars – In accordance with IMF definition: cash in circulation, sight and time deposits in both dinars and foreign currency. The same as M2 in the accepted methodology in Serbia

M2 – Cash in circulation, sight and time deposits in both dinars and foreign currency (in accordance with the IMF definition; the same as M3 in accepted methodology in Serbia)

NDA – Net Domestic Assets

NFA – Net Foreign Assets

RPI – Retail Price Index

y-o-y – Index or growth relative to the same period of the previous year

Abbreviations

CEFTA – Central European Free Trade Agreement

EU – European Union

FDI – Foreign Direct Investment

FFCD – Frozen Foreign Currency Deposit

FREN – Foundation for the Advancement of Economics

GDP – Gross Domestic Product

GVA – Gross Value Added

IMF – International Monetary Fund

LRS – Loan for the Rebirth of Serbia

MAT – *Macroeconomic Analyses and Trends*, publication of the Belgrade Institute of Economics

NES – National Employment Service

NIP – National Investment Plan

NBS – National Bank of Serbia

OECD – Organization for Economic Cooperation and Development

PRO – Public Revenue Office

Q1, Q2, Q3, Q4 – 1st, 2nd, 3rd, and 4th quarters of the year

QM – *Quarterly Monitor*

SORS – Statistical Office of the Republic of Serbia

SDF – Serbian Development Fund

SEE – South East Europe

SEPC – Serbian Electric Power Company

SITC – Standard International Trade Classification

SME – Small and Medium Enterprise

VAT – Value Added Tax

From the Editor



In the fourth quarter of 2014 and the beginning of 2015, negative trends in economy were halted, with some improvement in certain segments. However, there is still not enough basis to interpret this improvement as the beginning of a sustainable economic growth. Growth of economic activity was for the most part the result of renewed production in sectors that were particularly affected by the May floods, while exports and investments, the main drivers of growth, are still stagnating. Unemployment stagnated in the last quarter, while wages declined in real terms, primarily due to decrease of wages in the public sector. Year-on-year inflation reached a historic minimum, and as of mid last year, most of the months had a deflation. After a moderate depreciation at the end of last and beginning of this year, the dinar exchange rate has mostly been stable since the beginning of February.

After four consecutive quarters with declining economic activity, the last quarter of last year saw an increase in the seasonally adjusted GDP. Seasonally adjusted GDP in the last quarter was higher by 0.4% than in the previous one, and the main drivers of growth were industrial production and construction. Analysis by sectors indicates that the biggest growth was realised in activities that were most affected by floods, such as energy, but also that production is growing in certain activities that were not affected by floods, such as food industry. The growth of industrial production continued in January as well, with recovery spreading to a larger number of activities within the processing industry. Considering that the growth of economic activity was not generated by the growth of investments and exports, which represent the only sustainable drivers of growth in conditions of fiscal consolidation (government spending will drop this year and the following two-three years, and private spending will decrease at least this year), but rather by the growth of supplies/reserves, realised results for now cannot be interpreted as the beginning of a long-term sustainable recovery.

Signs of economic recovery are still quite weak, so it is necessary for the Government in cooperation with NBS to apply anti-recession measures, together with fiscal consolidation and reforms. Stronger growth of public investments would have the most direct and powerful

impact on economic activity, which is why public investments have to increase this year by at least 1 percentage point of GDP (around 300 million euros) compared to the previous year. Increase of public investments would be realised through accelerated implementation of contracted infrastructure projects, but also through re-activation of investments in municipal infrastructure, which has been on a low level in the last two years. Reduction of restrictiveness of monetary policy, through reduction of reference rate and the rate of mandatory reserves, would indirectly affect the growth of credit activity. NBS should cooperate with commercial banks in Serbia and examine the possibility of using a share of increased liquidity in the eurozone to credit companies in Serbia.

At the end of February, a three-year agreement between Serbia and IMF came into effect, which has three key components: fiscal consolidation, restructuring of public and privatisation of former socially owned enterprises, and improvement in the stability of the financial sector. Signing of the agreement increased the chances of realising ambitious Government plans for economic policy and reforms, while macroeconomic risks, such as public debt crisis and balance of payments crisis, were considerably reduced. We expect financial markets to have a positive reaction to the signing of the agreement and that borrowing conditions for the state and companies in Serbia at the international financial market will improve. Consistent implementation of the agreement would have a positive impact on business conditions and growth perspective, as well as gradual increase of foreign direct investments in Serbia.

During the fourth quarter, a large number of measures of fiscal consolidation has been implemented, such as the reduction of wages in the public sector and pensions, while at the beginning of 2015, subsidies for most of the state companies were abolished. Fiscal deficit since the beginning of 2015 declined considerably, as a result of fiscal consolidation measures, combating grey economy, but also some one-time factors. After excluding the effects of one-time factors, reduction of fiscal deficit is approximately going according to plan, which means that no spectacular results were achieved that would enable abandoning planned savings in the future.

However, even if fiscal consolidation results would be somewhat more favourable than planned, they should be used for the growth of public investments, instead of giving up on savings from government current spending.

According to the Prime Minister's statements, Serbia's budget during the first two months, realised a surplus of 2 billion dinars, while in the first quarter, a deficit of around 30 billion dinars is expected, which is significantly less than the maximum deficit of 55 billion dinars that was arranged with IMF. Considerably lower deficit in the first quarter will be mostly realised through one-time factors, such as payment of dividends from public enterprises, but also through a very low level of public investments. If the value of payments from public enterprises would be equally divided by months, fiscal deficit in the first quarter would be around 40 billion dinars. If the public investments had been on a "normal" level, the deficit would have been higher by a few more billion dinars. In addition, it is quite obvious that the planned deficit for the first quarter was set a bit higher than expected, so that the Government could successfully pass the first IMF review. Therefore, even if the results are slightly better than planned, the difference is not as big as is sometimes presented to the public.

A competent, dedicated and uncorrupted administration is a key condition for implementing the planned reforms in Serbia. Administration has an important role in creating policies and a key role in implementing them. This poses a question as to what extent the Serbian administration is capable of implementing numerous announced reforms. Based on past experience, it is estimated that the administration is an impediment to the implementation of reforms. According to the functioning of state institutions, Serbia is ranked extremely low on international competitiveness and business conditions lists.

Building of a strong administration requires time that by far exceeds the duration of an election cycle. That is why the main condition for improving the work of state administration is for elected officials to give precedence to long-term and general interests rather than short-term and partial interests. Even though building good administration is a long-term process, certain improvements are possible in a relatively short period. In

addition to fiscal consolidation, which reduces the state spending, it is necessary to also implement measures for advancing the operations of the administration. One of the first measures that could be implemented is tightening the hiring criteria in the public sector. This includes consistent applying of existing regulations, as well as their improvement, with the aim of hiring the most capable and the most qualified candidates, instead of, up till now, dominant hiring through partisan, family or other irregular channels. The second important step is to introduce clear criteria for certifying degrees, in order to put a stop to mass employment of people with dubious degrees of very low quality. Good administration means making the key criteria for advancement capability, expertise, not being corrupted, and being dedicated to the job, instead of party affiliation and other irregular criteria. Domination of irregular criteria over the past few decades has resulted in a strong negative selection in the public sector – key positions are not held by the best candidates. Naturally, efficient public sector requires a responsible rewarding policy, as it is highly unlikely that low wages for some of the most complex jobs in the society, which are being performed in the public sector, will attract and retain good staff. In that sense, our estimate is that the planned reduction of the number of employees and real wages in the public sector in the next three years is not only difficult to achieve, but will also present an aggravating factor in the advancement of its operations.

This issue of the Quarterly Monitor, beside the regular analyses, includes three Highlights and one Spotlight On. Highlight 1 (Arsić) analyses the scope and limitations of the IMF arrangement, while Highlight 2 (Ranđelović) assesses the effects of measures of combating grey economy and recommends additional measures. In Highlight 3 (Stamenković) we continue a series of articles dedicate to the analysis of the education system in Serbia and possible measures for its advancement. Focus of Highlight 3 is the analysis of the effects of economic and social factors on the PISA test results of our students. Spotlight On (Tanasković, Jandrić) analyses the determinants of bad loans, gives an overview of international experiences and analyses the implemented and planned measures of solving this issue in Serbia.



TRENDS

1. Review

Serbia faced mostly adverse macroeconomic trends in 2014. However, these trends were quite heterogeneous – the year began with a slight downturn in macroeconomic trends in Q1, which accelerated sharply in Q2 and Q3 (due to the May floods), while Q4 saw some signs of recovery. Economic activity decreased (by 1.8%), inflation was below the lower limit of the target corridor set by the NBS, and the positive trends in the current account deficit detected in 2013 were reversed. Furthermore, unsustainable fiscal policy, involving huge fiscal deficit and increase in public debt from about 60% of GDP at the beginning of the year to the worrying more than 70% of GDP at its end, was another serious problem Serbian economy faced in 2014. Some important breakthroughs were made in economic policy in 2014 through amendments to a number of systemic laws (Law on Pension and Disability Insurance, Labor Law, Law on Privatization, Law on Bankruptcy Proceedings, Law on Planning and Construction), along with the necessary reduction in public sector wages and pensions. However, huge and probably professionally more demanding part of the work is to be done in 2015 and the succeeding years. During that period (in accordance with the arrangement with the IMF) the government is expected to resolve the growing problems in public enterprises, to privatize money losing state-owned enterprises and the enterprises undergoing restructuring (or to declare bankruptcy), to reduce the number of public sector employees through reforms in the major budget users – such as education system or health care system.

Serbian economy was in recession throughout 2014 and real GDP shrank by 1.8%. May's floods, which caused a sharp drop in mining industry (coal production) and electricity production in the last seven months of the year, are among the reasons for Serbia's poor economic performance in 2014. However, it should be emphasized that even if the floods had not occurred, economic activity in 2014 would have been in recession, meaning that the real causes of the drop in economic activity are much deeper and therefore difficult to eliminate. About 2/3 of the decrease in GDP can be attributed to the floods (and slow post-flood reconstruction), meaning that even if the devastating May floods had not occurred, GDP would have shrunk by 0.6% (see Chapter 2 "Economic Activity").

Seasonally adjusted GDP grew by 0.4% in Q4 2014 relative to Q3, and preliminary data for January (industrial production, retail trade, average wage etc.) indicate further rise in economic activity at the beginning of 2015. However, it is too soon, and probably wrong, to claim that Serbian economy has started climbing out of recession. It is hard to believe that a sustainable economic recovery came after years of falling investment, and exactly when public sector pensions and wages were cut. The fact that some macroeconomic trends showing recovery are inconsistent with each other, and in some cases even impossible from the aspect of balance of payments (for example, rather improbable strong seasonally adjusted growth in food industry in November and December 2014 (Graph T2-8), real y-o-y increase in average wage in manufacturing industry of more than 15% in January, rise in employment in time of recession etc.) arouses doubts as to whether the suggested recovery in GDP is sustainable and true.

This issue of *QM* gives a more detailed analysis of the upward economic trends detected in Q4 2014 and in January 2015, because the prospects of economic growth in 2015 and in the succeeding years depend on how sustainable these trends are. The *first* possibility is that there has been a true and sustainable recovery in economic activity in the preceding few months. If so, Serbian economy would grow notably in 2015 and in the succeeding years. However, we believe that this is the least likely possibility. The *second* possibility, which cannot be ruled out by any means, is that some of the indicators showing improvement in economic activity were wrongly calculated by the Statistical Office of the Republic of Serbia. This would mean that the detected improvements were temporary and that economic activity would soon decrease to the level at which it would have been if there had not been any positive developments in Q4. The *third* possibility, which we find especially interesting, is that the improvement in economic activity was caused by formalization of economic flows that had been hidden from the SORS (reduction in shadow economy). In that case, GDP would keep growing

until this influence is exhausted. Expected economic trends would then take place – though with somewhat higher level of GDP. For now, we believe that our forecast predicting 0.5-1% decrease in economic activity in 2015 given in the previous issues of *QM* is correct. On one hand, 2015 started with somewhat better results than expected, which might boost economic activity (or slow down its drop). On the other hand, in our previous analysis, we counted on increase in coal and electricity production, which has not been restored to its pre-flood level yet, and on a successful privatization of Železara Smederevo, which failed.

Inflation was down to only 1.7% at the end of 2014, and y-o-y rise in prices was even smaller and stood at only 0.8% (in January 2015 y-o-y inflation was down to its lowest level since 1960, of only 0.1%). The major causes of such low inflation are the following - economic recession accompanied by drop in domestic demand, small rise in food and energy prices and administratively controlled prices, low imported inflation, and unduly restrictive monetary policy (see Chapter 5 “Prices and the exchange rate”). Interestingly, the above mentioned disinflationary factors were strong enough to offset the impact of dinar depreciation on prices. During the last year (to February 2015 inclusive), nominal exchange rate for dinar against euro depreciated by about 5%, and by more than 25% against dollar, while the prices went up by only 0.8%.

The NBS has been failing to fulfil its legal obligation to keep the inflation within the target corridor of $4\pm 1.5\%$ for a long time. Since October 2013, when inflation fell below the target corridor, rise in prices was within the target corridor for only two months, and it was below the bottom limit of the corridor for as much as 14 months. Although the NBS announced that the inflation would be pushed up to the target corridor by the middle of 2015 and that it would be raised to 4.2% by the end of the year, we believe that this cannot be achieved without a more determined monetary easing. Our analyses show that the announced 15% increase in electricity price (direct impact on inflation of about 0.7 p.p.), expected modest rise in oil prices, and gradual easing of disinflationary pressures based on the prices of primary agricultural products, will not be sufficient to push up the inflation to the target corridor, meaning that the NBS will have to take some additional measures to achieve it. The arrangement with the IMF, which additionally ensures macroeconomic stability in the following period, makes room for a more determined monetary easing.

Controlled depreciation of dinar exchange rate could be an effective measure against deflation – of course, as long as it does not jeopardize balances of a large number of foreign currency borrowers. Controlled depreciation of dinar would boost economic growth, because better price competitiveness of national economy would encourage rise in net exports. However, real depreciation of dinar against euro of 2.5% in Q4 2014 was followed by its real appreciation in the first two months of 2015. In response to these disinflationary pressures, the NBS purchased euros on the interbank market and thus prevented further appreciation of dinar. However, the NBS has some other mechanisms at its disposal (reference interest rate, currency structure of the mandatory reserves etc.) through which dinar can be weakened (which we find necessary). We believe that the optimum level of dinar depreciation would be the one which would push up the inflation to the target corridor set by the NBS.

Current account deficit accounted for 6% of GDP in 2014 and remained almost unchanged compared with 2013 (see Chapter 4 “Balance of payments and foreign trade”). This happened because, among other reasons, world prices of energy fell sharply in the second half of 2014. Energy accounts for about 15% of the imported goods, and almost 5% of the exported goods, meaning that large fluctuations in energy prices affect the current account deficit. If oil prices had not dropped (50% decrease from June to December in USD), along with the prices of other energy products, current account deficit in 2014 would have widened compared with 2013, which leads to conclusion that Serbian foreign trade actually suffered a downturn in 2014 (in fact, there was a real drop in net exports in 2014). Sharp rise in exports which started in 2013 suddenly stopped in 2014, and the second half of the year even saw a drop in exports. This occurred because the major driver of exports in 2013, the FAS company, reached its full production capacity, and no other product emerged to take its place. Investments suffered the sharpest drop of all GDP components during the previous years, which is the fundamental cause of the halt in exports - because strong rise in exports cannot be achieved without rise in investments.

However, we believe that the current account deficit will narrow in 2015 compared with 2014. This reduction will be caused by drop in imports rather than increase in exports. Trends in the world oil

prices from the beginning of the year to the middle of March indicate that the average energy prices in 2015 will be much lower than in 2014 – consequently, Serbia's current account deficit will shrink. Additionally, expected recovery in electricity production and coal extraction after reconstruction of the coal mines that had been flooded, will have positive impact on the balance of energy imports and exports. Furthermore, implementation of fiscal consolidation measures will cause a drop in domestic consumption and consequently, a fall in imports in 2015. Finally, the government could boost the foreign trade and reduce the current account deficit in 2015 by preventing real appreciation of dinar (or allowing/inducing its depreciation).

Capital inflows in 2014 were low and insufficient to make up the current account deficit. This was one of the causes of the considerable reduction in foreign currency reserves of the NBS in 2014 (more than EUR 1 billion). Furthermore, the structure of the capital inflows was quite unfavourable. Public foreign debt grew because the government borrowed more to finance the fiscal deficit. On the other hand, private foreign debt shrank. Foreign direct investments (FDI), the component of capital inflows of largest importance to Serbian economy, were at a very low level three years in a row. FDI totalled about EUR 1.4 billion in 2014 (including reinvested profits), and accounted for only 60% of the FDI received in 2011 (the same assessment methodology was used). Reliable forecasts about the trends in capital inflows in 2015 have not been made yet. Hopefully the arrangement with the IMF will boost FDI. However, one should bear in mind that the investment spending in EU countries, which are the major source of FDI in Serbian economy, is still falling (see Chapter 8 “International Environment”). Public foreign debt is expected to shrink in 2015 as a consequence of fiscal consolidation and reduction in fiscal deficit. It is quite unlikely that the current downward trend in the private foreign debt will rebound already in 2015, although greater microeconomic stability and elimination of some other problems (for example, large share of bad debt) could have positive impact on these trends.

Trends in labour market published by the SORS, and assessed through the Labour Force Survey, remained inconsistent with other macroeconomic trends in 2014. Namely, employment rose and unemployment fell although Serbian economy was in recession. According to the latest Labour Force Survey, employment rate in Q4 2014 rose to 50.4% and unemployment fell to 17.6%. Since economics is unable to explain this phenomenon of rising employment and decreasing unemployment during the previous years (since 2012), the only possible explanation is that the data published by the SORS is unreliable.

Fiscal deficit widened to very high 6.6% of GDP in 2014 (see Chapter 6 “Fiscal Flows and Policy”). Although it was unsustainably high, the fiscal deficit was somewhat smaller than planned in 2014 budget (7.1% of GDP), and in the budget revision adopted in October (8% of GDP). Public revenues were by RSD 30 billion below the projections made at the beginning of the year, primarily because macroeconomic indicators fell short of the plan – average inflation was much below the targeted level (2.1% instead of 5.5%), and so did GDP (although it was expected to grow by 1.5%, GDP shrank by 1.8%). Discrepancy between the actual and projected level of public expenditures was even larger, more than RSD 60 billion. Capital expenditures suffered the largest cut (by more than a half). However, this reduction was not planned and justified but was caused by the government's inefficiency in its carrying out infrastructure projects.

Judging from the latest fiscal trends, there are some grounds for optimism. Public revenues went up in Q4, and similar trend continued at the beginning of 2015. We believe that this increase was to a large extent caused by reduction in the shadow economy. Additionally, the process of fiscal consolidation began at the end of 2014 through reduction in public sector pensions and wages. Although some analysts, politicians, and representatives of other interest groups argued against this measure claiming that it would not be effective because it would cause a drop in demand, in economic activity and in public revenues – the early results show that such claims were unfounded. Fiscal results achieved in December 2014 and in the first two months of 2015 are within the expected and planned level, which proves the efficiency of this measure. The arrangement with the IMF signed at the end of February, is another guarantee that the government will be fiscally responsible in the following period. We therefore believe that the government currently keeps the direct fiscal flows – budget revenues and expenditures – under control, and that it would be no surprise if fiscal deficit fell below the targeted 5.9% of GDP in 2015.

1. Review

There are, however, some concerns as to whether the reforms envisaged in fiscal strategy (and in the arrangement with the IMF) will be carried out successfully. The announced privatization of Železara Smederevo failed, and the enterprise has not been declared bankrupt. Although the government announced that the status of the petrochemical complex (Azotara, Petrohemija, MSK) would be resolved in the first half of 2015, it has not come out with any specific information about the actions that have been taken so far. Furthermore, the government is obliged by the Fiscal Strategy and the arrangement with the IMF to reduce the number of public sector employees in the following three years. It is, however, appalling that the government still does not know the exact number of people employed by the public sector, because a comprehensive registry of public sector employees – which is a precondition for successful rightsizing of the public sector – has not been set up yet. The process of public sector downsizing needs to be based on a suitable plan, methodology and criteria; otherwise it could do more harm than good, because majority of surplus employees work in vital systems, such as education and health care system.

Public debt grew to more than 70% of GDP at the end of 2014, and the rapid growth continued at the beginning of 2015 although there was no significant rise in government borrowing. Public debt exceeded 75% of GDP as early as at the end of February. Debt-to-GDP ratio increased in the preceding months primarily due to a strong depreciation of dinar against US dollar (by about 25% in the preceding 6 months) and consequential increase in the share of dollar denominated debt in GDP. Since the majority of relevant studies show that the appreciation of dollar against euro (and dinar) is going to last, it is quite clear that the government's optimistic forecasts presented in the Fiscal Strategy (adopted less than two months ago) which predict that public debt will reach 79% of GDP at the end of 2016 and then start shrinking, will not come true.

Serbia: Selected Macroeconomic Indicators, 2005-2014

	Annual Data										Quarterly Data								
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2013				2014				
											Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Economic Growth																			
GDP (in billions of dinars)	1,751.4	2,055.2	2,355.1	2,744.9	2,880.1	3,067.2	3,407.6	3,584.2	3,876.4	3,884	...	...	...	...	...	...	...	...	...
GDP	5.5	4.9	5.9	5.4	-3.1	0.6	1.4	-1.0	2.6	-1.8	2.4	1.1	3.4	3.3	-0.2	-1.3	-3.6	-1.8	-2.4
Non-agricultural GVA	6.2	5.1	6.9	4.4	-3.3	0.2	1.5	1.1	1.6	-2.4	2.2	-0.3	2.4	2.3	-0.2	-1.8	-4.7	-2.4	-2.4
Industrial production	0.6	4.2	4.1	1.4	-12.6	2.5	2.2	-2.9	5.5	-6.5	5.2	3.0	10.8	3.3	2.1	-4.8	-13.9	-9.5	-9.5
Manufacturing	-1.0	4.5	4.7	1.1	-16.1	3.9	-0.4	-1.8	4.8	-1.4	5.4	3.2	8.8	2.2	3.6	-2.0	-5.6	-2.8	-2.8
Average net wage (per month, in dinars) ²⁾	17,478	21,745	27,785	29,174	31,758	34,159	37,976	41,377	43,932	44,530	41,419	44,248	43,939	46,185	41,825	44,971	44,934	46,371	46,371
Registered Employment (in millions)	2,056	2,028	1,998	1,997	1,991	1,805	...	...	...	...	1,724	1,724	1,720	1,705	1,863	1,896	1,895	1,895	1,864
Fiscal data																			
Public Revenues	42.1	42.4	42.1	41.5	38.6	-1.5	-4.6	0.6	-3.0	3.1	-5.7	-3.5	-2.6	0.1	-0.8	4.3	3.5	5.4	5.4
Public Expenditures	39.7	42.7	42.8	43.7	42.7	-1.7	3.3	3.6	-5.7	5.0	-9.1	-9.8	2.3	-4.2	4.4	3.7	-3.0	14.8	14.8
Overall fiscal balance (GFS definition) ³⁾	14.8	-33.5	-58.2	-68.9	-121.8	-136.4	-158.2	-217.4	-178.7	-257.5	-46.2	-44.7	-66.1	-55.0	-68.1	-45.0	-39.8	-105.2	-105.2
Balance of Payments																			
Imports of goods ⁴⁾	-8,286	-10,093	-12,858	-15,917	-11,096	-12,176	-13,758	-14,028	-14,693	-13,393	3,341	3,623	3,712	4,017	3,384	3,759	3,731	-2,476	-2,476
Exports of goods ⁵⁾	4,006	5,111	6,444	7,416	5,978	7,402	8,440	8,394	10,540	9,732	2,151	2,578	2,979	2,832	2,510	2,769	2,656	1,794	1,794
Current accounts ⁶⁾	-1,805	-3,137	-4,994	-7,054	-2,084	-2,082	-2,870	-3,639	-2,092	-1,857	-668	-387	-381	-671	-503	-495	-502	-312	-312
in % GDP ⁷⁾	-8.6	-12.9	-17.2	-21.6	-7.2	-7.4	-9.1	-12.3	-6.5	-6.1	-8.3	-4.4	-4.3	-7.8	-6.3	-5.8	-5.9	-6	-6
Capital account ⁸⁾	3,863	7,635	6,126	7,133	2,207	1,986	2,694	3,486	1,917	1,517	612	356	277	671	496	372	337	272	272
Foreign direct investments	1,248	4,348	1,942	1,824	1,372	860	1,827	669	1,229	1,210	171	264	446	347	316	397	334	152	152
NBS gross reserves (increase +)	1,675	4,240	941	-1,687	2,363	-929	1,801	-1,137	697	-1,332	859	-886	-164	887	-800	-370	509	-671	-671
Monetary data																			
NBS net own reserves ⁹⁾	175,288	302,783	400,195	475,110	578,791	489,847	606,834	656,347	757,689	786,293	673,147	674,731	701,822	757,689	696,802	756,996	787,778	788,293	788,293
NBS net own reserves ⁹⁾ , in mn of euros	2,050	3,833	5,051	5,362	6,030	4,609	5,895	5,781	6,605	6,486	6,025	5,917	6,122	6,605	6,015	6,513	6,641	6,486	6,486
Credit to the non-government sector	518,298	609,171	842,512	1,126,111	1,306,224	1,660,870	1,784,237	1,958,084	1,870,916	1,927,668	1,933,868	1,929,205	1,911,059	1,870,642	1,815,004	1,842,407	1,888,471	1,927,668	1,927,668
FX deposits of households	190,136	260,661	381,687	413,766	565,294	730,846	775,600	909,912	933,839	998,277	907,288	924,684	933,170	933,839	937,875	949,418	976,865	998,277	998,277
M2 (y-o-y, real growth, in %)	20.8	30.6	27.8	2.9	9.8	1.3	2.7	-2.2	2.3	6.7	-2.6	-4.7	1.2	2.3	1.9	3.5	4.3	6.7	6.7
Credit to the non-government sector (y-o-y, real growth, in %)	28.6	10.3	24.9	25.2	5.2	13.9	0.5	-2.1	-8.3	1.2	-8.2	-9.2	-8.9	-6.5	-8.3	-5.7	-3.3	1.2	1.2
Credit to the non-government sector, in % GDP	29.6	28.6	35.0	42.0	45.8	54.0	52.4	54.7	48.3	49.5	52.9	51.7	50.3	48.3	48.5	46.8	48.6	49.5	49.5
Prices and the Exchange Rate																			
Consumer Prices Index ⁷⁾	16.5	6.5	11.3	8.6	6.6	10.2	7.0	12.2	2.2	1.8	11.2	9.7	4.8	2.2	2.3	1.2	2.1	1.8	1.8
Real exchange rate dinar/euro (average 2005=100) ⁸⁾	100.0	92.1	83.9	78.5	83.9	88.0	80.43	85.3	80.2	81.8	79.5	79.5	80.8	81.2	80.7	80.9	81.8	83.9	83.9
Nominal exchange rate dinar/euro ⁸⁾	82.92	84.19	79.97	81.46	93.90	102.90	101.88	113.03	113.09	117.25	111.69	112.15	114.2	114.3	115.8	115.6	117.4	120.29	120.29

Source: FREN.

1) Unless indicated otherwise.

2) Data for 2008 represent adjusted figures based on a wider sample for calculating the average wage. Thus, the nominal wages for 2008 are comparable with nominal wages for 2009 and 2010, but are not comparable with previous years.

3) We monitor the overall fiscal result (overall fiscal balance according to GFS 2001) – Consolidated surplus/deficit adjusted for “budgetary lending” (lending minus repayment according to the old GFS).

4) The Statistical Office of the Republic of Serbia has changed its methodology for calculating foreign trade. As from 01/01/2010, in line with recommendations from the UN Statistics Department, Serbia started applying the general system of trade, which is a broader concept than the previous one, in order to better adjust to criteria given in the Balance of Payments and the System of National Accounts. A more detailed explanation is given in QM no. 20, Section 4, “Balance of Payments and Foreign Trade”.

5) The National Bank of Serbia changed its methodology for compiling the balance of payments in Q1 2008. This change in methodology has led to a lower current account deficit, and to a smaller capital account balance. A more detailed explanation is given in QM no. 12, Section 6, “Balance of Payments and Foreign Trade”.

6) The NBS net own reserves represent the difference between the NBS net foreign currency reserves and the sum of foreign currency deposits of commercial banks and of the foreign currency deposits of the government. More detailed explanations are given in the Section Monetary Flows and Policy.

7) Data for 2004, 2005 and 2006 are based on the Retail Prices Index. SORS has transferred to the calculation of the Consumer Price Index from 2007.

8) The calculation is based on 12-m averages for annual data, and the quarterly averages for quarterly data

2. Economic activity

Economic activity in 2014 achieved a notable real decline of 1.8%. One of the reasons for bad results of economic activity in 2014 are May floods, which influenced a deep fall of mining (coal) and production of electricity in the last seven months of 2014. However, it is also important to state that the economic activity would be in recession in 2014 even without May floods, and that the real reasons for the fall of economic activity are deeper and therefore more difficult to eliminate. In the last quarter of 2014 seasonally adjusted GDP increased by 0.4% compared to Q3, and the reason for this increase are slightly better results of industrial production and construction. Preliminary data for January 2015 imply even better results of economic activity than in Q4 2014. We believe however that it is still early, and probably wrong, to argue that the economic recovery and the exit from the crisis started. It is hard to believe that the recovery of the economy can be achieved after several years of decrease in investments and exactly at the time of the beginning of the fiscal consolidation. Doubts about the sustainability and accuracy of the implied recovery of GDP are reinforced by the fact that the macro-economic trends showing the improvement are inconsistent, and in some cases almost impossible in the balance sheet - for example quite unlikely high seasonally adjusted growth of the food industry in November and December 2014, real y-o-y growth of average wages in manufacturing industry of 15% in January, employment growth during the recession and more. *QM* analysis indicates that it is highly possible that one of the reasons for improvement of macroeconomic trends is increased activity of the State in combatting the grey economy, which is being conducted since the second half of 2014. This is the reason why somewhat more real values of some economic indicators are being reported to SORS – which then looks like they are being improved. For 2015 we hold on to our estimate stated in the previous issues of *QM* that the economic activity will record a fall of about 0.5-1%. On the one side, the data with which it is entered into 2015 are slightly better than we expected and that can contribute to a higher growth (smaller drop) of economic activity, but on the other side, a renewal of normal production of coal and electricity after the floods is being delayed, and privatization of Železara Smederevo was not successful well, which we did not calculate in the previous analysis.

Gross domestic product

***Real GDP drop
in 2014 of 1.8%***

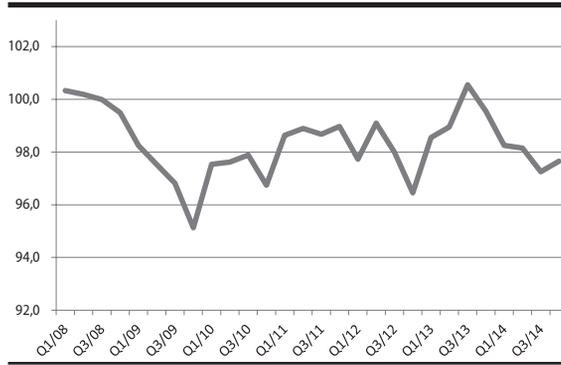
According to the SORS estimates, real year on year drop of GDP in 2014 amounted to 1.8%. About two thirds of this fall, or 1.2 p.p., is a consequence of May floods (and slow recovery), so if the catastrophic May floods had not happened, the GDP in 2014 would have record a fall of 0.6%. The reasons for the recession in which economic activity was throughout 2014 even without floods are unsustainable fiscal position of the state (because of which macroeconomic risks grew and averted private investors), a decrease in investments, low credit activity, a slowdown in exports after reaching full production capacity of car production (FAS) and more. As all of these were permanent and/or expected trends, we announced recession or stagnation of the economy in 2014 (see QM34) as early as in December 2013 which occurred in the end. We note however that the Government and the NBS predicted at the same time as *QM* economic growth in 2014 of 1.5% (see Fiscal Strategy for 2014 and Inflation Report from November 2013) and accordingly projected fiscal and monetary policy.

***This is already third
recession since
the end of 2008***

After the outbreak of the global economic crisis in the second half of 2008 the Serbian economy couldn't manage to return on a sustainable path of recovery and growth. After the fall of GDP in 2009 (which is after numerous revisions of SORS now estimated at 3.1%), with occasional episodes of mild recovery, two more economic downturns occurred, by 1% in 2012 and this last one by 1.8% in 2014. The current level of GDP is still about 2% lower than the one before the crisis, a fact by which Serbia, alongside with Croatia, is one of the few European countries in transition, which still, six years after the outbreak of the crisis, fails to reach pre-crisis level of production.

Seasonally adjusted GDP indicates growth compared to Q3

Graph T2-1. Serbia: Seasonally adjusted GDP growth (2008=100)



Source: QM estimates based on SORS data

Seasonally adjusted GDP growth indices confirm negative trends in the movement of economic activity in 2014, and it is also noticed that the fall of economic activity started two months before May floods. This undoubtedly confirms our thesis that the floods are not the only reason for the last recession of economic activity. However, a mild growth of seasonally adjusted GDP of 0.4% can be noticed in Q4 when compared to Q3. Positive trends from Q4 have continued in 2015 to all appearances, as January saw very unusual seasonally adjusted growth in industrial production by 6.5%, compared

to December 2014, y-o-y growth in retail sales in constant prices by 3.6% (despite reductions in pensions and salaries in the public sector), but also y-o-y growth of the average wage in the manufacturing industry in January of over 15%. The answer to the question whether the seasonally adjusted GDP growth in Q4 and surprisingly good indicators in January represent a hint of economic recovery, however, is currently very difficult to give.

...but it is still early to speak about economic recovery

The first fact that can be interpreted ambiguously is that somewhat better results are still not widespread in a larger number of sectors of the economy. Sectors of the economy which recorded the strongest growth in Q4 compared to Q3 are industrial production and construction, while the rest of the economy is stagnating or continuing the decline from the previous quarter. Within the industrial production, we noticed a mild recovery of mining and electricity production, which is a result of drying out of parts of flooded coal mines in the May floods and a gradual beginning of their re-exploitation. However, the real reason for the increase in industrial production in Q4 was very strong growth in the food industry, which in October and November recorded a seasonally adjusted growth of around 3-4% compared to the previous month, and in December an additional 15% compared to November. The observed increase in construction probably indicates that activities of flood damage reconstruction increased in Q4 when compared to Q3. For economic recovery to be sustainable, we believe that it should be more widely spread in a number of sectors.

The last positive data are very questionable

The second and we believe the key problem that complicates the interpretation of positive data in recent months is that many of them are economically quite unlikely, and some are almost impossible. For example, already described seasonally adjusted growth of the food industry in the last quarter of 2014 was economically hardly possible. The food industry is by far the largest single area of industrial production, but by its nature very heterogeneous, because it consists of a wide variety of third-party products (dairy, confectionery, bakery products, oils, meat products, etc.) with no individual type of product with a dominant share. Therefore, it is impossible that production in the short term increases by more than twenty percent, because that would mean a simultaneous jump in the production of a large number of essentially unrelated products, or some large investment, which did not happen¹. Furthermore, the increase in the number of employees which by the official data occurred in Q4 in both formal and informal part of the economy² is economically unlikely. It is indicative that some sectors of the economy in which a formal employment grows the fastest are: real estate, trade and other areas, where certainly there was no increase in production volume (but are particularly likely to do business in the gray area). However, data for January 2015 are questionable in particular. The seasonally adjusted industrial production increased by 6.5% and manufacturing industry by 6%, which took place in January 2015 compared to the previous month is huge and historically occurred only after the extra-

¹ In the broad public an explanation could be heard that due to the weather conditions in the second half of 2014 a usual campaign of sugar beet and oilseeds processing was delayed and that was the reason for the high seasonally adjusted growth of the food industry. But if that was the real reason then the described high growth in Q4 would had to be preceded by a large temporary decline in the food industry in Q3, which did not happen.

² Employment growth in Q4 is indicated not only by the Labour Force Survey but also by independent research in formal employment.

ordinary decline in production (after the bombing and after the state of emergency due to bad weather in February 2012), and certainly not in regular circumstances. Similarly, y-o-y growth in retail sales by 3.6% in January is hardly possible, particularly bearing in mind that in January 2015 compared to January 2014, pension and public sector wages have been reduced, and a y-o-y real growth in average wages in the manufacturing industry in January of 15.5% is singled out as improbable.

It is possible that the real reason for better indicators is suppression of the gray economy

From mid-2014, there was apparently an intensification of activities of the state in suppression of the gray economy, which is also suggested by the fiscal data and we believe that this is reflected in the more realistic presentation of some statistical indicators. An additional argument in favor of this claim is somewhat more detailed analysis of individual data which are showing the largest improvement. For example, the average net wage in the sector of computer programming and service activities in January 2015 rose even more than seven times compared to January 2014 –from less probable 15,500 dinars at a much more realistic 114 000 dinars. This fact suggests the possibility that the practice of employees officially reported at a much lower amounts of real wages in this area of the economy is abandoned. Also, this is indicated by already noticed fact that a relatively large increase in formal employment occurs in sectors of the economy especially sensitive to the size of the gray economy (trade, real estate, accommodation and food services) which can also point to the registration of already employed workers, and not to real improvement in the trends in these parts of the economy. Finally, in the analysis of positive trends in industrial production, we saw that they are focused on the production of consumer goods, and not on the production of intermediate and investment products which do not end up in retail.

Decline in private consumption and investment and a significant slowdown in export growth in 2014

We have analyzed the structure of GDP trends in the entire 2014 and especially in Q4 by use. Table T2-2 shows the structure of GDP growth by expenditure principle. The Table shows that the greatest changes in 2014 compared to 2013 occurred in the movement of exports which, following high 20% growth in 2013 slowed down to only 3% in 2014. The remaining components of GDP were not changed so dramatically in 2014 compared to 2013 - private consumption, investments are in decline (although the decline of investments is significantly lower than in 2013), government consumption was unchanged in real terms, while imports recorded a small real growth (Table T2-2). Such structure of GDP suggests that economic contraction in 2014 by 1.8% after the growth of 2.6% in 2013 actually does not represent a major reversal of the trend of economic activity, as it may seem at first glance. Namely high growth of exports in 2013 was the result of the production of only two companies (FAS and NIS), which was evident to come to an end with reaching full production capacity of these companies. When this happened in the first half of 2014, unfavorable trends in the biggest part of the economy that already existed in 2013 were revealed. From this brief analysis two conclusions stand out. First, that the Serbian economy has structural long-standing problems whose resolving will be a great challenge and will require a certain amount of time, and second, that the re-entry of the Serbian economy into recession was predictable and expected, which we announced timely in the issues of QM from the end of 2013.

Table T2-2. Serbia: GDP by expenditure method, 2009-2013

	Y-o-y indices														
	2009	2010	2011	2012	2013	2014	2013				2014				Share 2013
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GDP	96.9	100.6	101.4	99.0	102.6	98.2	102.4	101.1	103.4	103.3	99.8	98.8	96.2	98.2	100.0
Private consumption	99.4	99.4	100.9	98.2	99.4	98.7	98.1	100.1	100.0	100.1	98.4	99.1	98.7	98.6	75.3
State consumption	100.6	100.8	101.1	102.4	98.9	100.1	96.7	94.2	102.5	101.6	99.3	100.3	98.6	101.9	17.8
Investment	77.5	93.5	104.6	113.2	88.9	97.3	97.0	81.9	90.4	90.2	97.3	99.6	92.5	100.0	17.6
Export	93.1	115.0	105.0	100.8	121.3	103.9	113.8	115.6	131.7	122.4	114.8	109.5	94.3	100.9	41.2
Import	80.4	104.4	107.9	101.4	105.0	103.3	99.4	102.5	109.6	108.2	103.7	106.3	101.9	101.6	51.9

Source: SORS

A smaller y-o-y decline in economic activity was achieved in Q4 when compared to Q3. Government consumption in Q4 was in real terms higher than in the same period of the last year by about 2%, due to a large increase in expenditures for goods and services in December (even 42% nominal y-o-y growth). Investments were at the same level as in Q4 2013, which is however

2. Economic Activity

much better result compared to the previous three quarters of 2014 when they were in decline. We believe that the reason for somewhat better results of investments is intensification of State activities in the flood damage reconstruction activities from October, but the execution of some other infrastructure projects, because the growth in Q4 was achieved only by construction while imports and production of equipment still record the same large double-digit drop. Net exports in Q4 was in decline, but still achieved results were slightly better than we expected due to the solid recovery in exports compared to Q3, for which we are still not sure whether it will be sustainable in the coming quarters. Private consumption in Q4 achieved approximately similar decline as in Q3 (Table T2-2).

Construction and industry increasing in Q4, and other sectors do not signal recovery

Observed by production (Table T2-3) we see that in Q4 there was a relatively strong y-o-y growth of construction, which is estimated by SORS at 8.5%, after the quarter in which construction activity had relatively deep y-o-y fall of about 6%. Besides that, industrial production significantly reduced its y-o-y fall from 13% from Q3 to 9% in Q4. These two sectors of the economy gave their contribution to the seasonally adjusted GDP growth in Q4 compared to Q3 of over 0.5 pp. As total GDP in Q4 recorded seasonally adjusted growth of 0.4% this means that the remaining sectors of the economy (except construction and industry) in Q4 were still in a mild seasonally adjusted fall.

Table T2-3. Serbia: Gross Domestic Product by Activity, 2009-2014¹

	2009	2010	2011	2012	2013	2014	2013				2014				Share 2013
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Total	96.9	100.6	101.4	99.0	102.6	98.2	102.4	101.1	103.4	103.3	99.8	98.8	96.2	98.2	100.0
Taxes minus subsidies	98.6	99.5	101.1	97.8	98.9	99.4	95.9	98.4	100.2	101.0	98.7	100.4	99.3	99.4	15.8
Value Added at basic prices	96.6	100.8	101.5	99.2	103.3	98.0	103.7	101.6	104.0	103.8	99.9	98.5	95.6	98.0	84.2
Non agricultural Value Added	96.7	100.2	101.5	101.1	101.6	97.6	101.7	99.2	102.4	102.3	99.7	98.2	95.1	97.6	90.6 ²⁾
Agriculture	95.2	106.4	100.9	82.7	120.9	100.8	122.8	125.0	119.1	118.3	102.4	100.7	99.9	100.9	9.4 ²⁾
Industry	96.8	100.8	103.2	105.6	106.0	92.9	107.3	105.8	107.0	104.0	99.7	94.5	86.8	91.0	26.6 ²⁾
Construction	87.1	97.6	105.9	90.2	96.1	100.9	103.0	82.2	98.6	102.7	97.7	102.5	94.1	108.5	5.1 ²⁾
Trade, transport and tourism	92.9	100.0	99.5	99.3	102.3	98.7	101.0	99.9	102.7	105.4	99.9	98.0	98.3	98.7	17.8 ²⁾
Informations and communications	97.0	103.2	102.6	102.8	99.9	101.8	99.9	96.6	100.9	102.3	101.5	102.6	101.8	101.2	5.2 ²⁾
Financial sector and insurance	102.6	101.9	98.4	92.0	90.5	98.4	89.2	90.1	89.6	93.4	96.6	100.2	97.4	99.3	3.1 ²⁾
Other	99.7	99.8	100.9	101.8	100.2	99.7	100.7	99.3	100.7	100.1	99.6	99.7	99.6	100.1	32.8 ²⁾

Source: SORS

1) In the previous year's prices

2) Share in GVA

We hold on to the estimates on GDP fall in 2015 by around 0.5-1%

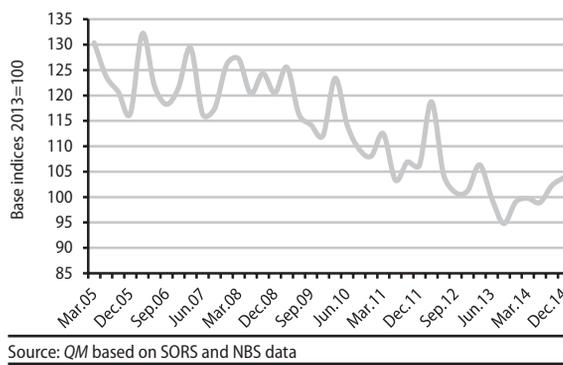
Announced data for Q4 and also available data for January 2015 are better than we expected in the previous issues of QM. However, it is still uncertain whether these trends will continue in the following quarters, especially because there is, we believe justified, doubt that announced data completely reliably describe the movement of economic activity in the last few months. On the other hand, some unfavorable events took place, which we also did not expect in the previous analysis. For example, we didn't expect that even by the end of 2014 the consequences of May floods on mining (coal) and production of electricity were not remediated. Mining and electricity production were also in January for 15-20% lower than the usual production levels – which will have negative impact on the results of the economic activity compared to our previous expectations. Also, the announced successful privatization of Železara Smederevo did not occur, based on which we expected a positive contribution to the GDP growth in 2015 by 0.2-0.3 p.p. Taking all this into account we maintain our estimate of the GDP fall in 2015 from the previous issues of QM of 0.5-1%.

Unit labor costs growing significantly in Q4...

Unit labour costs³ (ULC), measured in dinars are growing in Q4 when compared to Q3, but also compared to the same period of the last year – y-o-y growth of ULC amounted to about 5% (Graph T2-4). ULC represent the share of labour costs in the added value and we measure them for total economy from which we excluded the agriculture and public administration sectors so we could assess the real trends in the “market” part of the economy which does not depend essentially on changes of meteorological factors (such as agriculture). We estimate the increase of ULC in our sample as inadequate because it indicates that with the same labour costs less is being produced. However, in this case also it is possible that the observed ULC increase

³ Unit Labor Costs in dinars are calculated for the economy (excluding the Agriculture and Public Administration sectors).

Graph T2-4. Serbia: Real Unit Labor Costs in the Economy, 2005-2014



Source: QM based on SORS and NBS data

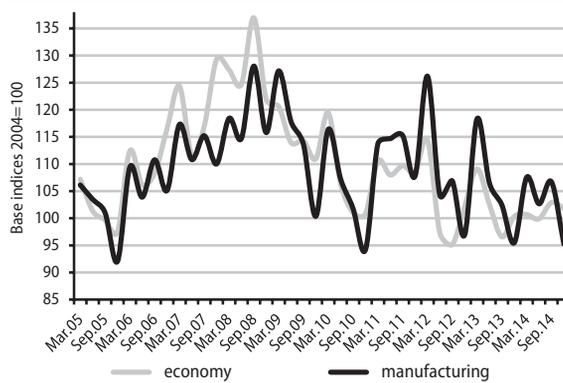
... This increase in ULC is probably a consequence of unreliable official data, and not the actual trends

is mainly a consequence of the reduction of the grey economy, i.e. more accurate presentation of the real labour costs, and that it is only a small part a result of the growth in wages received by employees. The previous long-term trend of ULC was their significant decrease (Graph T2-4). The direct reasons for the growth of the ULC in Q4 were officially published labor market trends which we believe to be unreliable - and therefore we still do not consider the observed ULC growth to be certain or troubling. In Q4, according to the official data, the growth of the average wage and formal employment occurred. Although at first glance it appears that the average wage in Serbia in Q4 was not significantly increased (the y-o-y growth of total average wage by 0.3% was achieved) in our sample from which the public sector is excluded (in which wages were reduced by 10% from November 2014), nominal wage growth was actually over 3%. We expect that the problem of unreliable measurement of wages in the private sector will further escalate when we calculate ULC for Q1 2015, as in January y-o-y growth of wages in the manufacturing industry was amazing 15.5%. Q4 also saw a slight increase in formal employment, which is also unlikely. In the previous part of the text we have already hinted the possibility that the real reason for some unusual macroeconomic trends we observed in Q4, and most likely in January 2015, were State actions to combat the grey economy. However, please note that statistics on employment and wages in Serbia has not been reliable enough for quite some time – and the Labor Force Survey can be used as the best example of bad data published in this area.

Euro-ULC not growing due to a dinar depreciation

Unit labour costs measured in euros (euro-ULC) are an indicator of the price competitiveness of the Serbian economy, as they define the greatest national cost component (labour costs) in relation to the added value. We calculate euro-ULC for the manufacturing sector (which produces by far the greatest share of tradable goods), and for the economy as a whole⁴, as shown in Graph T2-5.

Graph T2-5. Serbia: Real Euro - Unit Labor Costs in the Economy and Industry, 2005-2014



Source: QM based on SORS and NBS data

Note: the growth of euro-ULC on the graph represents the decline in price competitiveness

Graph T2-5 shows that the euro-ULC are at approximately same level compared to the same period of the last year besides the fact that the dinar-ULC (Graph T2-4) increased considerably. The reason for this is a significant real dinar depreciation throughout 2014 which compensated for this increase of the dinar-ULC. Based on the values of the euro-ULC (Graph T2-5) and the comparison with their historical values, it could be said that the price competitiveness of the domestic economy is with currently at the satisfactory level with the dinar exchange rate above 120 dinars per euro, but a moderate real depreciation would even be more favourable.

⁴ Excluding the Public Administration and Agriculture sectors.

Industrial production

Industrial production recorded a fall of 6.5% in 2014

In Q4 y-o-y fall in industrial production slowed down

Industrial production recorded a fall of 6.5% in 2014 (Table T2-6) which was particularly pronounced in the second half of the year. The main reason for such a deep fall in industrial production were the May floods and inefficient flood damage reconstruction, which is why mining and electricity production in 2014 recorded an annual decline of around 20%. However, even if there were no floods the industrial production in 2014 would be in decline, as evidenced by the movement of the manufacturing industry (which was not under significant influence of floods) which recorded a decline of 1.4% in 2014.

Similar structure of decline in industrial production continues in Q4, as well as in Q3 where the y-o-y decline is led by mining and electricity production (decrease of about 25%), while manufacturing had lower y-o-y decline, which amounted to 2.8% (Table T2-6). While the structure is similar this decrease in all three sectors of industrial production in Q4 was considerably lower than in Q3, which may indicate their recovery.

Table T2-6. Serbia: Industrial Production Indices, 2009-2014

	Y-o-y indices											Share 2013			
	2009	2010	2011	2012	2013	2014	2013				2014				
							Q1	Q2	Q3	Q4	Q1		Q2	Q3	Q4
Total	87.4	102.5	102.2	97.1	105.5	93.5	105.2	103.0	110.8	103.3	102.1	95.7	85.8	90.5	100.0
Mining and quarrying	96.2	105.8	110.4	97.8	105.3	83.3	107.8	102.2	107.6	104.1	99.7	87.3	71.6	76.2	8.5
Manufacturing	83.9	103.9	99.6	98.2	104.8	98.6	105.4	103.2	108.8	102.2	104.2	98.7	94.0	97.2	73.9
Electricity, gas, and water supply	100.8	95.6	109.7	92.9	108.1	79.9	103.7	103.7	120.5	106.8	99.3	86.2	61.3	72.6	17.6

Source: SORS

Seasonally adjusted indices show strong growth in industrial production since the beginning of the fourth quarter...

Graph T2-7 shows seasonally adjusted production indices of total industry and manufacturing ending with the last available data for January 2015. The Graph shows that after a temporary decline in September 2014, which occurred because the NIS almost entirely ceased production due to the overhaul in its plants (NIS production in September was less than 10% of normal production), an increase in seasonally adjusted indices of total industrial production and also of the manufacturing industry occurred in Q4. In January, these trends were almost extreme. Achieved seasonally adjusted growth in industrial production of 6.5% (and in the manufacturing industry of 6%) is unrecorded in ordinary circumstances and occurred only after extraordinary events (after the bombing, with the completion of a state of emergency due to the bad weather in February 2012, and was not reached, for example, after the end of the May floods in 2014).

Graph T2-7. Serbia: Seasonally Adjusted Industrial Production Indices, 2008-2014

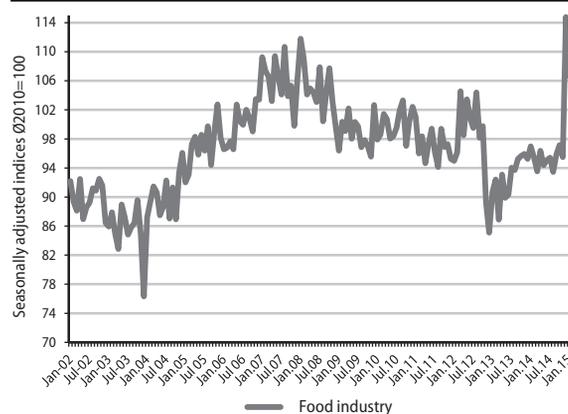


Source: SORS

It is unlikely that this unusually high growth in industrial production, and within it in the manufacturing industry, indeed took place in Q4 2014 as well as in January 2015. QM editorial office is close to the opinion that the real reason for these trends is better recording of the existing economic trends that have so far performed in the grey area, and that a real increase in production (at least not to this degree) actually did not happen. There are some other indirect indications in the statistics of the labour market and the wage movements for this opinion. However, there is always the possibility that the SORS has made some mistake in calculating these indicators. We will have a clearer picture of what really happened when the data for several months in 2015 are published, i.e. in the following editions of QM.

In Graph T2-8 we showed, as an illustration, special seasonally adjusted indices of the food industry (ending with the last available data for January 2015), which were crucial for the growth of the manufacturing industry (and total GDP) in Q4 2014. The Graph clearly shows rather extreme and unlikely growth of the food industry in the last few months of 2014. We have already explained that this is hardly possible in heterogeneous areas such as the food industry. More detailed analysis further confirms this assessment, because it shows that the growth of the food industry was preceded neither by extraordinarily good agricultural year⁵ nor by strong increase in imports of agricultural products⁶, so it is unexplainable where the inputs for such a huge increase came from. It is interesting to note that the exports of food products in the last two months of 2014, despite the exceptional growth of production, actually slowed its growth compared to the first 10 months of 2014.

Graph T2-8. Serbia: Seasonally Adjusted Food Industry Indices, 2002-2015



Source: QM based on SORS data

Q4 saw reduced decline of energy production and recorded a growth of consumer goods production

When observed by use (Table T2-9), we see that there was a reduction in y-o-y decline in energy production by about 10 p.p. in Q4 when compared to Q3. There are two reasons for this. The first is that NIS was overhauling its production capacities in Q3, and therefore the production in Q3 was extraordinarily low, and the other is that part of flooded coal mines was drained, and in accordance with that both the exploitation of coal and the electricity production gradually increase. We observed a similar change in the production of consumer goods which, after the y-o-y decline of 2.5% in Q3 saw a y-o-y growth of 5.6% in Q4, and the most important reason for this was already described increase in the production of the food industry, but there are some other areas that produce consumable products which achieved better results in Q4 compared to Q3 (beverage, textile, etc.). This structure of growth in Q4 may be a further indication of somewhat better results in industrial production (and the overall economy in Q4) being partly a consequence of the suppression of the grey economy, because only the production of consumer goods is growing, while the production of intermediate and investment goods didn't show any changes in Q4 compared to Q3.

Table T2-9. Serbia: Components of Industrial Production by use, 2009-2014

							Y-o-y indices											
	2009	2010	2011	2012	2013	2014	2012				2013				2014			
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	87.4	102.5	102.1	97.1	105.5	93.5	94.5	97.2	96.4	99.4	105.2	103.0	110.8	103.3	102.5	95.7	85.8	90.5
Energy	98.8	97.7	106.2	93.6	113.2	82.6	95.8	88.3	91.4	98.7	108.6	109.7	131.6	107.7	101.1	89.3	65.1	75.9
Investment goods	79.3	93.6	103.2	103.8	127.6	95.9	92.0	105.4	113.7	104.2	132.3	130.2	140.5	104.2	107.4	97.5	89.5	88.6
Intermediate goods	78.4	109.2	102.2	91.2	99.0	96.8	89.4	96.3	89.1	90.0	94.7	93.1	101.9	104.8	105.7	95.4	94.2	91.4
Consumer goods	86.8	102.1	95.4	103.2	100.7	100.7	97.8	104.5	104.6	106.1	107.0	101.5	97.4	100.0	100.2	99.6	97.5	105.6

Source: SORS

Construction

Q4 saw a growth of activity in the construction sector

Construction activity, after three years of continuous fall, ended 2014 at approximately the same level (a slight increase of about 1%) when compared to 2013. These results in the construction sector were significantly contributed by slightly better results in Q4 when the construction activity recorded a growth of about 5% compared to the same period of the previous year. Two main indicators of construction activity which we monitor independently: 1) The value of construction works performed, from the official construction activity statistics and 2) The cement production

⁵ Agriculture recorded growth of just 0.8% in 2014

⁶ Imports of agricultural products increased by 1% in 2014 compared to 2013, or for a little less than 5 million of euros.

index which we generate by ourselves based on SORS data; undoubtedly show a somewhat better movement of construction activity in Q4 compared to Q2 and Q3 of 2014. The nominal value of construction works performed in Q4 was by 6.4% higher than in the same period of the last year, while cement production recorded a y-o-y growth of 4.7% (Table T2-10).

Table T2-10. Serbia: Cement Production, 2001-2014

	Y-o-y indices				Total
	Q1	Q2	Q3	Q4	
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	103.7	108.1	110.1	105.9
2009	34.1	81.4	86.0	75.3	74.4
2010	160.7	96.9	96.0	97.4	101.1
2011	97.7	101.3	96.2	97.7	98.3
2012	107.9	88.3	58.2	84.9	79.6
2013	83.5	78.7	127.6	93.5	94.9
2014	136.2	90.3	96.2	104.7	101.5

Source: SORS

The most probable reason for the growth of activity in the construction sector in Q4 is intensifying work in the flood damage reconstruction, which took momentum in the fall of 2014, and slightly increased construction of public infrastructure projects, indicated by a high y-o-y growth of government spending on capital investment in the last quarter of 2014, of about 25%. Unfortunately there are still no indications that the observed increase in the construction activities is partly the result of an increase in investment activity in the private sector (which is crucial for the future growth of the economy). Namely, the production and import of capital equipment do not show the same signs of improvement in Q4 as construction activity.

3. Employment and Wages

According to the official statistical data from the Labour Force Survey (LFS), the improvement trend of the basic indices on the Serbian labour market has been somewhat mitigated. In the last quarter of 2014 compared to Q3, employment rate increased by 0.4 pp, unemployment rate decreased by 0.8 pp, while inactivity rate grew by 1 pp. However, compared to the same period in 2013, according to LFS, Serbia welcomed the end of 2014 with 100,000 less unemployed people. In the same period, employment grew almost entirely in the informal sector of the economy, and inactivity grew as well. It is not realistic to assume that all unemployed overflowed into the employed in the grey economy or in the inactive, i.e. that there was no new inflow into unemployment. This is especially impossible considering the contraction of economic activity in the amount of 1.8% of GDP in 2014. Since the decline of GDP is also related to grey economy, we express some doubts as to the growth of informal employment in this period. Generally speaking, the data on the labour market trends in Q4 are more consistent to other macroeconomic trends than was the case in the previous two years, when the statistics were showing a considerable improvement in the performance of labour market, while economy was in recession, citizen consumption was dropping, income tax was on a decline, and so on. Unlike employment data, the data on the trends in wages is more consistent to other economic trends. On the year-on-year level, real wages declined by 1.6%. Decline of real wages in Serbia is the result of the decline of wages in the public sector, while the increase of wages in the private sector was mostly the result of a reduction of the grey economy.

Employment

Employment in the last quarter of 2014, compared to Q3, was down by 0.4 percentage points

Labour Force Survey for the last quarter of 2014 shows that the rate of employment among the working age population dropped by 0.4 percentage points (pp) compared to the previous quarter. Considering that unemployment decreased by 0.8 pp, an increased rate of inactivity of one percentage point is expected.

The survey for the last quarter of 2014 was conducted at the beginning of November. Considering that in previous years, the observation period for the October survey was end of October, it is possible to compare the data from Q4 2014 with the October survey from 2013. Comparison of basic labour market indicators in Table T3-1 of the last quarter of 2014 with the same period in 2013 shows that:

- employment rate is growing by 1.2 pp
- unemployment rate is dropping by 3.4 pp
- inactivity rate is growing by 1.1 pp

In order to see better where these improvements are coming from, let us note that there were 4.6 million individuals in Q4 2014, ages between 15 and 64 (by 9.9 thousand less than in the same period in 2013). At the end of 2014, 2.8 million of these people were economically active (by 53 thousand less than in the same period in 2013):

- 2.3 million were employed. This is as much as 53 thousand more compared to 2013. Increase in the number of employed, therefore, contributed much more to the increased rate of employment than the decrease in the number of individuals ages between 15 and 64.
- 496.7 thousand was unemployed, i.e. by 106 thousand less compared to the end of 2013. Drop in the unemployment rate is the result of the decreased number of the unemployed, but also, almost to the same extent, the result of a reduction of active population in the observed period.
- 1.8 million were inactive, i.e. 43 thousand more compared to the end of 2013. Growth of the inactivity rate by one percentage point is to a lesser extent the result of the decline of total working age population, and to a higher extent the result of increased number of inactive individuals (Table T3-1).

3. Employment and Wages

In Q4 2014, compared to the same period in 2013, there was an inexplicably high decline in the number of the unemployed

What is most surprising in the observed trends between three basic statuses on the labour market are the changes in the absolute number of unemployed persons during 2014. From 612 thousand in the first two quarters, the number of the unemployed dropped to 530 thousand in Q3 and finally to less than 500 thousand in the last quarter of 2014. It is very hard to explain where 100,000 unemployed persons had disappeared. According to the survey, it would seem that about one half of the unemployed transferred to the employed (and mostly to informal employment, as we will later see) and almost the same number transferred to inactivity. All this with a very unrealistic assumption that there was no new inflow into unemployment.

Table T3-1 Serbia: Employment and Unemployment According to the Labour Force Survey, 2008-2014

		Total no. of employed 15-64 ²⁾	Number of employed in agriculture and unpaid family workers 15-64 ³⁾	Employment rate 15-64 15-64 god.			Total number of unemployed 15-64	Unemployment rate 15-64		
				Total	Male	Female		Total	Male	Female
		1	2	3			4	5		
2008	April	2,652,429	..	54.0	62.3	46.0	432,730	14.0	12.4	16.1
	October	2,646,215	443,243	53.3	62.2	44.7	457,204	14.7	12.7	17.3
2009	April	2,486,734	437,957	50.8	58.7	43.3	486,858	16.4	15.0	18.1
	October	2,450,643	411,303	50.0	57.4	42.7	516,990	17.4	16.1	19.1
2010	April	2,278,504	326,623	47.2	54.3	40.3	572,501	20.1	19.4	21.0
	October	2,269,565	352,724	47.1	54.4	39.9	565,880	20.0	19.0	21.2
2011	April	2,191,392	340,528	45.5	52.2	38.8	649,155	22.9	22.7	23.1
	October	2,141,920	329,378	45.3	52.5	37.9	690,782	24.4	23.5	25.6
2012	April	2,083,604	317,879	44.2	51.1	37.1	735,209	26.1	25.6	26.7
	October	2,201,760	345,883	46.4	53.7	39.1	661,698	23.1	22.1	24.5
2013	April	2,127,649	315,109	45.8	53.6	38.1	707,440	25.0	23.1	27.3
	October	2,268,750	349,742	49.2	56.2	42.1	602,651	21.0	20.2	22.0
2014	Q1	2,229,063		48	55.1	41	613,787	21.6	21.0	22.3
	Q2	2,277,413		49.3	56.3	42.5	612,134	21.2	20.4	22.1
	Q3	2,337,424		50.8	57.5	44.2	529,953	18.4	17.9	19.1
	Q4	2,322,200		50.4	57.2	43.7	496,177	17.6	17.3	18.0

Source: Labour Force Survey (LFS), SORS

Employment in one year grew the most in the informal sector

At first glance, it seems hard to explain the increase in the employment rate in the last quarter of 2014 compared to the same period in 2013, considering the observed overall economic trends. As can be seen in the Economic Activity section, GDP dropped 1.8% on an annual level. However, based on the Labour Force Survey, we see that the biggest part of employment increase in the amount of 53 thousand in the mentioned period occurred in the informal sector. To be more precise, employment in the period from the last quarter of 2013 to Q4 2014 increased in ten out of a total of twenty business activities. The biggest increase in the employment was realised in helping household members, which fall into the category of informally employed, since it has been almost doubled, from 41 to 78 thousand individuals. They are followed by the increase in employment in the mining sector by 26% (or 6 thousand) in the one year period. In other activities, growth of employment was small – only a few percentages.

The biggest decrease of employment of 11% occurred in companies that offer food and accommodation (hotels, resorts, camps). This is worrying information considering the potential of spa tourism in Serbia, which is not fully utilised due to unresolved property issues between the state and the Pension Fund (PIO), because of exceptionally long court proceedings which are preventing privatisation of these facilities (see section “Fiscal Trends and Policy”) (Table T3-2).

Informal employment is still increasing and is currently 24.2%

Informal employment rate, expressed as a share in the number of informally unemployed in the total number of the employed, is higher by 0.8 percentage points compared to Q3 2014. Survey from the last quarter of 2014 estimates that there are 594.6 thousand informally employed people in Serbia or by almost 20 thousand more than in the previous quarter. This includes those employed in unregistered companies, as well as registered companies but without formal labour agreement, as well as unpaid helping household members¹.

¹ Helping household members are persons who have helped another family member in leading family business or agricultural land, without being compensated for it.

Table T3-2 Employed by Business Activities, LFS

	Q4 2013	Q4 2014	Q4 2014/Q4 2013
TOTAL	2,394,004	2459048	102.72
Agriculture, forestry and fishing	522,084	538040	103.06
Mining	23,065	29198	126.59
Manufacturing industry	399,654	385369	96.43
Supply of electricity, gas and steam	37,206	38386	103.17
Water supply and wastewater management	36,866	35548	96.42
Construction	126,620	120476	95.15
Wholesale and retail trade, repair of motor vehicles	288,606	305493	105.85
Transportation and warehousing	130,882	121550	92.87
Accommodation and food services	61,973	55442	89.46
Information and communication	50,140	49253	98.23
Financial activities and insurance activities	44,566	40839	91.64
Real estate	2,028		0.00
Professional, scientific and innovation activities	63,185	61701	97.65
Administrative and support service activities	49,175	56725	115.35
Public administration and compulsory social insurance	132,950	138827	104.42
Education	156,867	164215	104.68
Health and social care	136,455	141713	103.85
Arts, entertainment and recreation	44,823	45794	102.17
Other service activities	45,177	49499	109.57
Activities of households as employers	41,003	78810	192.21

Source: LFS

Note: *a small number of occurrences, so it is impossible to make an assessment.

Since the Survey, ever since it started being published quarterly, shows the structure of the informally employed according to their professional status, we can observe that the biggest increase in the number of workers in the informal sector occurred among those with the status of employed or helping household members. The number of employed workers in the informal zone has almost doubled since the beginning of 2014, while the number of helping household members increased by 21% (Table T3-3).

Table T3-3 Formally and Informally Employed According to Professional Status, 2014

	Q1	Q2	Q3	Q4	Q4/Q1
Employed	62,352	71,723	118,552	123,737	198.4491275
Self-employed with employees	*	*	4,352	*	*
Self-employed without employees	227,955	229,427	226,723	239,872	105.2277862
Helping household members household	187,056	209,509	230,068	226,875	121.2872081

Source: LFS. *a small number of occurrences, so the estimate was not published

Trends from the Labour Force Survey are in line with the data from the RAD survey, which primarily covers the formal segment of the labour market. According to the RAD survey, formal employment at the end of 2014, compared to the same period of the previous year, remained almost unchanged at 1,707,000 employed. During 2014, the number of the employed varied by only a few thousand.

According to LFS, the number of formally employed at the end of 2014 was somewhat higher compared to RAD data and was 1,864,450. Since the beginning of 2014 (considering that earlier Surveys did not publish the number of formally and informally employed), the number of formally employed remained practically unchanged. So, formal employment recorded the same stagnating trend in both surveys during 2014. The only segment of employment that is on the rise, and which can only be measured by LFS, is informal employment.

3. Employment and Wages

We should, however, bear in mind that 1.8% drop of GDP includes activities in the grey economy as well, so we have some doubts about such an increase in the number of employees in the informal sector in Q4 2014, compared to the same period in 2013. Especially, taking into account the data on VAT revenue (see section on Fiscal Trends and Policy), it would seem that the efforts toward fighting the grey economy are starting to yield first results. VAT revenue had a strong growth in real terms (by 8.2%) in Q4 2014 compared to the previous quarter, while real year-on-year growth (Q4 2014-Q4 2013) was even bigger and was 15.1%. At the same time, during 2014, the revenue from income tax decreased in real terms by 8.1%, while income from contribution strongly increased in real terms (by 3.1%) compared to 2013. This was primarily the result of the reduced rate of the tax on earnings and increased rate of contributions. But it is also possible that it was the result of the fight against the grey economy, since prevention of illegal trade of goods and services also prevents payment of wages outside legal channels. This causes an increase in the share of earnings which is paid legally (since the number of formally employed remained almost the same during 2014).

Therefore, poor overall economic situation allows for part of the unemployed to withdraw into inactivity, i.e. to stop actively seeking work. Also, informal employment is expected to grow. However, having in mind fiscal trends, primarily VAT revenue and GDP, we express some reservations as to the scope of increase in the informal employment during 2014.

In 2015, we expect growth of unemployment due to the decreased number of employed in the public sector (administration at all levels, education, healthcare, etc.), public enterprises and former socially-owned enterprises. In the signed agreement with the International Monetary Fund (IMF), the Government took on an obligation to reduce public sector employment by mid-2015 by 5%, i.e. by around 25 thousand. By the end of March, the Government intends to conduct an analytical review of public sector employment, in order to identify sectors with the highest potential for employment reduction and efficiency improvement. After that, during 2016 and 2017, there will be an additional reduction in the number of the employed by around 5% through organisational and functional restructuring within the public sector, and in line with the new Public Administration Reform Strategy (see Highlight 1 for an assessment of desirability and feasibility of plans to reduce the number public sector employees). An important component of structural reforms in this and the following years is improvement of cost efficiency of public enterprises, which includes laying off unproductive employees in most of the enterprises. It is estimated that the number of employees in public enterprises in the next three years will be reduced by several thousand a year. In addition, growth of unemployment during 2015 will be the result of individuals losing their jobs in former socially-owned enterprises (enterprises in restructuring and other enterprises), which have been until now a part of enterprises foreseen for bankruptcy. In the first wave, bankruptcy of 188 former socially-owned enterprises has been initiated, enterprises with around 5000 employees – it is estimated that most of the employees will be laid off.

Wages

Average monthly gross wage was lower by 1.6% compared to the same quarter of the previous year

On the year-on-year level, the biggest decrease in wages was recorded in the public sector

According to the data from the Statistical Office of the Republic of Serbia, average monthly gross wages in Q4 nominally increased on year-on-year level by 0.4%, and in real terms were lower by 1.6% (Table T3-4. Average monthly net wages in the last quarter of 2014 were almost 46,000 dinar or 399 euro.

Year-on-year index or real net wages shows that the wages realised in Q4 2014 decreased in ten out of nineteen sectors compared to the same period of the previous year. The biggest decline was in the sectors of art, entertainment and recreation (8.7%), real-estate (8%), healthcare and social protection (6.2%), public administration (5.8%), education (4.6%). This is certainly the result of reduced wages in the public sector, which came into effect at the beginning of November. In other sectors, decrease of net wages in real terms on the year-on-year level was up to 3%.

Table T3-4 Serbia: Average Monthly Wages and y-o-y indices, 2012-2014

	Average Monthly Wage ¹⁾				Average Gross Monthly Wage Index ²⁾	
	Total labour costs ³⁾ , in dinars	Net wage, in dinars	Total labour costs, in euros	Net wage, in euros	nominal	real
2012						
Q1	63,846	39,068	591	362	111.0	106.0
Q2	68,140	41,664	600	367	109.6	105.3
Q3	67,457	41,187	577	352	106.4	98.4
Q4	71,452	43,625	630	384	108.7	96.8
Decembar	76,830	46,923	677	413	106.6	95.1
2013						
Q1	67,704	41,419	606	371	106.0	94.6
Q2	72,143	44,248	644	395	105.9	95.9
Q3	71,469	43,939	626	385	105.9	99.1
Q4	75,089	46,185	648	399	105.1	103.0
2014						
Q1	68,015	41,825	588	361	100.5	97.8
Q2	73,147	44,971	633	389	101.4	99.6
Q3	73,167	44,934	623	383	102.4	100.5
Q4	75,332	46,371	626	386	100.3	98.4

Source: SORS.

1) Data for 2008 are adjusted on the basis of a wider sample to calculate the average wage, which includes the salaries of employees of entrepreneurs.

2) Y/y wage indices of average monthly gross earnings for 2008 were calculated on the basis of average earnings in 2007 and 2008 and the old sample that does not include those employed by entrepreneurs. However, these indices are comparable with the indices for 2009, given the fact that the expansion of the sample of earnings preserved their growth dynamics and only reduced their nominal value by about 12%.

3) Total labor costs (TLCs) comprise employer's total average expense per worker, including all taxes and social security contributions. TLCs stand at around 164.5% of the net wage. Gross wage growth indices are equal to total labor cost indices, because the average TLC is greater than the average gross wage by a fixed 17.9% of employer based social security contributions

Reduction of nominal wages in the public sector was the result of replacement of the solidarity tax (which was imposed only on high wages in the public sector), reduction of almost all wages in the public sector by 10% (reduction refers to wages above 25 thousand dinars, which is around 50% of average wage in the public sector). Public sector wages were additionally reduced by cancelling the benefits for the work realised with other employers (the so-called “past performance”). In addition, according to the IMF agreement, public sector wages are foreseen to stay nominally unchanged in 2015 and in the following two years. Wages of a part of public sector employees have additionally been reduced. In line with the IMF agreement, after the reduction of public sector wages, there will be a reform of the wage class system in public administration. The goal is to simplify the system, make it more fair in various state bodies, and easily managed.

Administrative and Support Services² recorded the highest growth of wages by 7.5%. They are followed by growth of wages in the sector of Information and Communication (3%). This sector has been recording a continuous growth of wages in the last year and a half. In other sectors, growth of wages has not exceeded 3% (Table T3-5).

Table T3-5 Year-on-Year Index of Net Wages in Real Terms

	Admin. and support service	Information and communication	Arts, entertainment, recreation	Education	Health and social protection	Public administration
2013, Q1	94.6	95.8	94.6	95.5	96.1	95.8
2013, Q2	85.6	95.9	94.4	94.4	94.6	93.9
2013, Q3	88.5	114.6	99.9	97.9	97.7	100.4
2013, Q4	104.7	112.8	101.8	101.6	102.6	103.4
2014, Q1	89.1	123.3	95.6	98.6	97.3	97.1
2014, Q2	112.4	119.1	97.8	100.5	100.2	100.5
2014, Q3	109.2	112.8	97.7	99.7	99.2	97.2
2014Q4	107.5	103.1	91.3	95.4	93.8	94.2

Source: QM calculations

² This sector is not connected to public administration, but rather includes activities of renting and leasing, employment agencies, private security, etc.

4. Balance of Payments and Foreign Trade

In 2014, current deficit was 5.9% of GDP and by 0.2 pp lower than the 2013 deficit of 6.1% of GDP. In the period January–November 2014, the current deficit was 1,857 million euros (6.1% of GDP), which is by 0.7 pp higher compared to realised deficit from the same period in 2013. The realised amount of the trade and, therefore, the current deficit as well in 2014 was negatively impacted by the May floods and the slow recovery of the eurozone countries, while fiscal consolidation measures and the decline in the global price of oil had a positive impact. The total net inflow of capital from January to November was quite low, which is the result of FDI inflow and state borrowing on the one hand, as well as considerable deleveraging of other investments and net outflow on the Cash and Deposit account on the other. In October and November of 2014, the current deficit was 312 million euros, i.e. 5.7% of GDP. During these two months, a considerable outflow of capital was recorded in the amount of 399 million euros, on the basis of a modest inflow of FDI (152 million euros), followed by a high outflow of funds from other investments. Thus, this two-month period recorded a decline of foreign exchange reserves by 671 million euros. In 2015, the balance of payments imbalance will continue to decline, so the share of current deficit is expected to be around 4.5% of GDP. Fiscal consolidation, which reduces the domestic demand, will be the main driver of improvement, and it would be good to use a gradual depreciation of dinar to additionally support the improvement of the current balance. We expect that during 2015, inflow of foreign capital in Serbia will gradually increase, and that private investments will grow in relation to state borrowing. Labour market reforms, simplified administrative procedures, with reduced macroeconomic risks after the signing of the IMF agreement, should have a positive impact on foreign direct investment. However, increase of regional political risks, due to the crisis in Ukraine, and pressures on Serbia to pick between the disputed sides, will have a negative impact on foreign direct investments.

Current account deficit in 2014 was lower than the one realised in 2013

In the period January–November 2014, current deficit was slightly above the previous year's

Trade deficit was negatively impacted by the May floods and the slow recovery of eurozone countries....

....while fiscal consolidation and drop in the price of oil had a positive impact

In the period January–November 2014, current account deficit was 1,857 million euros. Current deficit was 6.1% of GDP (Table T4-1) and at the level of the deficit realised in 2013. According to NBS data (Inflation Report, February 2015), the current deficit in 2014 was 5.9% of GDP and 0.2 pp lower than the 2013 deficit of 6.1%. Compared to the first 11 months of 2013, the current deficit in 2014 was higher by 0.7 pp. This is the result of a mild increase in the deficit on the Primary Income account and a mild decrease in the net inflow of funds from Secondary Income, primarily due to a somewhat lower inflow of remittances, while the level of foreign trade deficit remained unchanged.

Trade deficit realised in the first 11 months of 2014 was 3.66 billion euros (12.0% of GDP, see Table T4-1). This deficit, expressed as a percentage of GDP, is lower than the deficit realised in the first 11 months of 2013 by 0.4 pp. On the one hand, the realised value of the trade deficit in 2014 was negatively impacted by May floods and slow recovery of eurozone countries, while the first initiated measures of fiscal consolidation, drop in the price of oil, and depreciation of dinar as of mid-2014 (effects of which will probably start to impact the deficit value at the end of the year) had a positive impact. Export of road vehicles in 2014 was lower than the previous year. Growth of automobile exports in the first half of the year was followed by a decline in the second half, observed year-on-year. Such a result in the automobile industry exports in the second half of 2014 is on the one hand due to the fact that calculations of the year-on-year growth of exports are now compared to a high base. On the other hand, poor results in the second half of 2014 were the result of a limited global demand for FIAT cars, due to its weakening position compared to other automobile producers, but also due to the still slow economic recovery of many countries (which in 2014 was the case with eurozone countries as well). In addition, it is uncertain how big of an importance FIAT places on the development of automobile industry in Serbia – it is disconcerting that no new investments are being announced, which would raise capacities to the level of 250–300 thousand cars, nor are there any announcements of the production of new models at the existing facilities in Kragujevac.

Ratios in foreign trade exchange during 2014 improved in Q2 compared to Q1 (index 104.2 compared to 102.0, respectively), then worsened again in Q3 (102.1), followed by another improvement in Q4 (index 103.6). Even though the ratios of global prices of products that Serbia imports and exports have varied throughout the previous year, they improved at the level of the entire 2014 by 2.1% and had a positive impact on Serbia's trade balance. Ratios of exchanges by sectors significantly varied – they improved significantly in Oil and Oil Derivatives (where Serbia is a net importer), while they declined in Agricultural Products (where Serbia is a net exporter).

Low inflow of capital from January to November

Total net inflow of capital from January to November was extremely low: 185 million euros¹. Such inflow was mainly the result of net inflow of FDI (1.2 billion euros) and state borrowing (592 million euros, net)² on the one hand, as well as considerable deleveraging of other investments (primarily banks and the central bank³) and net outflow on the Cash and Deposit account on the other. FDI were 1.2 billion euros, which is in line with the inflow realised in the 12 months of 2013. During 2014, inflow of portfolio investments was considerably lower than those of 2013. And the inflow of portfolio investments in 2013 was mostly achieved through state borrowing (Table T4-1).

In 2015, further reduction of balance of payments imbalance is expected

In 2015, NBS estimated the share of current deficit to be at the level of around 4.5% of GDP, i.e. that the balance of payments imbalance will continue to decline. More precisely, we expect a more positive contribution to the net exports in 2015 primarily from the effects of implementing fiscal consolidation measures, low global energy prices, recovery of the domestic energy sector, while at the beginning of the year, the balance of payments will be positively influenced by the depreciation of the local currency realised in the second half of 2014.

Capital inflow in 2015 will be positively impacted by: implemented and announced reforms, reduction of the macroeconomic risks in Serbia, and the monetary expansion in EU, while the possible prolongation of the Ukraine crisis will have a negative impact on the inflow of capital

Since the middle of last year, Serbia has implemented certain reforms which improve the conditions of doing business in Serbia, such as labour market reforms, reduction of administrative barriers in issuing building licenses, improvement of bankruptcy legislation, etc., but it also implemented a series of fiscal consolidation measures, which reduce the macroeconomic risks. At the end of February, the arrangement with IMF came into effect, which increases the probability of implementing the fiscal consolidation and the announced reforms. For now, it is hard to estimate how international environment will affect the inflow of investments in Serbia. It is expected that the ECB programme of “quantitative easing” will increase liquidity, which would have a positive impact on investment trends, but it is still uncertain whether there will be a significant acceleration in the growth of European economies. Prolonged Ukraine crisis will have a negative impact on investments in Serbia, because in that case, there will be increased pressure on Serbia to choose between the disputed sides.

Current account deficit in October and November of 2014 was 312 million euros, i.e. 5.7% of GDP (Table T4-1). Realised deficit was by 12.5% (0.9 pp of GDP) higher compared to the level from the same period of the previous year (October–November 2013), and it is at the deficit level of the first three quarters of 2014 (6.8% in Q1, 5.8% in Q2 and 6.0% in Q3).

In October and November of 2014, current deficit was 312 million euros, i.e. 5.7% of GDP

Trade deficit was 682 million euros, i.e. 12.4% of GDP, which is 0.6 percentage points of GDP higher than the realised share in October and November of 2013 (Table T4-1). During October and November 2014, goods in the amount of 1,794 million euros were exported, which is 8.9% below the values from the same period of the previous year. Exports in the observed two-month period in 2014 were 2,476 million euros, which is by 6.6% below the value realised in the same period in 2013. Thus, for two consecutive years (2013 and 2014), percentages representing exports in GDP, imports in GDP, and coverage of imports by exports, have been relatively stable. In the period October–November 2014, they were 32.6%, 45.0% and 72.4%, respectively. During October and November 2014, share of net inflow on the Secondary Income account was 9.1% of GDP.

¹ 519 million euros, including the Errors and Omissions account.

² The biggest part is the loan approved by the UAE for the Republic of Serbia budget needs in Q3.

³ NBS deleveraged mostly the debts toward the IMF.

4. Balance of Payments and Foreign Trade

Net outflow of capital was recorded in October and November

Outflow of capital of 399 million euros⁴ was recorded in October and November. A modest FDI inflow (152 million euros) was realised and a high outflow of funds from Other Investments (de-leveraging of loans of banks and businesses, as well as reduction of the balance on the Cash and Deposits account, Table T4-1). Inflow of portfolio investment was 126 million euros. Within Other Investments, a modest outflow was realised on the Trade Credit account, as well as at the account of the Central Bank and the state. Therefore, forex reserves in the first two months of the fourth quarter were reduced by 671 million euros.

Decrease of forex reserves during October and November was 671 million euros

Cumulative decrease of forex reserves during October and November was 671 million euros (Table T4-1). During these two months, the largest outflow of forex reserves occurred in November (490 million euros). The considerable outflow of foreign currency is primarily the result of regulatory change, which reduced the rate of mandatory forex reserve and, at the same time, raised the mandatory forex reserve requirement in dinars (net outflow on these basis amounted to 330 million euros). In addition, the outflow was also the result of the payment obligations of the state for matured securities denominated in euros and toward foreign creditors⁵. In order to prevent excessive daily fluctuations, NBS intervened in Q4 with a net sale of foreign currency on the interbank foreign exchange market in the amount of 765.0 million euros.

Table T4-1 Serbia: Balance of Payments

	2012	2013	Jan-Nov 2014	2013				2014			
				Q1	Q2	Q3	Oct-Nov	Q1	Q2	Q3	Oct-Nov
	mil. euros										
CURRENT ACCOUNT	-3,639	-2,091	-1,857	-661	-382	-377	-278	-540	-496	-508	-312
Goods	-5,634	-4,152	-3,661	-1,190	-1,045	-732	-682	-904	-994	-1,081	-682
Credit	8,394	10,540	9,732	2,151	2,578	2,979	1,969	2,512	2,767	2,660	1,794
Debit	14,028	14,693	13,393	3,341	3,623	3,712	2,651	3,415	3,762	3,740	2,476
Services	139	319	398	30	75	86	65	69	73	145	111
Credit	3,104	3,423	3,391	698	826	948	590	793	887	1,044	667
Debit	2,965	3,103	2,994	668	751	861	525	724	814	900	556
Primary income	-1,091	-1,412	-1,329	-183	-292	-528	-210	-327	-418	-340	-243
Credit	657	617	551	113	168	163	108	122	176	151	102
Debit	1,748	2,029	1,880	296	460	691	318	449	594	491	345
Secondary income	2,947	3,153	2,735	681	879	797	549	622	843	768	502
Credit	3,286	3,523	3,089	768	968	895	611	707	934	875	573
Debit	339	369	354	87	89	98	62	85	91	108	71
Personal transfers, net ¹⁾	2,459	2,701	2,234	581	772	684	465	511	697	618	409
Of which: Workers'	1,934	2,160	1,710	457	630	554	367	378	547	469	316
CAPITAL ACCOUNT - NET	-11	11	6	-2	9	4	0	2	-1	4	0
FINANCIAL ACCOUNT	-3,486	-1,917	-1,517	-612	-356	-277	-335	-533	-372	-341	-272
Direct investment - net	-669	-1,229	-1,210	-171	-264	-446	-216	-320	-392	-346	-152
Portfolio investment	-1,722	-1,916	-425	-1,403	348	122	-201	4	-150	-152	-126
Financial derivatives	2	-1	-1	2	-2	1	-2	0	-3	1	1
Other investment	41	532	1,450	101	446	210	107	583	544	-353	676
Other equity	0	0	0	0	0	0	0	0	0	0	0
Currency and deposits	156	-228	892	-203	165	188	146	121	141	246	385
Loans	574	1,185	563	375	295	67	128	370	386	-459	265
Central banks	219	657	506	150	148	179	122	189	186	100	31
Deposit-taking corporations,	377	682	605	286	67	155	-24	214	89	183	119
General government	-467	-449	-592	-150	-43	-278	-7	29	30	-676	25
Other sectors	444	296	44	89	124	12	37	-61	80	-65	91
Insurance, pension, and	3	0	0	1	0	-2	0	0	0	0	0
Trade credit and advances	-692	-426	-5	-72	-14	-43	-167	92	16	-140	27
Other accounts receivable/payable	0	0	0	0	0	0	0	0	0	0	0
SDR (Net incurrence of liabilities)	0	0	0	0	0	0	0	0	0	0	0
Reserve assets	-1,137	697	-1,332	859	-886	-164	-24	-800	-370	509	-671
ERRORS AND OMISSIONS, net	164	164	334	51	17	95	-58	5	125	163	40
	in % of GDP										
Current account	-11.5	-6.1	-6.1	-8.3	-4.4	-4.3	-4.8	-6.8	-5.8	-6.0	-5.7
Balance of goods	-17.8	-12.1	-12.0	-14.9	-11.9	-8.3	-11.8	-11.4	-11.6	-12.7	-12.4
Exports of goods	26.6	30.8	31.9	26.9	29.4	33.8	34.1	31.6	32.3	31.3	32.6
Imports of goods	44.4	42.9	43.9	41.7	41.3	42.1	45.9	43.0	43.8	44.0	45.0
Balance of goods and services	-17.4	-11.2	-10.7	-14.5	-11.0	-7.3	-10.7	-10.5	-10.7	-11.0	-10.4
Personal transfers, net	7.8	7.9	7.3	7.3	8.8	7.8	8.0	6.4	8.1	7.3	7.4

Note: Balance of Payments of the Republic of Serbia is in line with the international guidelines contained in the Balance of Payments Manual no. 6 (BPM6). Source: NBS

1) Personal transfers represent current transfers between resident and non-resident households.

2) Quarterly values. Conversion of the annual GDP in euros was done according to the average annual exchange rate (average of official NBS daily middle exchange rates).

4 359 including the Errors and Omissions account.

5 <http://www.nbs.rs/internet/cirilica/scripts/showContent.html?id=7811&konverzija=no>

Export

Year-on-year export growth in 2014 was 1.2%, which is a considerable deceleration compared to 25.8% in 2013...

...in the first half of 2014, export decelerated growth, and in second half recorded a decline

In the first half of 2014, export decelerated growth (year-on-year growth of 17.7% in Q1 and 6.4% in Q2), and in the second half, it recorded a lower value compared to the same period of the previous year (-10.9% in Q3 and -3.4% in Q4). Realised export value in 2014 was 11.13 billion euros, which is by only 1.2% above the value realised in 2013. This is a very modest growth considering that the export in 2013 was by 25.8% higher compared to the recorded value in 2012. The main reason for modest export results in 2014 is the lack of larger new investments during 2013–2014, which would have built an export-oriented industry. May floods additionally deteriorated export possibilities, but their effect is temporary and will probably be exhausted in the first half of 2015. Slow recovery of the eurozone and worsening economic conditions in Russia have caused a drop in demand for Serbian products.

Table T4-2 Serbia: Exports, Year-on-Year Growth Rates, 2012–2014

	Exports share in 2014	2012	2013	2014	2013		2014		2013		2014	
					Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4
					in %				in mil. euros				in %
Total	100.0	8,739	10,997	11,130	3,110	2,954	2,771	2,854	37.9	22.0	-10.9	-3.4
Total excluding road vehicles	86.2	8,269	9,360	9,593	2,608	2,531	2,457	2,509	21.3	17.6	-5.8	-0.9
Energy	3.7	303	519	414	145	150	102	85	124.8	67.5	-29.4	-43.2
Intermediate products	33.0	3,126	3,633	3,678	1,002	897	942	875	23.3	18.4	-6.0	-2.4
Capital products	25.8	1,667	2,979	2,875	859	793	643	700	109.4	27.2	-25.1	-11.7
Capital products excluding road vehicles	12.0	1,197	1,342	1,337	358	370	329	355	17.0	4.9	-8.1	-4.2
Durable consumer goods	5.3	395	523	586	142	147	150	167	33.6	32.5	5.8	13.9
Non-durable consumer goods	23.5	2,224	2,410	2,614	675	674	717	717	12.8	10.3	6.2	6.3
Other	8.7	1,025	932	963	287	293	217	310	9.0	28.0	-24.6	5.8

Source: SORS

During 2014, year-on-year decline in the exports of Energy and Capital Goods was recorded

In 2014, observed year-on-year, Energy exports dropped by 20.2% and Capital Goods exports by 3.5%. That is a big trend change, considering that both export groups recorded an extremely high year-on-year growth in 2013, at the rates of 71.2% and 78.8%, respectively. Also, year-on-year growth of exports of Intermediate Goods has also decelerated considerably – from 16.2% in 2013 to 1.2% in 2014 – and of Durable Consumer Goods – from 32.6% in 2013 to 11.9% in 2014, while the export growth rate of Non-Durable Consumer Goods during these two years remained unchanged. Exports of the so-called Other Products, after the year-on-year decline of 9% in 2013, recorded a growth of 3.3%. For the trends in overall exports, the growth dynamic of exports of Intermediate Goods, Capital Goods and Non-Durable Goods is especially important, as all together, they make up 82.4% of total exports, or individually: 33.0%, 25.8% and 23.5%, respectively (Table T4-2).

Year-on-year decrease of exports of road vehicles

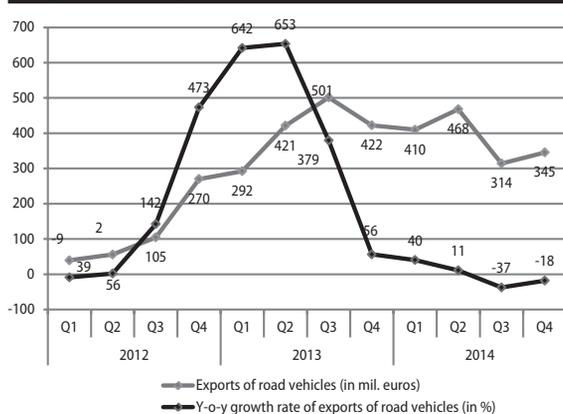
SORS data on exports of road vehicles indicate that in 2014, it was by 6.1% lower than in 2013, i.e. it dropped from 1.64 million euros in 2013 to 1.54 million euros in 2014. In the first half of 2014, a growth in automobile industry exports was recorded, followed by lower exports in the second half of the year compared to the same period in 2013. In Q4 2014, exports of road vehicles continued their year-on-year decline, which had started in Q3 (although at a somewhat lower rate of 18% in Q4, compared to 37% in Q3, see Graph T4-3). Decline of automobile exports in the second half of the year occurred as the result of exhausting the past growth (high base of the previous year) on the one hand, as well as limited room for growth on the other – due to a deteriorated competitive position of FIAT models produced in Serbia, but also due to the slow recovery of buyer countries. In the coming period, a positive contribution of the automobile industry to the total export growth will only be possible if there are some significant investments which would increase the capacities of FIAT in Serbia to 250–300 thousand cars, but for now, this is highly unlikely. If no new models are introduced in the production this year, it will be hard to maintain even the current level of production.

Exports in Q4 2014 were by 3.4% below the realised exports in Q4 2013. Even though the exports are lower, observed year-on-year, it is still a smaller decrease than the one realised in the previous quarter (decline of 10.9% y-o-y in Q3). Such a result is still for the most part the result of the May floods – shown by the fact that year-on-year decline of energy exports in

Year-on-year
decline in exports
in Q4...

...although
smaller than in the
previous quarter

Graph T4-3 Exports of Road Vehicles



Source: SORS, QM

13.9% and 6.3%, respectively. Also, Other Products exports in Q4, after a high year-on-year decline realised in the previous quarter, were by 5.8% above the levels of Q4 2013 (Table T4-2).

Table T4-4 Export Structure by Countries

	2013	2014	2014/2013
	in mil. EUR		in %
European Union	6899	7204	4.4
Italy	1791	1932	7.9
Germany	1307	1330	1.8
Rep. of Bosnia and Herzegovina	904	993	9.9
Russian Federation	800	775	-3.2
Romania	591	628	6.2
Republic of Montenegro	642	568	-11.5
Republic of Macedonia	434	454	4.6
Republic of Slovenia	360	354	-1.7
Republic of Croatia	313	345	10.0
France	264	314	18.6
Bulgaria	253	288	14.0
Hungary	302	284	-5.9
Czech Republic	241	268	11.3
Austria	279	265	-5.0
USA	369	235	-36.1
Poland	204	222	8.7
Turkey, Republic of	165	173	5.2
Other countries	1780	1731	-2.8

Source: SORS & QM

goods due to the declining value of the Russian Ruble in 2014, which significantly depreciated in the second half of the year. Therefore, the effects of declining purchasing power of the Russian market was dominant compared to the absence of competition from EU producers on certain product markets. There was a noticeable decline of exports to USA, which could be the result of lower exports of FIAT cars to the US market in 2014 compared to 2013.

In the coming period, we expect a positive contribution to increasing exports from the effects of dinar depreciation (which will affect the first half of the year compared to other currencies, and possibly in the second half, if depreciation continues) and from the recovery of exports in the energy sector (which will affect the second half of 2015). EU demand trends are still quite uncertain, as it is still unsure if and when the ECB programme of quantitative easing will boost the eurozone economies.

Q4 was 43.2%. Also, recorded year-on-year decline of car exports contributed to overall exports in the Capital Goods category to be below the previous year's by 11.7%. It is still a smaller year-on-year decline of exports in this category than in Q3 2014, when the exported value was by a quarter lower compared to Q3 2013 (Table T4-2).

Aside from the year-on-year decline in the value of exports of Energy and Capital Goods, the level of exports of Intermediate Goods in Q4 was lower than the previous year's by 2.4%. On the other hand, Durable and Non-Durable Consumer Goods recorded a year-on-year growth of exported value of

During 2014 (January-December) exports to EU grew by 4.4% year-on-year, despite its relatively slow recovery (Table T4-4). The largest exports in 2014 were to Italy, Germany, Bosnia and Herzegovina, Russia, and Romania. Exactly one half of the total exported value was realised through exports to these five countries. However, observed year-on-year, while exported value to Italy, Germany, BiH and Romania was bigger in 2014, exports to Russia were lower than previous year's. Such export results to Russian market are contrary to all expectations. That is, export value to Russia in 2014 was lower by 3.2% than in 2013, and as much as 4.3% in Q4 2014 compared to the same period in 2013. The reason behind this export result could be the reduced demand for import

Import

In 2014, goods in the value of 15,381 million euros were imported

During 2014, goods in the value of 15.4 billion euros were imported (Table T4-5), which is only slightly below the realised imports in 2013 (year-on-year drop of 0.52%). Imported value in the first half of 2014 was above the previous year's (1.0% in Q1 and 2.4% in Q2), while the year-on-year decline occurred only in the second half of the year (-0.3% in Q3 and -4.6% in Q4). This import dynamic is due to the decline in domestic demand, due to the effects of the initiated measures of fiscal consolidation, significant decline of global energy prices since the middle of the year, lower production in the automobile industry in the second half of the year (which affected the lower imports of production components), and dinar depreciation, effects of which, due to the time lag, might overflow to imports at the end of the year. Therefore, in 2014, year-on-year growth of exports accompanied by a slight decline in imports, affected the coverage of imports by exports to grow by 1pp – from 71% in 2013 to 72% in 2014, which is a much more modest increase compared to the one realised during 2013, when this indicator increased by 12pp – from 59% in 2012 to 71% in 2013.

Year-on-year drop of imports in Q4 was 4.6%

Imports in Q4 were 4.03 billion euros, which is by 4.6% below the values of Q4 2013. Recorded year-on-year decline in the import value is significantly higher than the decline in 2013 (0.3%). The biggest contributor to the decline of overall imports was the decline in imported values of capital goods and energy (Table T4-5).

A decline recorded in all components except the so-called other products

Imported value during Q4 2014 of all import components was lower than the value from the same period of the previous year (Table T4-5), except in products categorised under Other, which recorded a significant year-on-year growth of 64.6%.

Imports of Capital Goods in Q4 2014 were lower by 18.6% compared to Q4 2013, which could be in part the result of imports of production components for the automobile industry, due to a slightly lower production and exports in the second half of the year. Also, continued lack of significant investments in increasing the production capacities is affecting the low import of capital goods.

Year-on-year decrease of imports of Intermediate Goods in Q4 was slightly lower than in the previous quarter, which could possibly be the result of certain smaller changes in economic activity, primarily in industrial production, which, observed seasonally, are increasing compared to the previous quarter. Initiated measures of fiscal consolidation are reflected in the still low domestic demand, which leads to a year-on-year reduction of imports of consumer goods – durable by 8.4% and non-durable by 1.8% (Table T4-5).

Q4 recorded a drop in energy imports, even after excluding effects of decreased global prices

High year-on-year decline in the Energy import values during Q4 were predominantly the result of decreased global energy prices, but also partly due to lower imported quantity compared to the last quarter of the previous year. Imported value of energy in Q4 was lower by one quarter than the import value of these products in the same quarter of 2013. This is mostly due to the decline in global prices – in euros, energy prices dropped 19% year-on-year in Q4⁶. After excluding the effects of decreased prices, we get that the quantity of imported energy is by 8% below the previous year's. Extremely low energy prices will affect the continuation of reduced value of energy imports in the coming period. In addition, recovery of the domestic energy production will additionally contribute to the year-on-year reduction of energy imports, but this effect will not show before the middle of the year, due to the higher base from the previous year.

Numerous factors in 2015 will act toward decreased growth of domestic demand and imports

In 2015, we expect that lower imports will be affected by lower domestic demand as a side effect of fiscal consolidation, renewed production in the energy sector, as well as possible keeping of global energy prices on a low level. In addition, at the beginning of the year, another contributing factor to reduced imports could be the delayed effects of dinar depreciation from the end of 2014.

⁶ Drop of energy prices in dollars in Q4 was as high as 26% year-on-year. Due to high euro depreciation against the dollar, drop in energy prices expressed in euros is lower and is 19%.

Table T4-5 Serbia: Imports, Year-on-Year Growth Rates, 2012-2014

	Učesće u uvozu 2014	2012	2013	2014	2013		2014		2013		2014	
					Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4
					in %				in mil. euros				in %
Total	100.0	14,717	15,462	15,381	3,904	4,228	3,893	4,032	9.9	6.0	-0.3	-4.6
Energy	13.7	2,570	2,325	2,100	563	755	558	567	5.1	11.3	-0.8	-24.9
Intermediate products	31.9	5,132	5,130	4,902	1,357	1,300	1,257	1,245	4.3	0.7	-7.3	-4.2
Capital products	21.9	2,996	3,779	3,368	967	1,038	787	832	33.2	16.9	-18.6	-19.8
Durable consumer goods	1.9	323	324	299	76	91	74	83	-5.6	10.8	-2.2	-8.4
Non-durable consumer goods	14.6	2,175	2,264	2,240	573	626	579	615	4.0	0.2	1.0	-1.8
Other	16.1	1,520	1,640	2,472	369	419	638	689	2.4	-1.6	72.7	64.6
Imports excluding energy	86.3	12,147	13,137	13,281	3,342	3,474	3,335	3,466	10.7	4.9	-0.2	-0.2

Source: SORS

Foreign Debt

Foreign debt at the end of December was 26.03 billion euros, i.e. 78.2% of GDP...

...as a net result of continuing trend of public sector borrowing and private sector deleveraging

At the end of December 2014, Serbia's foreign debt was 26,030 million euros, i.e. 78.2% of GDP (Table T4-6). During 2014, foreign debt was increased by 3.1 pp of GDP. Rising share of debt in GDP was partially (284 million euros, which is below 1% of GDP) the result of additional borrowing, while for the most part, it was the result of foreign exchange differences – moderate real depreciation of dinar against the euro, and relatively high depreciation of dinar against the dollar. Finally, drop of GDP in 2014 caused an increase in the share of debt in GDP. Share of foreign debt in GDP was by 2.2 pp of GDP higher than if there were not any decline in the value of GDP, which is used as a denominator, i.e. foreign debt at the end of December would have been 76% of GDP. Still, share of foreign debt in GDP (and its components) would have been higher if it were not for the increase in the value of GDP due to changed methodology of SORS⁷.

Net borrowing during 2014 of 284 million euros was the result of, on the one hand, public sector borrowing of 1.02 billion euros (4.2 pp of GDP) and, on the other, deleveraging of the private sector by 736 million euros (1.1 pp of GDP).

Significant growth of public sector's foreign debt during 2014 was realised despite the fact that NBS considerably decreased its debt toward IMF by 545 million euros in this period. After deleveraging part of its foreign debt in the first half of the year, the state borrowed again in the second half of 2014. Primarily, state borrowing occurred during Q3 (when public sector's foreign debt increased by 1.08 billion euros – primarily due to taking a loan from UAE for the purposes of securing funds for the state budget, but partly due to withdrawing several tranches of loans taken from the Council of Europe Development Bank, EIB and IBRD⁸). During Q4, public sector additionally borrowed 308 million euros⁹.

In Q4, foreign debt was reduced by 315 million euros...

...the result of high deleveraging of the private sector...

...while public sector's debt increased

On the other hand, the private sector deleveraged part of its debt in 2014, which is completely due to the deleveraging of banks. The banks deleveraged their long-term debt by 700 million euros, while the business sector borrowed 50 million euro net. The amount of short-term debt of the banks at the end of 2014 was lower by 114 million euros, while the short-term debt of the business sector increased by 27 million euros. Thus, at the end of 2014, the share of public sector's foreign debt reached 55%, while the share of private sector's foreign debt was 45%.

During Q4, total foreign debt was reduced by 315 million euros (Table T4-6). The reason of this reduction in the amount of foreign debt is high deleveraging of the private sector – both banks and businesses – by 623 million euros. On the other hand, public sector's foreign debt increased by 380 million euros, primarily due to taking out loans from IBRD and EIB.

⁷ See the previous issue of QM.

⁸ Inflation Report, NBS, 2014.

⁹ During Q4, the state took out loans in the amount of 288 million euros, which mostly includes IBRD loans attended for the Deposit Insurance Agency, and EIB loans for Corridor 10 and the development of regional and municipal infrastructure (Inflation Report, February 2015, p.18).

Table T4-6 Serbia: Foreign Debt Structure, 2011–2014

	2011	2012	2013	2014			
				Mar.	Jun.	Sep.	Dec.
stocks, in EUR millions, end of the period							
Total foreign debt	24,123	25,645	25,746	25,632	25,299	26,345	26,030
(in % of GDP) ⁴⁾	72.0	81.2	75.1	74.9	74.4	78.2	78.2
Public debt ¹⁾	10,800	12,185	13,166	12,969	12,796	13,878	14,186
(in % of GDP) ⁴⁾	32.2	39	38.4	37.9	37.6	41.2	42.6
Long term	10,800	12,185	13,166	12,969	12,796	13,878	14,181
o/w: to IMF	1,618	1,389	697	515	333	247	152
o/w: Government obligation under IMF SDR allocation	459	452	434	436	439	455	463
Short term	0	0	0	0	0	0	5
Private debt ²⁾	13,323	13,460	12,580	12,663	12,502	12,467	11,844
(in % of GDP) ⁴⁾	39.8	43	36.7	37.0	36.8	37.0	35.6
Long term	12,722	13,005	12,383	12,523	12,347	12,337	11,733
o/w: Banks debt	3,869	3,722	3,228	3,035	2,932	2,776	2,528
o/w: Enterprises debt	8,854	9,283	9,153	9,487	9,414	9,559	9,203
o/w: Others			1	2	2	2	2
Short term	601	455	197	140	155	130	110
o/w: Banks debt	582	428	171	115	128	89	57
o/w: Enterprises debt	19	27	26	25	28	41	53
Foreign debt, net 3), (in% of GDP) ⁴⁾	36.0	47	42.5	44.5	44.6	45.9	-

Note: Republic of Serbia's foreign debt is calculated on the principle of "matured debt", which includes the amount of debt from the principle and the amount of calculated interest unpaid at the moment of the agreed maturity.

Source: NBS, QM

1) Republic of Serbia public sector's foreign debt includes the debt of the state (including the debt of Kosovo and Metohija from the loans concluded before the arrival of KFOR mission, unregulated debt toward Libya, and clearing debt toward the former Czechoslovakia), of the National Bank of Serbia, local self-government, funds and agencies founded by the state, and debts for which state guarantee had been issued.

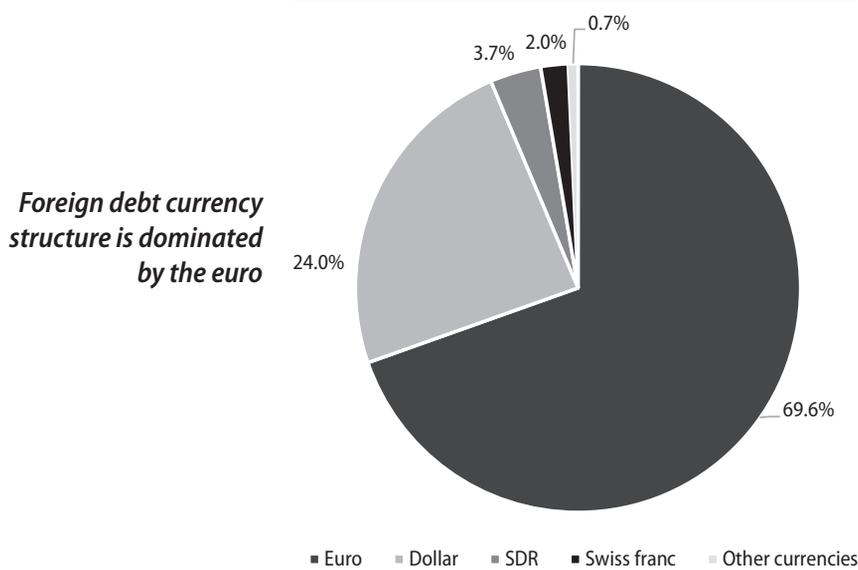
2) Republic of Serbia private sector's foreign debt includes the debt of banks, companies, and other sectors for which no state guarantee had been issued. Private sector's foreign debt does not include loans concluded before December 20, 2000 which are free from payment (884.2 million euros, out of which 393.7 million euros relates to domestic banks, and 490.5 million euros relates to domestic companies).

3) Total foreign debt less NBS forex reserves.

4) Sum of GDP values of the observed quarter and GDP values of the previous three quarters are used.

Out of the total deleveraging of the private sector in Q4 in the amount of 623 million euros, 603 million was deleveraged from long-term debt. The banks deleveraged 247 million euros on this basis. Companies in these three months also reduced the level of foreign long-term debt by 357 million euros. The amount of short-term debt at the end of December was lower by 20 million euros than three months before. The banks reduced the amount of short-term debt by 32 million euros, while at the same time, businesses increased this amount by 13 million euros.

Graph T4-7 Serbia: Foreign Debt Currency Structure



Source: NBS, QM

According to NBS data from March 2014¹⁰, foreign debt currency structure was significantly dominated by the euro (69.6%). Around one quarter (24.0%) of the debt was denominated in dollars (Graph T4-7). Special withdrawing rights make 3.7% of total foreign debt, Swiss Franc 2.0%, while other currencies make 0.7%. Therefore, the level of foreign debt was increased on the basis of increased value of foreign debt expressed in euros, primarily due to the euro depreciation against the dollar (because around one quarter of the foreign debt is in dollars).

10 Debt Analysis of the Republic of Serbia, March 2014.

5. Prices and the Exchange Rate

Inflation trend in Q4 and January was around the lower limit of the National Bank of Serbia target band and at the end of January it to 0.1%. Underlying inflation (measured by the consumer price index excluding the prices of food, energy, alcohol and tobacco) is extremely low as well (in January, it amounted to 1.6%), and since of August, it is below the lower limit of the NBS target band. A moderate deflation was recorded during three out of four previous months (October, December and January), while November was without any change in the prices. A low domestic demand and recessionary tendencies, a decline of world oil prices, low prices of unprocessed food and the lack of growth in regulated prices gave the largest contribution to maintaining the inflation at a extremely low level, with occasional deflation. In conditions of low domestic demand, the impact of dinar depreciation to inflation is lower than in “normal” times. The return of inflation within the limits of the target band can be expected only with the active measures of the NBS, given that major changes in the prices will not occur, except for the announced increase in electricity prices, especially when one takes into account a low domestic demand, stabilization of the dinar exchange rate and the absence of overflow of so far realized depreciation to the prices. During Q4, the dinar nominally depreciated by around 1.8% against the euro (2.5 % for the period average), i.e. 6.2% against the dollar (8.7% on the average level). The depreciation continued in January, when dinar weakened by additional 2.1% (0.9% for the month average) against the euro, i.e. 9.5% (7.2% on average level) against the dollar. Exchange rate changes are mostly driven by the global factors (uncertainty in international financial markets, the reactions of the FED and ECB), while domestic factors usually affected the amplification of depreciation or mitigation of appreciation when compared to the countries in the region with a similar exchange rate regime (unfavorable news in Q4 in relation to the sustainability of public finances, the pace and intensity of fiscal consolidation and structural reforms). The approval of the arrangement with the IMF has influenced the reduction of the country risk and the consequent stabilization of the dinar exchange rate. Real depreciation of about 2.7% in Q4, softened by the appreciation of about 0.5% in January (in January, dinar nominally depreciated, but the appreciation is a result of a significantly higher deflation in Eurozone than in Serbia) contributes to improving the competitiveness of the economy, which could be sustained with the NBS measures aimed at preventing a further exchange rate appreciation and returning within the target band.

Prices

Inflation in Q4 continued its trend below the lower limit of the NBS target band, and in January was close to zero

In December, year-on-year inflation amounted to 1.8%, being below the lower limit of the tolerated deviation from the target, where it has been since of May 2014 (Table T5-1). In January 2015, the prices are almost at the same level as in January last year- year-on-year inflation was a mere 0.1%. Since August, underlying inflation (measured by the consumer price index excluding the price of food, alcohol, tobacco and energy) has been also below the lower limit of the NBS target band, and in December, it amounted to 2.2% and in January 1.6%, which suggests that low inflationary pressures are largely the result of a low aggregate demand (among other things because there was no significant overflow of the exchange rate depreciation to the prices), whose recovery is not expected in the near future. Extremely low inflation is the result of a few domestic and global (external) factors. Entering into a recession in 2014 and the expected fall of GDP in 2015, low aggregate demand, additionally reduced with the measures of fiscal consolidation (reduction in pensions and salaries in public sector), the lack of a growth in regulated prices and a weak effect of the overflow of exchange rate depreciation to the prices (rather than the expenses are partly borne by the consumers, it has completely overflowed to the manufacturers and traders through the reduction of margins) are the most important domestic factors that contribute to sustaining the inflation at a low level. A strong drop in the prices of primary agricultural products

at a world market, which caused the fall of these prices in the domestic market and contributed to a low cost pressures in food production, as well as a fall in a world oil prices, which mostly influenced the fall in the prices of petroleum products and the reduction in the cost pressures in the branches of the industry that uses these fuels are the most important external factors of the trend in domestic prices. Reduction in disinflationary pressures was not even helped by the passive attitude of the NBS towards the deflation in the past several months (slow and insufficient mitigation of the monetary policy restrictiveness), which focused its measures exclusively towards the dinar exchange rate stabilization. Price trend in Q4 was at the expected level, taking into account the absence of adjustments in regulated prices and the reduction of the key policy rate (KPR) by the NBS, and the deflation realized was 0.6%. January was marked by the further deflation of about 0.2%, so now both total and underlying inflation are at a record low level, the lowest since the inflation has been measured by the consumer price index (Graph T5-2). Next to the factors with a long-term impact, deflation was also contributed by one-off factors- low year-on-year growth in the regulated prices (a drop in these prices was recorded in Q4) and a low growth in the prices of primary products in the country and world market. As previously estimated, aggregate demand in the following period will have additional increased disinflationary effect due to the effect of the implementation of the fiscal consolidation measures- reduction in pensions and salaries in public sector, as well as possible implementation of structural reform measures.

Reduced and stable inflation favorably affect the business conditions, but the inflation level is too low

Table T5-1. Serbia: Consumer Price Index, 2009-2015

	Consumer price index				
	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
2009					
dec	130.8	6.6	6.6	-0.3	1.6
2010					
dec	144.2	10.2	10.2	0.3	11.7
2011					
dec	154.3	7.0	7.0	-0.7	2.5
2012					
mar	157.4	3.4	2.0	1.1	8.4
jun	162.4	5.4	5.3	1.2	13.2
sep	169.1	10.3	9.6	2.3	17.7
dec	173.1	12.2	12.2	-0.4	9.9
2013					
mar	175.1	11.2	1.2	0.0	4.7
jun	178.2	9.7	2.9	1.0	7.3
sep	177.3	4.8	2.4	0.0	-2.0
dec	176.9	2.2	2.2	0.2	-0.9
2014					
jan	179.5	3.1	1.5	1.5	4.4
feb	179.7	2.6	1.6	0.1	7.5
mar	179.1	2.3	1.2	-0.3	5.1
apr	180.1	2.0	1.8	0.6	1.4
may	180.2	2.1	1.9	0.1	1.1
jun	180.4	1.2	2.0	0.1	2.9
jul	180.2	2.0	1.9	-0.1	0.2
aug	179.9	1.5	1.7	-0.2	-0.7
sep	181.2	2.1	2.4	0.7	1.6
oct	180.8	1.8	2.2	-0.2	1.3
nov	180.8	2.4	2.2	0.0	2.0
dec	180.0	1.8	1.8	-0.4	-2.4
2015					
jan	179.6	0.1	-0.2	-0.2	-2.6

* Three-month moving average of a price growth rose to an annual level. (For example, the March value is obtained by raising the average monthly price growth in January, February and March to an annual level). Source: SORS.

Low and stable inflation is one of the important elements of a good business environment because it is a good way to increase the predictability of business conditions and reduce business risks. Since the late 2013 Serbia has been realizing low inflation, while its variability has been moderate. However, zero inflation and occasional deflation, which Serbia has often been faced with since the end of the first quarter of 2014, has a negative effect on economic activity. The realization of inflation of about 4% per year is important also from the standpoint of fiscal consolidation, as additional savings based on real devaluation of salaries and pensions are accounted within it. It is therefore necessary that NBS more decisively reduces the monetary policy restrictiveness so that the inflation could return to the target band and stabilize within it.

5. Prices and the Exchange Rate

In the past three months, the NBS has kept its key policy rate unchanged

Although through Q3 and Q4 inflation moved below the lower limit of tolerated deviation from the target band, the key policy rate of NBS was in this period reduced only in November by 50 base points- from 8.5% to 8.0%, where it currently stands (Graph T5-3). The attitude of the NBS's Executive Board is that the reasons for a slow and cautious reduction of KPR are- achieving permanent stabilization of the inflation at a low level, as well as the existence of the risk in under circumstances of uncertain movement in international environment: dynamics of the economic recovery of the world economy, the effects of divergent monetary policies of the Fed and ECB, the trend of oil prices at the world market and the presence of geopolitical tensions. However, the instability in the foreign exchange market largely influenced the decisions of NBS on the reduction of KPR, and this was the main reason for very slow relaxation of monetary policy. We estimate that the space for depreciation exists until it doesn't threaten the inflation movement, for which there are no signs now, nor there were signs in the previous two quarters. Although domestic risks (relatively high fiscal and foreign-trade deficit, high level of public debt and high percent of bad loans which would increase in the case of stronger depreciation) limit the scope for more significant growth of monetary policy expansiveness, it is estimated that NBS should gradually increase the monetary policy expansiveness at the cost of the acceptance of moderate risks. It is possible that even greater easing of monetary policy would not have significant effect on inflation movement in conditions of low aggregate demand, but it would be an adequate answer upon economy's entering the recession, given that the GDP growth is expected only from 2016. Slightly higher inflation would in particular contribute to easing the growth of unemployment rate, which inevitably occurs when the economy enters the recession, and would as well boost the effects of fiscal adjustment measures. The NBS policy rate is high even in comparison to other countries in the region that also apply the flexible exchange rate regime, and whose inflation rates and exchange rate changes were comparable in the previous period (with the exception of Turkey, see Graph T5-7). The equivalents of the NBS key policy rate in these countries at the end of February (and their y-o-y inflation rates in January) are: the Czech Republic 0.05% (inflation -0.1%), Croatia 5% (inflation -0.6%), Poland 2% (inflation -1.0%), Romania 2.25% (inflation 0.5%), Hungary 2.1% (inflation -1.4%) and Turkey 7.5% (inflation 7.2%). Approximate value of the KPR in Serbia is only in Turkey, whose central bank nevertheless applies a lower rate of NBS although, unlike Serbia, Turkey's inflation is relatively high.

Reducing the rate of required reserves and changes in its structure stabilize the exchange rate and strengthen the disinflationary pressures

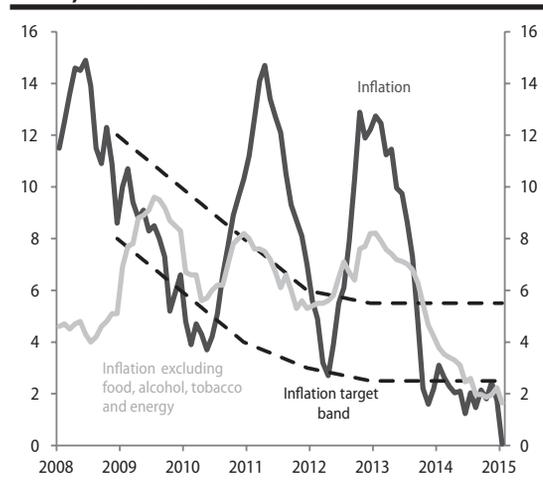
By using the unconventional monetary policy measures-reducing the required reserves rate and increasing the rate of allocation of its dinar portion by twice the percentage, the NBS indirectly increases the supply of foreign currency and reduces the supply of dinars. Ending a subsidized loan programs, thanks to which the credit activity continued to grow in Q4 (but slower than in Q3), will cause the slowdown in credit activity in 2015, forcing the NBS to reduce the required reserves rates repeatedly, but at the same time to increase the rate of allocation of required reserves in dinars. This measure of NBS is also directed toward alleviating depreciation and consequent easing of inflationary pressures. During Q4 the rate of foreign currency required reserves was reduced by 2 p.p. (a reduction from 29% to 27% to the portion of the foreign currency base with maturity up to two years and a reduction from 22% to 20% to the portion of base with maturity over two years). At the same time, the structure of foreign currency required reserves is changed- the foreign currency required reserves rate that is allocated in dinars by 4 p.p. (from 32% and 24% to 36% and 28% depending of maturity). In January, these rates were further reduced by 1 p. p. (foreign currency required reserves rate), i.e. increased by 2 p.p. (required reserves rate in dinars).

Divergent monetary policy: the contraction of the monetary policy of the FED and ECB expansion

The announced implementation of a more restrictive monetary policy of the Fed (Federal Reserve System of the United States) and the implementation of monetary expansion measures of the European Central Bank (ECB), as well as the decision of the Swiss Central Bank to abolish the minimum franc rate against the euro, contribute to increasing uncertainty in international financial market. Positive developments in the real sector of the United States (the strong growth of economic activity and the recovery of the labor market) indicated the completion of the program of Fed's quantitative easing and the increase of the reference rate is announced in 2015, although it is not known to what extent and when it will start. On the other hand, ECB has

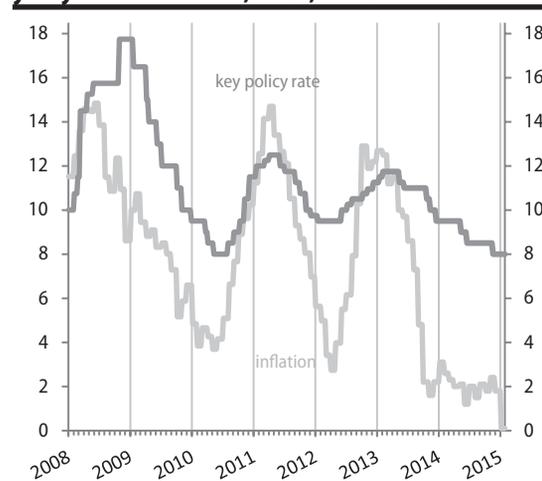
decided, due to the intensified deflationary pressures in the EU and slow economic activity (a recovery of the euro zone is more moderate and does not overflow into the job market, while in Central and Eastern Europe economic activity is slowing down), to implement the unconventional measures of the expansionary monetary policy. Following the purchase of private securities, ECB decided to purchase government securities of the Eurozone countries (measures similar to quantitative easing of the Fed). Starting from March this year up to September 2016, over 1,100 billion euros will be injected, to which financial markets reacted by reducing the yield on government securities in all member states of the eurozone except Greece. A different character of ECB and Fed's and monetary policy will most possibly contribute to a further weakening of the euro, which has made Swiss central bank, after more than three years, to abolish the minimum franc exchange rate against the euro of 1.2 francs per euro. This particularly had a negative impact on the credit market of certain countries of Central and Eastern Europe in which the part of credit portfolio is denominated in Swiss francs. This reflected to Serbia as well, where loans in CHF represent about 3% of GDP, which is however significantly lower than in some other countries (eg. in Poland and Croatia, where it amounts to about 8% and 7% of GDP).

Chart T5-2. Serbia: Y-o-y Inflation Rate and Underlying Inflation and the NBS Target Band, 2008-2015



Source: NBS and QM

Chart T5-3. Serbia: NBS Key Policy Rate and y-o-y Inflation Rate, in %, 2008-2015



Source: NBS

Deflation in Q4 and in January 2015

Deflation is achieved in Q4 and it amounted to 0.6% (Table T5-4), i.e. by months: in October, 0.2%, 0.0% in November and in December 0.4%, while in January deflation was 0.2%. A highest negative contribution to inflation came from the lower prices of unprocessed food, petroleum products and cigarettes, while the largest positive contribution came from the growth in the prices of pharmaceutical products and car prices, as well as a modest rise in the price of processed food. Prices of food and non-alcoholic beverages recorded a fall of 1.4% in Q4, where the prices of unprocessed food had a largest contribution (a drop of 4% is largely of seasonal character- the prices of fruit and fresh meat dropped, while the prices of vegetables and eggs increased). Prices of processed food increased slightly (2% growth- rise in the prices of milk and dairy products is neutralized by the fall in the prices of edible oil and sugar). A rise in the prices of pharmaceutical products (1.1% growth) contributed to the inflation by 0.05%, while the rise in the price of cars of 2.8% (which is a direct consequence of dinar exchange rate depreciation, given that these prices are, as a rule, stated in euros) contributed by 0.06%. The prices of cigarettes dropped by about 8% (contribution of 0.36%) due to fall in turnover on the market and higher competition among manufacturers, who are trying to maintain the position in the declining market, as well as the possible dumping by some manufacturers. The prices of petroleum products decreased by 8.2% (contribution by -0.4pp) due to a significant fall in the world oil prices (the effect of a drop in the prices of petroleum in the world market is partly neutralized by dinar depreciation against the dollar). The prices of Ural type petroleum, which Petroleum industry of Serbia processes at its refineries, dropped during Q4 from 93 dollars per barrel to about 56 \$/barrel, while in this

5. Prices and the Exchange Rate

same period the dinar exchange rate against the dollar increased from 93.6 to 99.5 dinars per dollar. Petroleum prices continued to decrease in January as well, when (at the end of the month) it amounted to about 45 dollars per barrel, while in the same month dinar weakened against the dollar to about 109 dinars per dollar. In late February the price of petroleum increased to 59 \$/barrel, while dinar strengthened slightly against the dollar (to 107.3 dinars per dollar). Given that the petroleum prices in late February and early March stabilized, while the dinar exchange rate against the dollar slightly depreciated, the effect of the growth in the petroleum prices on the prices of petroleum products can be expected in February and March this year. Prices of services increased by 1.6%, mostly as the result of an increase in the travel arrangements and mobile telephony services. Import prices denominated in dinars declined by 4.2%, which is almost entirely the result of lower petroleum prices. World food prices which continued to fall in Q4 had a disinflationary effect, while import prices of production material stagnated. Deflation was recorded in January, when the drop in the prices amounted to 0.2% (in the last 12 months, deflation was realized during six months). A positive contribution to January inflation was given by the growth in the prices of food (growth of 0.64%, contribution of 0.2%) and the growth in the central heating price (growth of 2.4%, contribution of 0.03%), while a drop in the petroleum product prices (drop of 4.9%, contribution -0.24%) and a drop in pharmaceutical product prices (a decrease of 2.6%, contribution of -0.1%) had a negative contribution.

Table T5-4. Serbia: Consumer Price Index: Contribution to Growth by selected Components

	Share in CPI (in %)	price increase in Q4 2014	Contribution to overall CPI increase (in p.p.)	Share in CPI (in %)	Price increase in January 2015	Contribution to overall CPI increase (in p.p.)
Total	100.0	-0.6	-0.6	100.0	-0.22	-0.22
Food and non-alcoholic beverages	35.0	-1.4	-0.5	32.8	0.54	0.19
Food	31.3	-1.5	-0.5	29.2	0.64	0.20
Alcoholic beverages and tobacco	7.7	-5.0	-0.4	7.4	0.13	0.01
Tobacco	4.5	-8.0	-0.4	4.7	0.00	0.00
Clothing and footwear	4.6	0.7	0.0	4.5	-0.75	-0.03
Housing, water, electricity and other fuels	12.9	1.5	0.2	13.6	0.36	0.05
Electricity	5.0	0.0	0.0	4.8	0.00	0.00
Furniture, household equipment, routine maintenance	3.9	0.0	0.0	4.6	0.52	0.02
Health	6.2	0.9	0.1	5.0	-1.59	-0.10
Transport	12.4	-2.4	-0.3	12.9	-1.99	-0.25
Oil products	4.9	-8.2	-0.4	5.8	-4.89	-0.24
Communications	5.1	2.1	0.1	5.0	-0.23	-0.01
Other items	12.2		0.2	14.3		-0.1

Source: NBS and QM

Total and underlying inflation are low

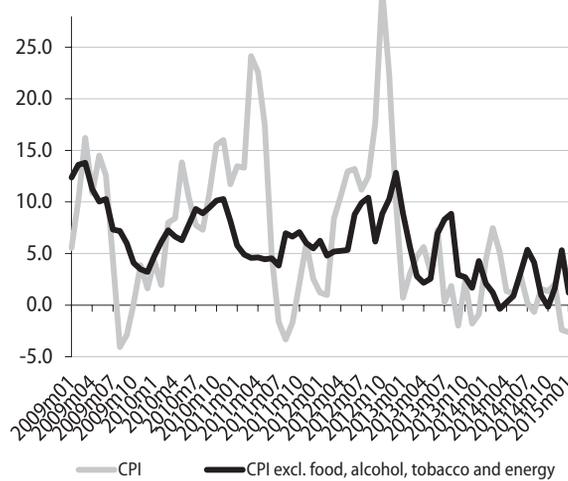
Underlying inflation (inflation excluding food, alcohol, tobacco and energy) during Q4 and in January 2015 is on a stable low level, as well as during the whole of 2014. A slight increase recorded in July and December (Graph T5-5) was caused by the changes in the prices of one-off character, i.e. by dinar weakening. In June, there was a rise in the prices of insurance and prices of the group "recreation and culture", whose effect disappeared and underlying inflation swiftly returned within the stable low frames. However, in December, the main reason for the underlying inflation leap (next to the release of September negative underlying inflation from the annualized 3m average account shown in the graph) was the rise in the prices of cars and telephone equipment, which largely depend on the dinar exchange rate, as these are imported goods. The growth of these prices continued in January, when dinar continued to weaken further, thus the future pace of underlying inflation dynamics will depend largely on the dinar exchange rate. But since the exchange rate stabilized in February, a higher and more lasting changes in underlying inflation are not expected in the coming months, especially if one bears in mind the trend of further weakening in aggregate demand. Total inflation was at a moderate low level

during first two months of Q4, due to an account of a high September inflation in annualized 3m period. However, when the September inflation came out from the account, December and January recorded relatively high deflation (2.4% and 2.6% when annualized). Regulated prices in Q4 continued to decrease (1.4% drop) primarily on the basis of the lower cigarette prices, which was partially compensated by the ncrease in the prices of natural gas and utilities. Year-on-year growth of the regulated prices in December amounted to 1.1%, which is unusually low, given that in the previous years it amounted to about 10%. In the forthcoming period, we expect the rise in the prices of electricity of 15% since of April 2015, which will directly affect the inflation growth by about 0.7pp.

The return of inflation within the target band will depend on the increase of electricity prices, but also on the NBS assessment

As NBS has directed its decisions on the conduct of monetary policy towards the exchange rate stabilization since the second half of the year 2014, the inflation will return within the target band only if NBS takes an active role in its movement in the coming period. NBS’s central projection of inflation trends is such that in the mid-year inflation should return within the tolerance band and by the end of the year move within that range. However, only the announced electricity price growth of 15% (contribution to inflation of about 0.7%) will significantly contribute to its growth, while the effect of electricity price overflow to other prices will be absent to a large extent and will not give any important contribution to inflation. Relatively modest growth of world oil price during February and stabilization during March wwill not affect inflation greatly, but it is uncertain how the oil price will move in the future. In the first half of the year only seasonal growth of primary agricultural products will act inflationary, but also not to a large extent. Dinar weakening was stooped in early February, since when dinar has started to slightly strengthen, thus the effect of overflow of exchange rate depreciation to the prices cannot be expected (which didn’t even occure in January when dinar, observed at the end of the month, weakened by 2.1% against the euro), given that the exchange rate by the end of March returned to the December level. Low aggregate demand (increased by the measures of fiscal adjustment) and low inflation in international environment, despite the expansionary monetary policies of central banks, will remain the main disinflationary factors in the long term. The inflation trend in the future will be affected by the NBS decisions on the further easing of monetary policy, which is, as noted above, more restrictive than it should be under the current circumstances in Serbia, as well as in comparison to the countries in the region. As after the approval of the arrangement of Serbia with the IMF country risks reduced, making the stabilization of the dinar exchange rate more probable in the future, there is a good chance that the additional space for the easing of NBS monetary policy and consistent implementation of the inflation targeting policy will open. Also, not even a long period of the inflation movement below the target represents something that NBS could passively watch, given that the main task of most central banks, including the NBS, is achieving and maintaining the price stability; central bank itself determines the limits of inflation movement, but it also must implement measures to ensure the inflation is moving within these limits.

Chart T5-5. Serbia: CPI and Underlying Inflation Trend, Annualized Rates, in %, 2009-2015



Source: NBS and QM

The exchange rate

Depreciation in Q4 and in January

During Q4, dinar weakened against the euro by 1.8%, i.e. 2.5% for the average period. At the late Q4, dinar weakened against the dollar by 6.2%, i.e. 8.7% at the quarter average (a large part of the depreciation is a result of the weakening of the euro against the dollar). Significantly stronger depreciation continued in January (Graph T5-6), when dinar weakened by an additional 2.1% against the euro, i.e. or 9.5% against the dollar (data for the end of January compared to the end of December), i.e. by 0.9% against the euro and 7.2% against the dollar (observed at the month average). The end of depreciation pressures that started at the beginning of Q3 (when the dinar exchange rate was 115.7 dinars per euro) occurred in the early February (when the dinar exchange rate reached over 123 dinars per euro), and nominal exchange rate appreciation has started since then, and is currently standing at the value of about 121 dinars per euro. The National Bank of Serbia intervened with net sales of 765 million euros during Q4, sales of 90 million euros in January, while in February it intervened with net purchase of 140 million euros. We consider that it is good that NBS didn't succumb to the temptation to allow the dinar strengthening, influenced by the factors in foreign exchange market. Dinar strengthening is not in accordance with the competitiveness of the Serbian economy, thus it would be only temporary, which means that dinar strengthening would be followed by its sudden fall. In highly euroized Serbian economy preventing sudden dinar fluctuations is one of the most important conditions for the stabilization of inflation. It is therefore estimated that a moderate inflation is the acceptable compromise between the needs to improve the price competitiveness with the exchange rate and the needs to prevent high exchange rate fluctuations.

Box 1. Problem solution for the citizens indebted in Swiss francs

After Swiss Central Bank decided to abolish the minimum franc exchange rate against the euro, a strong depreciation of the dinar exchange rate against the Swiss franc occurred in January (about 12% for the month average), which jeopardized the repayment of mortgage loans denominated in this currency. On that occasion, the NBS did not react hastily, despite the pressures of the debtors, by shifting the burden to taxpayers, but at the end of February, they made the decision on the possibilities to convert the loans in Swiss francs to euro, the reduction of interest rate and the possibilities to extend the period of loan repayment.

Although we generally assess the NBS solution as good, we still believe that it could be more flexible in terms of the interest rate level. The flexibility is particularly justified as the mortgage loans are related to the period of 20 years and more, during which time the interest rates in international market can significantly fluctuate in an unpredictable manner. Therefore, we estimate that it would be better that instead the requirement to limit the interest rate on Swiss francs to 3% a year, which are currently high interest rates, but in the future they may be low, a more adequate solution would be to determine interest rates as the sum of LIBOR (by which a future changes in the interest rate market would be taken into account) and fixed margin of 2% for example.

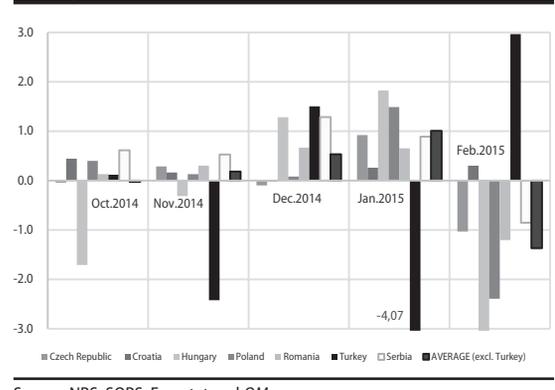
Global factors again had the greatest impact on the dinar exchange rate movement, while domestic factors reinforced depreciation pressures during Q4 (unfavorable news on the sustainability of public finances, the pace and intensity of fiscal consolidation and structural reforms), only to influence the reduction of country risk, exchange rate stabilization and dinar strengthening in early 2015, and especially upon the approval of the arrangement with the IMF. Global factors influencing the dinar exchange rate movement had a similar effect on the currencies of the countries in the region with a similar exchange rate regime (Graph-T5-7), although Serbia recorded somewhat higher depreciation (i.e. lower appreciation) than average.

Chart T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2010-2015



Source: NBS

Chart T5-7. Nominal exchange rate depreciation (in %) in Period of October 2014-January 2015 in Chosen Central and Eastern European Countries

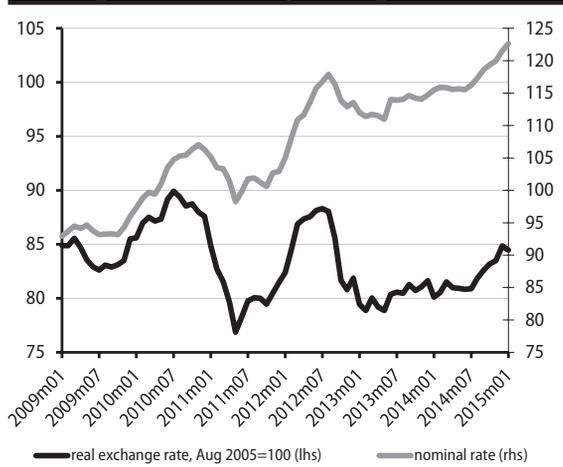


Source: NBS, SORS, Eurostat and QM

Real depreciation in Q4 and real appreciations in January

Q4 saw a real dinar depreciation of about 2.7% and January had appreciation of about 0.5%. Total real dinar depreciation during 2014 amounted to about 4.0% and was the result of nominal dinar exchange rate depreciation, partly compensated with the difference in inflation in Serbia and Eurozone (although inflation in Serbia during 2014 amounted to relatively modest 1.8%, eurozone realized deflation of about 0.2%). Although dinar depreciated in January by about 0.9% (at a month average) and deflation of 0.2% was realized, deflation in the Eurozone was high

Chart T5-8. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly Averages, 2009-2015



Source: NBS, SORS, Eurostat and QM

enough (consumer price index fell by 1.5%) to turn the nominal dinar depreciation into a real appreciation. The real exchange rate was relatively stable from 2013 up until the second half of 2014 (Graph T5-6), but in early Q3, a moderate real depreciation period started, which reached its peak at the end of the year. It would be desirable that this moderate real depreciation doesn't annul itself, because with it, so far reached improved economy competitiveness would be lost (eg. Instead of buying Euros in interbank foreign exchange market, key policy rate should be decreased, which would influence the return of inflation within the target band and the prevention of the exchange rate appreciation).

6. Fiscal Flows and Policy

Fiscal deficit in Q4 2014 was very high due to a steep single rise in net budget borrowing (due to assume of previous debts of Air Serbia, for financial rehabilitation of banks etc.). However, without this effect included, increase in fiscal deficit in Q4 relative to the preceding quarters was below the season-specific due to a notable rise in revenues and low dynamics in capital expenditures. Intensified activities against shadow economy and dinar depreciation pushed up the revenues. Yet, to maintain the positive trends in public revenues, these intensified activities against shadow economy need to be accompanied by a systemic reform in inspection services. It will be possible to give judgments about whether the recovery in budget revenues is sustainable only when the data for the first half of 2015 is available. Consolidated fiscal deficit in 2014 (including “below-the-line” expenditures) is estimated at about 6.6% of GDP, which is much below the projections made in October (by 1.3% of GDP), but still much above the sustainable level. This discrepancy between the actual deficit and the targeted level came from a notable rise in revenues in Q4 and inadequate expenditure planning and inefficient spending (for example capital expenditures). Although the arrangement with the IMF increases the chances of a more considerable reduction in fiscal deficit in the following three years, it does not guarantee the success, because implementation of some adopted measures (such as public sector rightsizing, deciding the status of public and state-owned companies) is both technically and politically demanding. Public debt totaled EUR 22.8 billion (70.7% of GDP) at the end of 2014, and along with the debt of local governments it reached 72.8% of GDP. Public debt rose by EUR 2.7 billion in 2014 due to large fiscal deficit and dinar to euro and dinar to dollar depreciation. If fiscal deficit and other macroeconomic indicators meet the projections in 2015, public debt, along with the debt of local governments, will reach 79% of GDP at the end of the year.

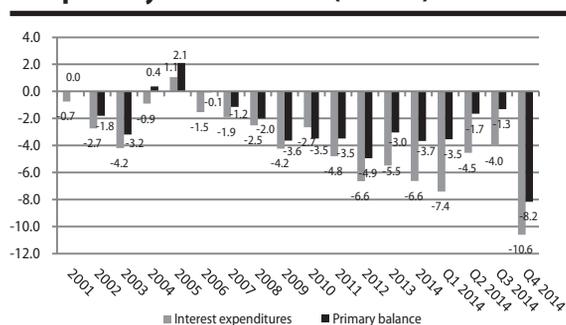
General trends and macroeconomic implications

Fiscal deficit in Q4 totals RSD 105.2 billion (about 10.6% of the quarterly GDP)

Consolidated fiscal deficit in 2014 stands at 6.6% of GDP

Consolidated fiscal deficit in Q4 2014 totaled RSD 105.2 billion, which is approximately 10.6% of the quarterly GDP.¹ This large fiscal deficit in Q4 primarily came from a steep rise in net budget borrowing (to clear liabilities of Air Serbia taken up in the agreement on strategic partnership, and for financial rehabilitation of banks). Without this effect included, increase in fiscal deficit in Q4 relative to the preceding quarters was below the season-specific due to a rise in public revenues and low dynamics in capital expenditures.

Graph T6-1. Serbia: Consolidated fiscal balance and primary fiscal balance (% GDP)



Source: QM calculation

Consolidated fiscal deficit (including “below-the-line” expenditures) in 2014 totaled RSD 258.1 billion, or about 6.6% of GDP. It is by more than RSD 50 billion smaller than the amount projected in the budget revision adopted in October 2014. This discrepancy between the actual deficit and the targeted level is officially attributed to a rise in revenues at the end of the year and slower dynamics in expenditures on goods and services and capital expenditures (due to complex procurement procedures set out in the

¹ As of January 2015 the Ministry of Finance have started publishing monthly reports on consolidated public expenditures which include expenditures on activated guarantees, expenditures on financial rehabilitation of banks etc. (which were previously treated as off-balance expenditures, or so called “below-the-line” expenditures). Accordingly, from this issue on, QM analysis of fiscal trends will be based exclusively on data about the total consolidated fiscal deficit, inclusive of the foregoing expenditures. Term fiscal deficit will therefore refer to deficit inclusive of so called “below-the-line” expenditures. The Ministry of Finance has also published a series of revised monthly data on fiscal deficit now including so called “below-the-line” expenditures, which allows y-o-y comparison of data on consolidated public expenditures and fiscal deficit. Inclusion of all expenditures in consolidated balance of the public sector and systematic monthly reports on these expenditures considerably increase budget transparency.

Public Procurement Law). However, given that the budget revision was adopted in October, this discrepancy of almost 20% (in only two months) is unacceptably large and indicates that the methodology used for macro fiscal projections, budget planning, execution and monitoring was inadequate.

Primary fiscal deficit in 2014 stands at 3.7% of GDP

Primary fiscal deficit (deficit without expenditures on interest payments) totaled about 3.7% of GDP, meaning that expenditures on interest payments make more than 55% of consolidated fiscal deficit. This indicates that expenditures on interest payments are an important driver of fiscal deficit. Consequently, fiscal deficit could become self-generating in the future.

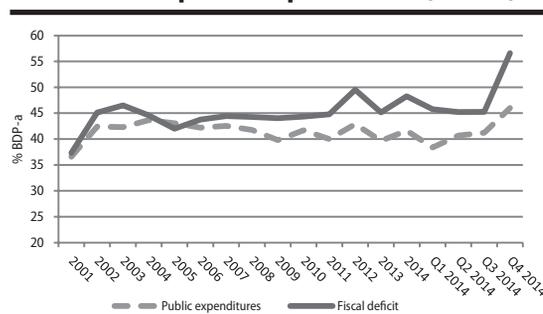
Fiscal deficit is by 1.3% of GDP below the projected level due to a poor expenditure planning, intensified activities against shadow economy and the influence of some other factors

Consolidated fiscal deficit in 2014 was by 1.3% of GDP (or by RSD 50 billion) below the targeted level due to the influence of multiple factors, the most significant being the following: *i*) inadequate expenditure budgeting, and lack of systemic government control over the dynamics in procurement of goods and services and public investments, *ii*) tax revenues in Q4 were above the projected level thanks to intensified activities against shadow economy² (see: Highlight 2: Randelović), *iii*) dinar to euro depreciation, and especially dinar to dollar depreciation, which on one hand pushed up revenues from VAT and excise on imports, as well as custom duties, and on the other hand caused an increase in expenditures on interest payments for public debt denominated in foreign currency, *iv*) drop in world oil price, *v*) highly inefficient execution of public investments, *vi*) and possibly, postponement of some procurements (goods and services and/or capital expenditures), slowdown in VAT refund etc.

Consolidated fiscal surplus of RSD 16.5 billion posted in January

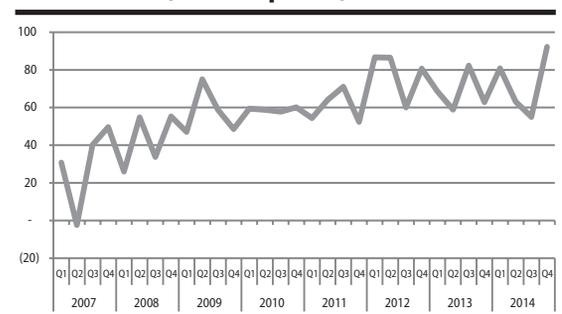
Data show that a consolidated fiscal surplus of RSD 16.5 billion was achieved in January, which usually occurs in this month because of the influence of seasonal factors. To be more specific, in five out of seven preceding years consolidated budget was in surplus in January. However, the surplus recorded in January 2015 is somewhat larger than the season specific, primarily due to dividend payment of RSD 7.6 billion made by Telekom. Although revenues from VAT were quite large in January (VAT payments made by small taxpayers), by eliminating the influence of inflation and seasonal factors, we will see that there was no significant rise in these revenues relative to the preceding months. This suggests that these more welcome fiscal trends detected during the preceding months leave no room for giving up on some of the announced measures for fiscal consolidation.

Graph T6-2. Serbia: Consolidated public revenues and public expenditures (GDP%)



Source: QM

Graph T6-3. Serbia: Real seasonally adjusted fiscal deficit (in 2013 prices)



Source: QM

Through fiscal consolidation, rise in debt-to-GDP ratio will slow down by 2017...

A range of fiscal consolidation measures which are a part of the three-year program with the IMF adopted in February 2014 and which are intended to reduce the deficit by about EUR 1.4 billion by 2017 is included in 2015 Budget. Measures designed to reduce fiscal deficit by 4.75% of GDP altogether are envisaged in the arrangement with the IMF, which is a step closer to sustainable public finance. Since the arrangement does not define the precise amount of the targeted deficit for 2017 but only sets the cumulative amount of the necessary reduction, medium term dynamics in public debt will depend on which amount of 2014 deficit is subject to reduction – actual or targeted. If the actual 2014 deficit (6.6% of GDP) is used as the base, and if the arrangement is fully implemented, fiscal deficit may narrow to about 2% of GDP in 2017,

² In the IMF's Article IV they conclude that the rise in revenues from VAT was caused by the rise in electricity imports in the second half of 2014. This explanation is not plausible because revenues from VAT are affected by the overall consumption of electricity in Serbia and not by its origin.

...but it will probably have to continue in 2018 to stop the rise in public debt

and debt-to-GDP ratio may be stabilized. If, however, the targeted 2014 fiscal deficit (7.9% of GDP) is used as the base, fiscal deficit may narrow to about 3% of GDP by 2017. In that case, rise in debt-to-GDP ratio would be slowed down rather than stopped, and fiscal consolidation would have to continue in 2018 to stop it.

Given that 2014 deficit is partly a result of much lower spending on goods and services and capital projects than planned, which is unsustainable in the long run, and taking into account the risk that some of the measures envisaged in the arrangement might not be fully implemented, the second scenario (2017 fiscal deficit at 3-3.5% of GDP) appears to be more likely. In that case, fiscal consolidation would have to continue in 2018 to reduce fiscal deficit to about 2% of GDP, which would first stabilize public debt (as GDP percentage) and then push it downwards. This is also necessary for successful conclusion of EU accession negotiations at the end of the current or at the beginning of the following decade. Fiscal consolidation program incorporates so called “hard” (controllable) measures, some of which have already been introduced (wage and pension reduction), while some are to be implemented (public sector rightsizing, making large public enterprises self-sustaining etc.), and so called “soft” (not fully controllable) measures (battle against shadow economy etc.). Wage and pension reduction is one of the measures that are easy to introduce from the aspect of administrative procedures, but whose implementation is a tough political decision. On the other hand, public sector downsizing by 10%, comprehensive reforms in public companies and resolution of state-owned and public enterprises in a timely manner, are both politically and technically demanding measures. Therefore, credibility and success of the program of fiscal consolidation will depend on government’s persistence in implementing these measures. Although the arrangement with the IMF increases the chances of success, it does not guarantee success.

Persistent implementation of fiscal consolidation may have positive effects on economic growth in the following years

Full implementation of fiscal consolidation might, after making negative impact on economic activity in 2015 (due to drop in consumption), should produce positive effects on growth in the succeeding years by restoring investors’ trust in Serbia (which would lead to rise in investments and net exports, but which requires improvement of business environment). However, through partial implementation of fiscal consolidation, its negative effects on GDP would remain, and it would fail to boost investments and exports in the succeeding years.

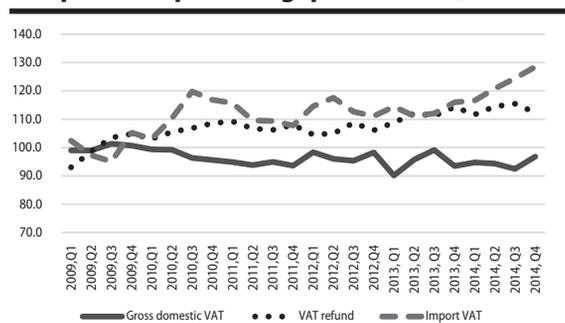
Analysis of the dynamics and structure of public revenues and public expenditures

Q4 saw a notable rise in public revenues – primarily in revenues from VAT

Q4 2014 saw a moderate real rise in seasonally adjusted consolidated public revenues (by 2.1%) relative to the preceding quarter. There was a notable real y-o-y rise in these revenues (by 5.4%), as well. Sharp increase in revenues from VAT, and rise in non-tax revenues were the main causes of this growth. There was a moderate real rise in total public revenues in 2014 (3.2%). It was driven by rise in revenues from VAT (caused by reduction in shadow economy and VAT rate increase), revenues from corporate income tax (caused by tax rate increase in 2013) and revenues from social security contributions (caused by increase in social security contribution rate and reduction in shadow economy).

Revenues from VAT grow steeply...

Graph T6-4. Serbia: Dynamics in real seasonally adjusted revenues from VAT by components (preceding quarter=100)



Source: QM calculations

Real seasonally adjusted revenues from VAT grew steeply (by 8.2%) in Q4 relative to the preceding quarter. Real y-o-y rise in these revenues (Q4 2014 – Q4 2013) was even larger (15.1%). This is a good result, given the drop in consumption and GDP. Total revenues from VAT in 2014 were much higher (by 5.4%) than in the preceding year because these revenues grew in Q3 and Q4. Analysis by components shows that the rise in revenues from VAT in Q4 relative to Q3 came from a considerable increase (real se-

asonally adjusted) in revenues from gross domestic VAT (by 4.8%), moderate decrease in VAT refund (by 2.7%) and moderate rise in VAT on imports (by 3.2%).

...due to reduction in shadow economy, dinar depreciation and more restrictive VAT refund policy

Accordingly, this rise in revenues from VAT in time of decreasing economic activity was caused by the following: *i*) intensified activities against shadow economy (mainly through tighter controls on retail trade of goods and services – in shops and hospitality establishments) which pushed up gross domestic VAT and VAT on imports *ii*) moderate real dinar to euro depreciation and strong real dinar to dollar depreciation, which boosted revenues from VAT on imports, and *iii*) more restrictive VAT refund policy (right to VAT refund is restricted by clearance of any other tax debt) and slowdown in exports, which slightly slowed down VAT refund. It is economically justifiable to restrict the right to VAT refund by clearance of any other tax debt. At the same time, VAT refund to taxpayers who qualify for the refund must be done smoothly and efficiently, within the legal term, in order not to impair their liquidity. This especially applies to export oriented businesses.

Excise revenues are going down in Q4 – primarily excise revenues from tobacco products and alcoholic beverages

Real seasonally adjusted excise revenues went down in Q4 relative to the preceding quarter (by 2.7%). There was a real y-o-y drop in these revenues (by 2.4%), as well. Total excise revenues from tobacco products and alcoholic beverages went down. However, there was a real rise in excise revenues (by 1.6%) in the whole of 2014 relative to 2013. A big step forward in reduction of illegal sale of petroleum products was made in Q2 (through fuel marking). On the other hand, it was not until Q4 that the activities against illegal sale of tobacco and tobacco products were intensified, meaning that this measure could not produce any fiscal effects in that period.

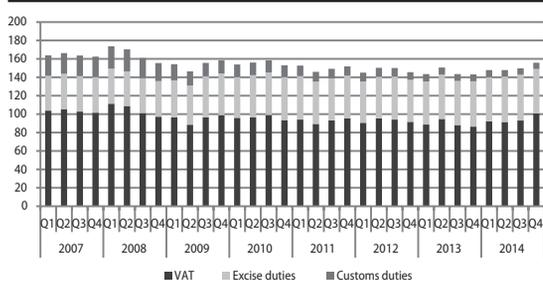
Drop in custom revenues slows down

Custom revenues (real seasonally adjusted) fell slightly in Q4 relative to Q3 (by 1.3%), and y-o-y decrease in these revenues was somewhat larger (7.3%). In time of almost completely liberalized foreign trade (with EU) and stagnant imports, this drop in custom revenues can be attributed to a slowdown in imports, and changed structure of imported goods, regarding their type and country of origin. Namely, goods that are subject to lower custom duties and goods imported from the signatory countries to free trade agreement with Serbia dominate. At the same time, if dinar had not depreciated in Q4, drop in custom revenues in this period would have been somewhat larger. On the other hand, real dinar depreciation discourages imports, producing thus unfavorable long-term effects on custom revenues.

Revenues from personal income tax are going up slightly – probably due to reduction in shadow economy

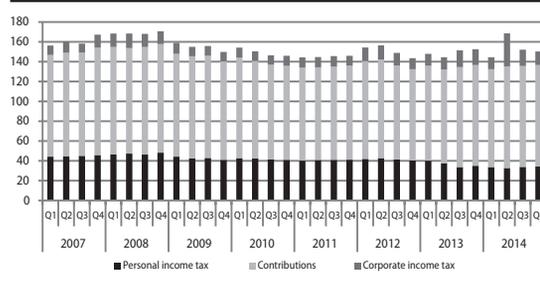
Seasonally adjusted revenues from personal income tax and social security contributions went up moderately in Q4 relative to the preceding quarter (by 1% and 0.5% respectively). There was a notable real drop in revenues from personal income tax (by 8.1) and a sharp real rise in revenues from social security contributions (by 3.1%) in 2014 relative to 2013. This occurred primarily because tax rate for wages was reduced and social security contribution rate was increased. Given that revenues from social security contributions went up regardless of the rate increase, we believe that the measures against shadow economy contributed to this rise, because through reduction in shadow economy the share of wages that are paid legally increases, as well as the number of formally employed (prevention of illegal sale of goods and services prevents employers from making under the table salary payments).

Graph T6-5. Serbia: Trends in real consolidated seasonally adjusted revenues from consumption taxes on consumption (RSD billion, in 2013 prices)



Source: QM calculation

Graph T6-6. Serbia: Trends in real consolidated seasonally adjusted revenues from tax on factors of production (RSD billion, in 2013 prices)



Source: QM calculation

Revenues from corporate income tax are going up in 2014, but the rise is smaller than the relative increase in tax rate

There was a considerable real rise in revenues from corporate income tax (17.1%) in 2014 relative to 2013, mainly because corporate income tax for 2013, when the tax rate was increased from 10% to 15%, fell due for payment in 2014. However, rise in these revenues was smaller than the relative increase in tax rate, which could be attributed to decreasing profitability and liquidity of businesses. Real seasonally adjusted revenues from corporate income tax in Q4 went down relative to Q3 (by 2.7%), and suffered a considerable y-o-y decrease (by 18.1%), as well. This can be attributed to decreasing profitability of companies, leading to downwards revisions in tax advance payment, or to illiquidity (and consequential rise in tax arrears).

Other tax revenues are growing slightly, due to property tax rate increase...

There was a considerable real rise in other tax revenues in Q4 (by 9.3%). These revenues were slightly higher than in the same period 2013 (by 0.5%), as well. Total other tax revenues in 2014 were moderately higher than in 2013 (by 3.1%). This is mainly attributed to increase in property tax rate, after abolition of construction land usage fee.

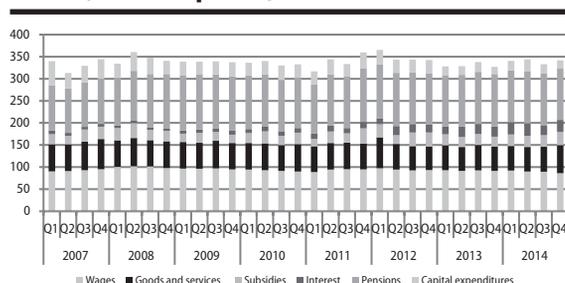
Non-tax revenues are going up due to dividend payments made by NIS and solidarity tax

Non-tax revenues (real, seasonally adjusted) went up considerably in Q4 relative to Q3 (by 20%) because additional solidarity tax was collected in accordance with the order granted by the Tax Administration, and NIS paid dividend at the end of November.³ Solidarity tax slightly pushed up non-tax revenues in 2014 relative to 2013 (by 1.5%). Although the government counts on large inflows of revenues from dividend payments by public enterprises in 2015 and in the succeeding years, this is not sustainable in the long run, because if they use a larger share of their profits for dividend payments, these enterprises may not be able to invest sufficiently in their fixed assets. Consequently, capital base of their business activity might be impaired in the medium term.

Public expenditures are growing in Q4

Real seasonally adjusted public expenditures went up considerably in Q4 2014 relative to Q3 (by 2.9%). There was a substantial real y-o-y increase in these expenditures (by 36%), as well. This rise in public expenditures in Q4 was caused by a single sharp increase in borrowing from

Graph T 6-7. Serbia: Trends in consolidated seasonally adjusted public expenditures (RSD billion, in 2013 prices)



Source: QM calculations

the budget, to clear liabilities of Air Serbia taken on previously and for rehabilitation of financial sector (banks and insurance companies). Exclusive of these effects, real seasonally adjusted public expenditures in Q4 were moderately higher than in Q3 (by 2.9%). Y-o-y rise in these expenditures was somewhat larger (by 7.6%) and was mainly caused by increase in expenditures on goods and services, interest payments and subsidies. There was a considerable real rise in total annual expenditures (by 5.2%) mainly because expenditures on activated guarantees, interest payments and subsidies went up.

Expenditures on goods and services are going up

Real seasonally adjusted expenditures on goods and services increased sharply in Q4 relative to Q3 (by 12.9%). There was a strong real y-o-y rise in these expenditures, as well (by 19.1%). Total annual expenditures on goods and services were much higher than in 2013 (by 6.2%). Expenditures on goods and services rose mainly at the central government level because at the end of the year the government realized that the actual deficit would be smaller than projected in the budget revision, which made room for some previously postponed procurements and clearance of procurement arrears. Since the drop in these expenditures in the preceding quarters was officially attributed to problems with implementation of the Public Procurement Law, rise in these expenditures in Q4 could indicate that these procedural problems have been overcome.

Expenditures on subsidies are going up, in spite of being several times higher than in EU

Real seasonally adjusted expenditures on subsidies went up considerably in Q4 relative to the preceding quarter (by 13.9%). Y-o-y rise in these expenditures was even steeper (by 41.9%). Such trends in expenditures on subsidies are explained by specific dynamics in agricultural subsidy

³ Although solidarity tax was abolished in November, at the end of the year the Tax Administration started granting the orders for clearance of solidarity tax for those public sector employees from whose income solidarity tax had not been deducted and paid.

payments and implementation of new subsidy programs approved in the revision of 2014 budget. Total annual expenditures on subsidies were much higher in 2014 than in the preceding year (by 13.2%), primarily because budget subsidies became the main source of finance for the RTS and radio and TV subscription fee was abolished, and direct budget support to Srbijagas was approved (instead of guarantees on loans to this company). Given that expenditures on direct and indirect subsidies in Serbia exceed 3% of GDP, which is two to three times higher than in other European countries, increase in these expenditures (even if it is caused by temporary factors) is not economically justifiable.

Expenditures on interest payments went up in Q4 because coupons on euro-denominated bonds fell due, indebtedness increased and dinar depreciated

Expenditures on interest payments (real seasonally adjusted) considerably increased in Q4 relative to Q3 (by 19.3%) because large amount of euro-denominated bonds fell due. Additional causes of this increase are growing public debt and moderate dinar to euro depreciation, and strong dinar to dollar depreciation. Total annual expenditures on interest payments were by 19.3% higher than in 2013 due to growing public debt (and consequential increase in principal, but also in interest rates) and dinar depreciation. Even if fiscal consolidation program is implemented fully and persistently, rise in debt-to-GDP ratio will probably continue after 2017. Therefore, upwards trend in expenditures on interest payments is expected to continue, though the ECB's quantitative easing program makes room for cheaper borrowing in euros in the following period.

There is a moderate decrease in expenditures on wages...due to public sector wage cut and increased natural outflow of employees

Real seasonally adjusted expenditures on public sector wages fell considerably in Q4 relative to Q3 (by 4%), and y-o-y decrease in these expenditures was even steeper (by 6.5%). Total annual expenditures on wages went down (by 3.1%), which is economically justifiable. These expenditures decreased in Q4 because all public sector wages over the minimum wage have been reduced by 10% as of November. Additionally, increased number of employees took retirement at the end of 2013, to escape being subjected to new retirement regime, which includes more stringent retirement requirements and penalties for early retirement. The foregoing wage cut, increased natural outflow of employees, and public sector downsizing by 10% in the following three years, should reduce expenditures on employees to economically justifiable and long-term sustainable level. Although this process might provoke a backlash from many sides, the government needs to be persistent and must not give up on any of the measures. Otherwise, credibility of the fiscal consolidation program would be seriously impaired.

Expenditures on pensions are going down slightly...due to pension cut

Expenditures on pensions (real seasonally adjusted) went down slightly in Q4 relative to Q3 (by 1.4%). There was a slight real y-o-y drop in these expenditures (by 2%), as well. These expenditures decreased because all pensions above the average have been reduced by 22% as of November. Expenditures on pensions are expected to keep falling in Q1 2015, as well, though at a slower pace, due to increased inflow of new pensioners at the end of 2014. Total annual expenditures on pensions were almost stagnant (real y-o-y drop of 0.1%) due to rise in the numbers of pensioners, negative real pension indexation and reduction in above-average pensions at the end of 2014. After successful implementation of parametric reform in the middle of 2014, and pension reduction in November same year, expenditures on pensions as a % of GDP are expected to decrease gradually in the following years. However, it will take much longer to reach the sustainable level of these expenditures, equaling about 10% of GDP, because a considerable number of pensioners have been exempted from the pension cut.

Although capital expenditures are going up, they are still relatively low – only 2.5% of GDP

There was a strong drop in capital expenditures (real seasonally adjusted) in Q4 2014 relative to the preceding quarter (by 8.5%). On the other hand, more money was spent on capital projects in this quarter than in the same quarter last year (by 25.2%) – mainly from the central government budget. Total annual capital expenditures were by 12.7% higher than in 2013. Although they grew considerably, capital expenditures accounted for only 2.5% of GDP in 2014. However, this ratio needs to be almost two times higher to make some notable improvements in public infrastructure. This also indicates that current expenditures accounted for almost 60% of the consolidated fiscal deficit. Given that fiscal deficit is financed through borrowing, future generations will have to pay off a large portion of this debt. Low dynamics in capital expenditures in the preceding quarters was attributed to complicated public procurement procedures. This is unjustifiable, because the valid procurement regulations have been in force for almost two years,

which is sufficient time to overcome the difficulties and get used to new procedures or to eliminate possible shortcomings by amending the regulations.

Fiscal trends by government levels

Central government, the Autonomous AP Vojvodina, and the Health Insurance Fund of the Republic of Serbia were running deficit in Q4, while other government levels were in surplus

While central government was running deficit in 2014, sub-central government levels were in surplus

Central government, the AP of Vojvodina and local self-governments overspent their budgets in Q4 2014 (by RSD 45.9 billion, RSD 0.4 billion and RSD 2.5 billion respectively). Health Insurance Fund of the Republic of Serbia has been running deficit since Q2, which widened to RSD 6.7 billion in Q4, because the rate for health insurance contributions was reduced. However, since the public sector wages have been reduced, this deficit is expected to narrow in the following period.

Central government budget deficit in 2014 totaled RSD 204.1 billion, which is by RSD 20 billion below the amount targeted in the budget revision adopted in October. At the same time, sub-central government levels (local self-governments and AP Vojvodina) were running budget surplus of RSD 9.5 billion. This surplus is even larger than in 2013 (RSD 7.6 billion), which leads to conclusion that there is a systemic disequilibrium in distribution of competences and revenues among different government levels, namely sub-central government levels are given more revenue than competences. Accordingly, this disequilibrium needs to be eliminated and distribution of revenues needs to be organized systemically so that sub-central government levels receive a predictable amount of revenues which would encourage them to behave economically efficient.

Table T6-8. Serbia: Fiscal surplus (deficit) at different levels of government (bn. RSD, current prices)

Year	Budget of Republic	Pension fund	National		Vojvodina budget	Local self-governments
			Employment Service	Health fund		
2010	-108.0	-1.0	-0.1	1.9	-9.6	-11.5
2011	-144.3	0.2	1.3	2.1	-0.7	-15.6
2012	-213.0	-0.4	0.8	4.0	1.1	-0.3
2013	-194.4	-1.2	-0.5	8.7	1.3	6.3
2014	-204.1	3.6	2.0	0.2	1.0	8.5
Q1 2014	-77.5	0.3	0.0	6.1	1.8	4.5
Q2 2014	-51.5	0.9	0.8	3.0	2.1	3.5
Q3 2014	-30.4	0.0	0.8	-2.1	-0.4	-0.4
Q4 2014	-44.7	2.4	0.4	-6.7	-2.5	1.0

Source: QM calculations

Box 1. Privatization of spas and property rights disputes between the Republic of Serbia and the Pension and Disability Insurance Fund

Privatization of spa hotel and tourism enterprises has been postponed at the end of 2014 because some of them are subject to property rights disputes between the Pension and Disability Insurance Fund and the Republic of Serbia. Namely, the Pension and Disability Insurance Fund has sued the Republic of Serbia for ownership of these enterprises, on the basis of investments made by the Fund in 1970s. Such disputes usually last for almost a decade (and sometimes even longer), and since the assets of these enterprises have been blocked, some spas are falling into decay and some that have great potential have been closed down. The property in dispute is estimated at tens of millions of euros, and the Pension and Disability Insurance Fund receives EUR 2 billion from the budget of the Republic of Serbia every year to service pensions. Accordingly, the question arises as to whether such suits are legitimate, given that the sued party every year gives to the plaintiff non-repayable funds whose value exceeds the value of the property in dispute several tens of times.

These disputes could be settled in a relatively short term. Namely, the Republic of Serbia could use a monthly transfer payment from its budget to the Pension and Disability Insurance Fund to buy the property rights on the property in dispute. This property would thus become economically active through privatization and investments in development of tourist facilities. This solution would be welcome from the aspect of regional inequality, as well, because these spas are mostly located in undeveloped parts of Serbia (Niška Banja, Kuršumlijska Banja, Sokobanja, Vrnjačka Banja etc.).

Revenues of the central government and revenues of local self-governments are going up

There was a real y-o-y rise in revenues in the central government budget in Q4 2014 (by 9.2%), mainly due to increase in revenues from VAT, revenues from personal income tax, non-tax revenues and donations (for flood relief). There was a real y-o-y rise in revenues in the budgets of local self-governments (by 7%), as well, mainly due to a strong increase in revenues from property tax (by almost 77%), donations for flood relief and transfer payments from the budget of the republic. Integration of construction land usage fee into property tax did not cause a decrease in total revenues from these items in the budgets of local self-governments, which is good. Steep real y-o-y fall in revenues collected in the budget of the Health Insurance Fund of the Republic of Serbia continued (by 14.1%), because the rate for health insurance contributions was reduced from 12.3% to 10.3%, as of July, and transfer payments from the central government budget rose considerably.

Expenditures of the central government are growing, and expenditures of local self-governments are going down

There was a real y-o-y increase in central government expenditures in Q4 2014 (by 11.5%), mainly due to a considerable rise in expenditures on goods and services, subsidies, capital expenditures and other current expenditures. Expenditures on goods and services and capital expenditures probably increased because spending on these items was postponed in the preceding quarters (after the change at the post of the Minister of Finance), and then accelerated at the end of the year, when it was clear that the budget deficit would be below the targeted. Additionally, the government paid off some of the arrears from the previous years, which is economically justifiable. There was a slight real y-o-y increase in expenditures of the Health Insurance Fund, due to a strong rise in other current expenditures and expenditures on goods and services, which went up probably because some procurements could not be postponed any longer and procurement arrears from previous years were paid off. At the same time, sharp real drop in capital expenditures of the Health Insurance Fund continued, because reduction in the rate for health insurance contributions pushed down the inflow of revenues from these contributions. There was a real y-o-y drop in all categories of expenditures of local self-governments in Q4, which is economically justifiable, although it is unfavorable that the largest cut was made in capital expenditures. This could be partly because the Public Procurement Law stipulates that local self-governments must provide the whole amount of funds needed for specific capital project before starting it.

Trends in public debt

Serbia's public debt amounted to EUR 22.8 billion (70.7% of GDP) at the end of 2014...

Serbia's public debt amounted to EUR 22.8 billion (70.7% of GDP) at the end of 2014, and was by EUR 640 million larger than at the end of Q3, and by EUR 2.7 billion larger than at the end of 2013.

...and along with the debt of local self-governments it totaled 72.8% of GDP

Including the debt of local self-governments, public debt amounted to 72.8% of GDP at the end of 2014, which is in line with the projections presented in the previous issues of QM. Increase in public debt in 2014 exceeded consolidated annual fiscal deficit by EUR 500 million, because of additional borrowing needed to service fiscal deficit in 2015 (loan from the United Arab Emirates etc.), and dinar depreciation against euro and dollar. In the same period, debt-to-GDP ratio increased by 11.3% of GDP, which exceeded its absolute growth. This is attributed to real decrease in GDP, moderate real dinar to euro depreciation (by 3.4%), and strong real dinar to dollar depreciation (by 17.3%) caused by euro to dollar depreciation. Rise in debt-to-GDP ratio would be even larger if the data on GDP were not revised upwards in the meanwhile.

Table T6-9. Serbia: Public debt dynamics 2000-2014

	Amount at the end of period, in billions EUR													
	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
I. Total direct debt	14.17	9.62	8.58	8.03	7.85	8.46	10.46	12.36	15.07	17.3	17.7	18.0	19.5	20.2
Domestic debt	4.11	4.26	3.84	3.41	3.16	4.05	4.57	5.12	6.5	7.0	7.5	7.7	8.0	8.2
Foreign debt	10.06	5.36	4.75	4.62	4.69	4.41	5.89	7.24	8.6	10.2	10.3	10.3	11.5	12.0
II. Indirect debt	-	0.66	0.80	0.85	0.93	1.39	1.71	2.11	2.60	2.81	2.8	2.7	2.6	2.5
III. Total debt (I+II)	14.2	10.3	9.4	8.9	8.8	9.8	12.2	14.5	17.7	20.1	20.5	20.7	22.1	22.8
Public debt / GDP ²	169.3%	50.2%	36.2%	29.4%	25.6%	31.3%	41.5%	45.1%	59.3%	63.8%	62.3%	63.0%	66.8%	70.9%
Public debt / GDP (QM) ³	169.3%	52.1%	36.1%	29.9%	28.3%	32.8%	41.9%	44.4%	56.1%	59.4%	60.6%	61.2%	67.6%	70.7%

1) According to the Public Debt Law, public debt includes debt of the Republic related to the contracts concluded by the Republic, debt from issuance of the t-bills and bonds, debt arising from the agreement on reprogramming of liabilities undertaken by the Republic under previously concluded contracts, as well as the debt arising from securities issued under separate laws, debt arising from warranties issued by the Republic or counterwarranties as well as the debt of the local governments, guaranteed by the Republic.

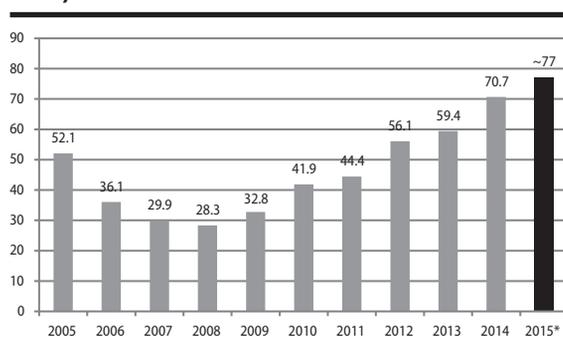
2) Estimate of the Ministry of Finance of the Republic of Serbia

3) QM estimate (Estimated GDP equals the sum of nominal GDP in the current quarter and three previous quarters)

Source: Ministry of Finance and QM calculations

Downwards trend in indirect debt continues, but it is expected to rebound

Downwards trend in indirect debt detected in the preceding three quarters continued in Q4, though at a slower pace (EUR 80 million in Q4). In the whole of 2014 indirect debt shrank by EUR 270, which is praiseworthy but unsustainable, because key generators of indirect public debt (government guarantees to Srbijagas and other public/state-owned companies, financial rehabilitation

Graph T6-10: Trends in public debt in Serbia (% GDP)

Source: QM calculations

of banks etc.) have not been eliminated. Given that the transition to company financing through guarantees instead of direct budget subsidies was caused. Increased budget transparency and tighter control over budget execution imposed by independent institutions and the National Assembly pushed up the amount of off-budget subsidies, in the form of government guarantees on loans. These expenditures were included in 2014 fiscal deficit and in 2015 Budget, which made them visible. Consequently, a reverse process took place in 2014 – government guarantees were partly replaced by direct subsidies.

Box 2. Currency structure of public debt and foreign exchange risk management

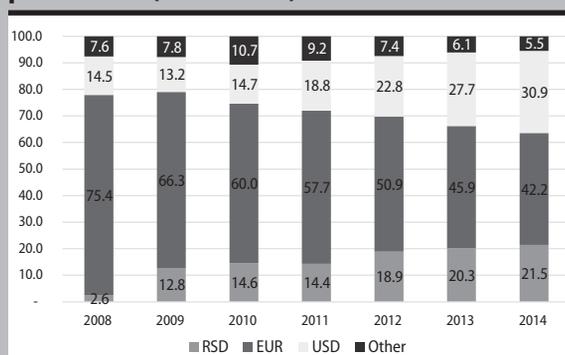
Dinar denominated public debt accounted for about 1/5 (21.5%) of the total public debt in 2014¹, and the remainder of the debt was denominated in foreign currencies, mainly in euros (42.2%) and dollars (30.9%), while the share of public debt denominated in other currencies was much smaller. From 2008 to 2014, share of dinar denominated public debt increased eight times, and the sharpest rise was recorded between 2008 and 2011 because in that period fiscal deficit was mainly financed through issuance of dinar-denominated treasury bills. However, sustainability of public debt is highly exposed to foreign exchange risk because the share of national currency in debt portfolio is still small. There has been a considerable increase in dollar-denominated public debt as of 2011, and the sharpest rise was recorded in 2012 and 2013, when the government launched several issues of Eurobonds denominated in dollars. At the same time, share of euro-denominated public debt has been shrinking as of 2008. Dollar-denominated public debt increased considerably and euro-denominated public debt decreased mainly because borrowing in US dollars was more available and cheaper than euro-denominated loans due to the Fed's loose monetary policy and its quantitative easing program lasting for years, alongside with Eurozone crisis and less available borrowing in euros. Additionally, repayment of a considerable part of old

¹ Data for 2014 refer to the end of November because these were the only available data when the analysis was made.

debt denominated in euros (old foreign currency savings etc.) pushed down the share of euro-denominated public debt.

The only way to eliminate foreign exchange risk would be to borrow in national currency exclusively (in which revenues are collected). However, this is impossible because of the lack of capital

Graph T6-11: Serbia: Currency structure of public debt (2008-2014)



Source: QM calculations

in domestic market. Trends in exchange rates are impossible to predict with satisfactory degree of certainty. Therefore, full protection from exchange risk is impossible. However, the government must have an effective strategy for foreign exchange risk management, in which currency structure of foreign debt is in line with currency structure of exports (effective reduction in dollar-denominated debt by 10 pp). Additionally, insurance against foreign exchange risk (hedging) should be considered, depending on the price of these operations and estimated level of exchange rates in the following period.

Public debt will amount to 79% of GDP at the end of 2015

Debt-to-GDP ratio will continue to rise in 2015 due to poor health of public finance, and real GDP shrinking in 2014, depreciation of dinar against euro and dollar, and possible issue of government guarantees to public companies, because restructuring of large users of these guarantees has not begun yet. Given the level of public debt at the end of 2014, and expected trends in economic activity and fiscal deficit by the end of 2015, and expected further slight depreciation of dinar against euro, and assuming that borrowing in advance (to obtain funds for the next year) will remain within the expected level, 2015 public debt is estimated at 77% of GDP, and along with the debt of local municipalities, it is targeted at 79% of GDP.

Appendices

Annex 1. Serbia: Consolidated General Government Fiscal Operations¹⁾, 2008-2014 (nominal amounts, bn RSD)

	2008	2009	2010	2011	2012	2013				2014					
						Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4
I PUBLIC REVENUES	1,193.5	1,200.8	1,278.4	1,362.6	1,472.1	346.4	380.1	386.7	424.9	1,538.1	352.9	403.3	407.6	457.0	1,620.8
1. Current revenues	1,143.1	1,139.2	1,215.7	1,297.9	1,393.8	327.3	361.3	367.6	405.0	1,461.3	334.9	383.7	385.4	436.8	1,540.8
Tax revenue	1,000.4	1,000.3	1,056.5	1,131.0	1,225.9	296.4	321.8	325.8	352.5	1,296.4	301.3	348.7	344.8	375.1	1,369.9
Personal income taxes	136.5	133.5	139.1	150.8	150.8	35.3	38.2	39.8	35.9	42.1	156.1	32.2	35.1	36.9	42.2
Corporate income taxes	39.0	31.2	32.6	37.8	54.8	18.4	11.0	15.4	15.8	60.7	15.5	29.8	14.2	13.2	72.7
VAT and retail sales tax	301.7	296.9	319.4	342.4	367.5	87.3	98.7	94.6	99.9	380.6	93.6	97.0	101.7	117.3	409.6
Excises	110.1	134.8	152.4	170.9	181.1	42.5	53.7	52.3	56.3	204.8	42.9	55.2	58.4	56.0	212.5
Custom duties	25.8	48.0	44.3	38.8	35.8	7.3	7.9	8.2	9.1	32.5	7.3	7.5	7.8	8.6	31.2
Social contributions	312.7	318.8	323.0	346.6	378.9	93.4	99.7	107.7	117.6	418.3	99.3	109.8	110.7	120.6	440.3
Other taxes	35.6	37.1	46.0	43.5	42.6	9.3	10.9	11.6	11.7	43.5	10.7	14.3	15.1	17.2	57.3
Non-tax revenue	0.0	138.8	159.2	36.9	37.9	30.9	39.6	41.9	52.5	34.9	33.7	35.0	40.5	61.7	0.0
2. Capital revenues	1.4	0.9	0.3	2.0	8.7	1.9	0.5	0.6	0.5	3.5	0.4	0.6	0.4	0.6	2.0
II TOTAL EXPENDITURE	-1,265.5	-1,328	-1,419.5	-1,526.1	-1,717.3	-392.6	-424.8	-452.8	-479.9	-1,750.2	-421.0	-448.3	-447.4	-562.2	-1,878.9
1. Current expenditures	-1,089.6	-1,155	-1,224.8	-1,324.8	-1,479.9	-350.9	-385.0	-395.4	-418.6	-1,549.8	-381.7	-393.6	-398.0	-454.7	-1,628.0
Wages and salaries	-293.2	-302.0	-308.1	-342.5	-374.7	-93.8	-98.1	-97.5	-103.4	-392.7	-95.7	-97.9	-96.4	-98.6	-388.6
Expenditure on goods and services	-181.4	-187.4	-202.5	-233	-235.7	-49.7	-55.3	-60.0	-71.9	-236.9	-50.9	-58.3	-60.2	-87.4	-256.8
Interest payment	-17.2	-187.4	-34.2	-44.8	-68.2	-18.9	-27.5	-27.2	-20.9	-94.5	-35.5	-28.6	-26.8	-24.2	-115.2
Subsidies	-77.8	-22.4	-77.9	-80.5	-111.5	-19.0	-22.0	-28.4	-31.8	-101.2	-19.4	-23.7	-27.9	-46.1	-117.0
Social transfers	-496.8	-63.1	-579.2	-609.0	-652.5	-32.4	-173.0	-172.6	-179.5	-687.6	-170.7	-172.4	-172.8	-181.0	-696.8
o/w: pensions ⁵⁾	-331.0	-556.4	-394.0	-422.8	-473.7	-120.0	-124.6	-125.3	-128.2	-498.0	-125.0	-126.9	-128.0	-128.1	-508.1
Other current expenditures	-23.5	-387.3	-22.9	-31.7	-37.4	-7.1	-9.1	-9.6	-11.1	-36.9	-9.6	-12.6	-14.0	-17.5	-57.3
2. Capital expenditures	-106.0	-24.0	-105.1	-111.1	-126.3	-13.4	-17.6	-26.7	-26.4	-84.0	-13.9	-25.3	-23.7	-33.7	-96.7
3. Called guarantees	-1.6	-2.2	-2.7	-3.3	-3.7	-2.4	-1.1	-1.6	-2.9	-7.9	-3.4	-5.9	-8.2	-12.1	-29.7
4. Budget lending	-19.3	-24.0	-30.0	-25.0	-38.2	-8.0	-3.9	-11.0	-12.8	-35.6	-5.2	-5.8	-0.3	-44.1	-55.4
III CONSOLIDATED BALANCE	-72.0	-127.1	-141.0	-163.5	-245.2	-46.2	-44.7	-66.1	-55.0	-212.1	-68.1	-45.0	-39.8	-105.2	-258.1

Source: QM

Annex 2. Serbia: Consolidated General Government Fiscal Operations¹, 2008-2014 (real growth rates)

	2008	2009	2010	2011	2012	2013					2014				
						Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4
I PUBLIC REVENUES	3.3	-8.9	-1.5	-4.6	0.6	-5.7	-3.5	-2.6	0.1	-2.2	-0.8	4.3	3.5	5.4	3.2
1. Current revenues	3.5	-9.1	-1.5	-4.4	0.1	-6.2	-2.9	-2.8	1.7	-2.6	-0.3	4.3	2.8	5.7	3.3
Tax revenue	3.7	-8.8	-2.5	-4.1	1.0	-4.2	-2.1	-3.4	2.9	-1.7	-1.0	6.4	3.8	4.3	3.5
Personal income taxes	6.3	-10.8	-3.9	-2.9	2.1	-4.9	-12.3	-18.9	-11.6	-12.2	-17.8	-13.5	0.8	-1.7	-8.1
Corporate income taxes	18.5	-27.0	-3.6	3.9	35.1	-28.2	-7.9	39.6	44.9	2.9	-18.0	165.3	-9.5	-18.1	17.4
VAT and retail sales tax	2.5	-10.2	-0.7	-4.0	0.0	-2.1	-0.6	-6.2	-5.2	-3.8	4.3	-3.6	5.4	15.1	5.4
Excises	0.7	11.6	4.2	0.6	-1.2	9.5	20.1	-10.9	8.2	5.1	-1.7	0.8	9.5	-2.4	1.6
Custom duties	1.8	-32.4	-14.9	-21.5	-14.0	-15.3	-20.5	-16.9	-9.3	-15.6	-4.4	-7.0	-6.9	-7.3	-6.5
Social contributions	4.3	-7.0	-6.5	-3.9	1.9	-3.0	-4.4	6.7	10.9	2.6	3.6	29.1	28.1	0.5	3.1
Other taxes	-2.3	-4.9	14.5	-15.2	-8.8	-14.2	-15.6	0.2	10.2	-5.2	12.1	8.2	0.8	44.1	29.2
Non-tax revenue	2.6	-11.3	5.8	-6.1	-6.2	-22.0	-9.4	2.1	-5.4	-8.7	6.0	-13.1	-5.1	15.1	1.5
2. Capital revenues	-76.8	-41.4	-66.8	468.2	304.5	159.4	-63.6	-31.7	-91.3	-63.0	-79.6	17.6	-27.7	6.0	-33.3
II TOTAL EXPENDITURE	5.0	-4.8	-1.7	3.3	4.3	-9.1	-9.8	2.3	-4.2	-0.3	4.4	3.7	-3.0	14.8	5.2
1. Current expenditures	6.9	-3.3	-2.2	3.1	4.1	-7.2	-5.2	3.0	-1.0	-2.7	6.0	0.4	-1.2	6.5	2.9
Wages and salaries	10.9	-6.0	-5.9	0.4	2.0	-2.1	-5.7	0.0	-2.1	-2.6	-0.6	-2.0	-3.0	-6.5	-3.1
Expenditure on goods and services	-5.7	-0.3	4.3	1.5	1.5	-13.4	-20.3	4.5	4.0	-6.6	-0.1	3.4	-1.6	19.1	6.2
Interest payment	-2.8	-5.7	-0.3	17.4	41.9	9.8	86.3	9.5	26.7	28.8	82.9	2.2	-3.4	13.6	19.3
Subsidies	-13.3	19.0	40.6	7.4	29.1	-24.7	-20.7	35.9	-29.5	-15.6	-0.8	6.0	-3.8	41.9	13.2
Social transfers o/w: pensions)	10.1	-26.0	13.9	5.8	-0.1	-6.4	-2.5	-1.2	1.7	-2.1	2.4	-2.2	-1.8	-1.2	-0.7
Other current expenditures	9.5	2.2	-3.9	3.9	4.4	-4.8	-4.1	-1.6	1.2	-2.3	1.5	0.0	0.2	-2.0	-0.1
2. Capital expenditures	14.9	6.7	-6.1	23.9	9.9	-19.6	-29.5	12.4	10.6	-8.4	31.1	36.2	43.1	55.0	42.6
3. Called guarantees	-4.3	-6.7	-11.8	5.3	6.0	-52.9	-29.0	-16.6	-46.7	-38.2	1.4	41.5	-12.8	25.2	12.7
4. Budget lending	283.5	-2.2	-2.7	-3.3	-3.7	13.6	82.2	324.3	184.6	248.7	40.7	439.8	417.0	310.5	267.8
	13.3	-24.0	-30.0	-25.0	-38.2	53.0	-79.8	34.7	49.3	44.2	-36.1	45.5	-97.4	237.4	52.2

Source: QM

Annex 3. Serbia: Real annual rates of growth in public revenues and public expenditures, by the levels of government

	Q4 2014/Q4 2013			
	Consolidated budget	Budget of Republic	Health Fund	Local self-governments
A Total public revenues (I)+(II)+(III)+(IV)	6.0	9.2	-2.4	6.1
I Current revenues (1)+(2)	5.7	8.8	-14.1	3.2
1. Tax revenues	4.3	6.3	-16.9	7.0
1.1. Customs	-7.3	-7.3	-	-
1.2. Personal income tax	-1.7	13.7	-	-8.3
1.3. Corporate income tax	-18.1	-19.5	-	-
1.4. VAT	15.1	15.1	-	-
1.5. Excise duties	-2.4	-2.4	-	-
1.6. Property taxes	-	-	-	76.8
1.9. Other taxes	0.5	5.3	-	5.9
1.10. Social security contributions	-	-	-16.9	-
2. Non-tax revenues	15.1	24.3	103.6	-8.0
II Capital revenues	5.96	-	-71.0	5.6
III Transfers from the other levels of government	-	-	28.7	16.5
IV Donations	241.4	312.9	-	50.2
		0.0		
B Total public expenditures (I)+(II)+(III)+(IV)	7.6	14.5	2.4	-18.1
I Current expenditures	6.5	11.5	2.5	-13.7
1.1 Wages	-6.5	-5.2	-8.3	-9.8
1.2. Goods and services	19.1	41.8	10.8	-13.0
1.3 Interest payments	13.6	16.4	-100.0	-13.7
1.4 Subsidies	41.9	64.9	0.0	-13.6
1.5 Social insurance and social assistance	-1.2	-1.3	16.0	-19.4
1.6 Transfers to the other levels of government	-	1.3	-	-
1.7 Other current expenditures	55.0	103.9	2411.3	-18.3
II Capital expenditures	25.2	56.2	-45.0	-37.5
III Strategic reserves	-	1852.5	-	-49.9
IV Net lending	192.4	95.2	-	-90.9

Source: QM

7. Monetary Trends and Policy

The continuing drop of the y.o.y. inflation rate in Q4 freed space for a further relaxation of monetary policy. Still, the Serbian National Bank (NBS) very cautiously lowered its key policy rate while directing most of its activities towards stabilizing the Dinars exchange rate. In the last quarter of the previous year interventions were aimed at preventing a sudden depreciation of the Dinar while interventions in the first two months of this year were aimed at preventing sudden changes in the exchange rate in both directions. The state of the Serbian economy (the recession, low inflation, a drop in credit activity), the adopted measures of fiscal consolidation and trends in the international environment create room for a more significant and faster easing of the restrictive monetary policy. The credit activities of domestic banks rose slightly in the enterprises segment while other placements dropped. Foreign owned banks are continuing to withdraw their placements from Serbia which indicates serious problems in companies and in the banking sector. Bearing in mind these negative trends and the end of the program of subsidized loans, a new mechanism needs to be found to move credit activity in Serbia. In 2014 there was an evident stabilization and slight reduction of bad loans with improvements recorded in the enterprises and household segments.

Central Bank: Balance and Monetary Policy

NBS moderately and cautiously eases restrictive monetary policy

The Serbian National Bank (NBS) monetary policy was directed to stabilizing the foreign currency market in Q4 despite the drop in the y.o.y. inflation rate below the planned framework. That view is confirmed by the fact that despite deflation at monthly level, the NBS corrected its key policy rate only once by 0.5 percentage points to leave it at the level of 8% up to mid-March when it was reduced to 7.5%. On the side of interventions primarily directed at stabilizing the foreign currency market, the NBS changed its decision on mandatory foreign currency reserves twice in Q4 and once more in January in order to withdraw Dinar liquidity and reduce the pressure on the inter-banking foreign currency market. The weaker pace in lowering the key policy rate is the consequence partly of the great withdrawal of banks from REPO placements which started in Q3. In the second half of the year, REPO stock was reduced by about 755 million Euro, partly as the consequence of a reduction in Dinar liquidity which happened because of the obligation of banks to cover most of their foreign currency required reserve with Dinars. The freed foreign currency reserves were mainly returned to the bank head offices outside the country. The y.o.y. inflation rate stood at 0.1% in January because of a high base from the previous year and because of that we can expect inflation to remain below the target framework in the first half of 2015 despite the announced rise in the price of electricity due to the low aggregate demand. In February amendments to the law on banks were adopted showing that the NBS is paying increasing attention to the problems in the banking sector with an accent on the high level of bad loans (see in more detail in Spotlight On 1). We still believe that despite these efforts, the center of future activities should lie in the creating of positive stimulation for new credit placements and not just a stabilization of the foreign currency market.

Table T7-1. Serbia: NBS interventions and foreign currency reserves 2012-2014

	2012				2013				2014			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Repo stock (in millions of euros)	1,055.98	111.98	2.29	354.16	678.86	663.82	832.03	966.40	783.96	824.19	387.39	69.48
NBS interest rate	9.50	10.00	10.50	11.25	11.75	11.00	11.00	9.50	9.50	8.50	8.50	8.00
NBS interest rate	1.11	-2.77	-5.74	1.11	6.95	3.31	13.24	10.38	4.38	5.09	6.78	10.63
NBS interest rate	-18.43	-7.27	-6.50	-3.99	19.25	12.85	12.83	9.25	5.28	7.08	0.03	-1.94
NBS interventions on FX market (in millions of euros)	-498.50	-1288.80	-1348.30	-1343.30	10.00	-215.00	-140.00	375.00	-800.00	-630.00	-855.00	-1620.00
INCREASE	cumulative, in % of initial M2¹⁾											
NBS own reserves ²⁾	-17.6	-45.4	-35.6	-6.0	12.5	7.1	17.9	43.2	-31.2	-4.9	2.0	-6.6
NDA	2.4	61.3	65.8	41.3	-15.3	-3.9	-16.2	-31.3	12.2	-11.4	-7.6	15.6
Government, dinar deposits ³⁾	-5.1	6.1	4.3	-4.3	1.0	-1.2	-4.7	-19.9	3.3	-14.6	-24.3	-9.5
Repo transactions ⁴⁾	2.2	53.7	59.3	40.2	-16.0	-14.7	-23.8	-30.7	9.2	6.5	28.9	46.0
Other items, net ⁵⁾	5.3	1.5	2.3	5.4	-0.3	12.0	12.4	19.3	-0.3	-3.4	-12.2	-20.9
H	-15.2	15.9	30.2	35.3	-2.8	3.3	1.7	12.0	-19.0	-16.3	-5.6	9.0
o/w: currency in circulation	-3.3	-4.0	-1.4	-1.6	-3.9	-0.7	1.0	5.4	-5.2	-3.5	0.5	3.7
o/w: excess liquidity	-13.6	-1.6	-1.1	5.4	0.6	2.1	-1.4	4.4	-12.1	-11.6	-7.3	-0.6
in millions of euros, cumulative from the beginning of the year												
NBS, net	-1070.60	-2087.45	-2383.97	-1050.95	30.01	-992.01	-1041.50	943.97	-608.63	-725.22	169.79	-778.03
Gross foreign reserves	-1138.11	-2090.09	-2536.57	-1324.15	-385.77	-1576.91	-1822.60	240.33	-793.11	-1090.74	-276.23	-1309.69
Foreign liabilities	67.51	2.64	152.60	273.20	415.78	584.90	781.10	703.63	184.49	365.52	446.02	531.66
IMF	58.24	-6.44	138.99	258.95	401.14	568.40	759.83	695.60	182.35	364.90	446.72	539.97
Other liabilities	9.27	9.07	13.61	14.25	14.65	16.50	21.27	8.03	2.14	0.61	-0.70	-8.31
NBS, NET RESERVES-STRUCTURE												
1. NBS, net	-1070.60	-2087.45	-2389.97	-1050.95	30.01	-992.01	-1041.50	943.97	-608.63	-725.22	169.79	-778.03
1.1 Commercial banks deposits	459.45	740.45	1030.19	907.59	911.80	967.01	1058.25	240.42	-125.77	91.72	28.90	610.69
1.2 Government deposits	263.40	488.43	683.75	28.63	-811.79	47.05	209.55	-359.83	144.17	541.44	-162.64	48.59
1.3 NBS own reserves	-347.74	-858.58	-670.03	-114.73	130.02	22.06	226.30	824.56	-590.22	-92.05	36.05	-118.75
(1.3 = 1 - 1.1 - 1.2)												

Source: NBS.

1) "Initial M2" designates the state of primary money at the start of the current, ie the end of the previous year.

2) Definition of net own reserves NBS is given in section 8, "Monetary trends and policy", Frame 4, QM 5.

3) State includes all levels of government: republic and local.

4) This category includes NBS treasury bonds (BZ) and repo operations.

5) Other domestic net assets includes: domestic loans (net debts from banks, not including BZ and repo transactions; net debts of economy) together with other assets (capital and reserves; and balance items: other assets) and corrected by exchange rate changes.

There is room for a stronger easing of restrictive monetary policy

The state of the Serbian economy, adopted measures of fiscal consolidation and trends in the international environment are creating room for a more significant and faster easing of restrictive monetary policy. The economy continues to be in recession, inflation is below the target level (with frequent periods of deflation) and the credit activity of banks has seen a downwards trend for several years. In the second half of the year the government introduced a series of measures aimed at achieving a significant reduction of the fiscal deficit which have already started producing effects which are approximately in harmony with expectations. The European Central Bank started a program of strong monetary expansion which will cause a weakening of the Euro against other currencies in the world. In those circumstances, we believe there is room for an additional easing of restrictive monetary policy both through a lowering of the key policy rate and through a gradual reduction of the required reserves rate. The NBS should ease its restrictive monetary policy until inflation stabilizes at around the middle of the target corridor (4% a year). The NBS would continue preventing sudden depreciations of the Dinar because it would have a negative effect on foreign currency debts in the highly Euro oriented economy such as the Serbian economy.

An expansive monetary policy would be anti-recession and would contribute to improving the competitiveness of the Serbian economy

An expansive monetary policy would have a moderate anti-recession effect because lower interest rates would cause a rise in private investments and private spending. If private investments, private spending and exports rise quickly the recession effects of fiscal consolidation would be lesser and shorter lasting. A rise in private investments and private spending depends on a large number of elements, with monetary policy not being the most important but that relatively modest influence should be used. An expansive NBS monetary policy should secure a moderate weakening of the Dinar against the Euro in the next few years despite the strong monetary expansion in the Eurozone. The weakening of the Dinar would stimulate exports and discourage imports which, combined with the planned structural reforms, would have a positive effect on economic activity and employment.

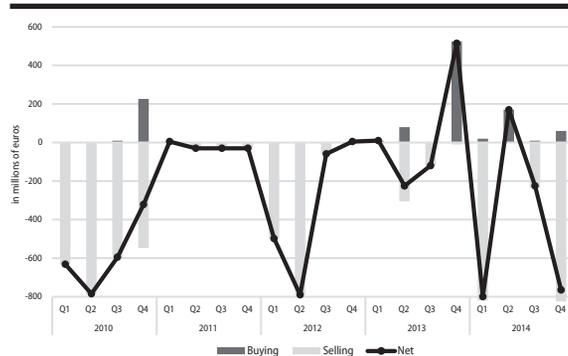
Primary money growth in Q4...

The end of the year was characterized by continued depreciation pressure on the inter-banking foreign currency market. That led to NBS interventions in Q4 which were dominated by the sale of foreign currency totaling 825 million Euro as opposed to purchases totaling just 60 million Euro (Graph T7-2). In 2014, the NBS sold 1.62 billion Euro to slow down the weakening of

... due to significant withdrawal of banks from REPO placements

the Dinar (in 2013, the NBS was a net buyer of foreign currency totaling 375 million Euro, Table T7-1). In Q4, the NBS continued freeing up foreign currency liquidity in the banking sector with new changes to the Decision on banks FX reserve requirements. For the first time in mid-October and then again in December and January, the NBS lowered the rate of the FX reserve requirement to the current 26% for obligations with a due date of up to two years and to 19% for obligations with a due date of more than two years. The overall effect was strengthened further with the change of structure of the FX reserve requirement since the portion set aside in Dinars was increased to 38% and to 30% for obligations with due dates of up to and more

Graph T7-2. Serbia: NBS interventions on inter-banking foreign currency market 2010-2014



Source: NBS

than two years. The relatively high increase of the Dinar portion of the FX reserve requirement compared to the decrease of the overall rate meant that business banks had a part of their Dinar liquidity pulled out while their foreign currency liquidity was freed up. In January 2015, the ECB adopted a program of quantitative easing under which, as of March, state bonds would be bought at a monthly level of 60 billion Euro. The planned duration of the program is at least to September 2016 with a possible extension which leads to expectations of more than 1,200 billion Euro being pumped into the Eurozone market.

More interventions on inter-banking foreign currency market cause drop in net own reserves

There was an evidently lower number of interventions on the inter-banking foreign currency market in the first two months of 2015 with the NBS making net purchases of 50 million Euro by the end of February (it sold 90 million in January and bought 140 million Euro in February). We feel that it is very positive that the NBS prevented a strengthening of the Dinar with interventions on the foreign currency market since the start of the year. The strengthening of the Dinar in conditions of a high foreign deficit and high unemployment would bring short-term benefits to the population (lower cost of repaying loans, cheaper imported products) but in the long-term it would be harmful because it would cause the closing down of jobs. The greater extent of interventions on the inter-banking foreign currency market caused a drop in the NBS own reserves¹ in Q4 by 155 million Euro while at the level of all of 2014 the net own reserves dropped by 118 million Euro (in Q3 the NBS net own reserves increased by 128 million Euro, Table T7-1). Nonetheless, primary money recorded a growth of 14.67% of the value at the start of the year in Q4 (in Q3 primary money rose by 10.69% of the value at the start of the year). The negative effect of the drop in net own reserves in creating primary money was neutralized with the new rise in net domestic assets which in Q4 stood at 23.21% of the value at the start of the year. As in the previous quarter, the net domestic assets' growth was the consequence of a reduction of REPO placements by 317.5 million Euro, or 17.1% of the value at the start of the year. The increase in net assets in Q4 by 8.69% also had a positive effect on the growth of primary money while the higher rise was compensated by the increase of state Dinar deposits by 14.8% of the value at the start of the year.

Monetary System: Structure and Money Mass Trends

The money mass recorded a y.o.y. growth in Q4 ...

Compared to the value at the start of the year, the money mass M2² recorded a nominal increase of 8.6% in Q4. This is also the first quarter after more than 18 months in which the loans to the non-state sector were increased by 3% (in Q3 loans to the non-state sector saw a drop of -1.2% y.o.y. and in Q2 -4.5% y.o.y., Table T7-4). Following the correction for inflation during the year

¹ Repaying NBS loans to the IMF also caused a drop in foreign currency reserves (see section on Balance of Payments)

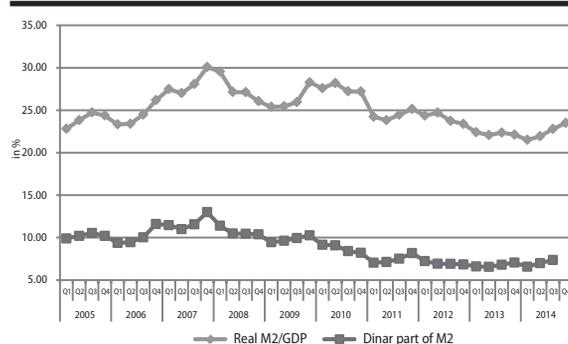
² Monetary aggregate M2 in the section Monetary Trends and Policy includes the lesser aggregate M1, savings and timed deposits as well as foreign currency deposits in business banks. The the aggregate M2 which we observe is equal to the monetary aggregate M3 in NBS reports.

7. Monetary Flows and Policy

... caused by a slight rise in credit activity in the non-state sector

which was extremely low, the real growth of the M2 at annual level stood at 6.7% with loans to the non-state sector at annual level recording an increase of 1.2%. Taking into consideration the depreciation of the Dinar in all of 2014, loans to the non-state sector recorded a drop of -2.5% with a clear trend from the start of the year of slowing down following that drop (after the correction for the exchange rate changes in Q1 a drop of -10.3%, in Q2 -6.75% while in Q3 the drop stood at -5.85%).

Graph T7-3. Serbia: money mass trends as percentage of GDP, 2005-2014



Source: QM calculation

At quarterly level, the money mass saw a rise of 2.7% of the value at the start of the year (in Q3 a quarterly rise of 4.5%, Table T7-4), in which the biggest contribution was due to changes in the state of the net domestic assets. Unlike the previous quarter, the net domestic assets now contributed positively to the growth of the money mass because of an increase of 3.4% of the M2 since the start of the year. The other key element the net foreign assets recorded a minimal reduction of 0.6% of the value of the M2 at the start of the year in Q4 following a big increase in Q3 (in Q3 the net foreign assets rose by 11.8%).

Table T7-4. Serbia: growth of money and contributing aggregates, 2012-2014

	2012				2013				2014			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	y-o-y, in %											
M2 ¹⁾	14.0	18.1	13.8	9.6	8.2	4.5	6.1	4.6	4.2	4.8	6.6	8.6
Credit to the non-government sector ²⁾	14.4	14.0	16.6	9.8	1.9	-0.5	-4.4	-4.5	-6.1	-4.5	-1.2	3.0
Credit to the non-government sector ²⁾ , adjusted ³⁾	8.6	4.6	7	3.8	1.6	0.6	-4.1	-5.0	-8.2	-5.4	-3.7	-0.7
Households	5.7	3.3	3	2.5	3.0	2.9	2.9	2.6	2.0	2.5	3.0	3.6
Enterprises	10.1	5.3	9.1	4.4	0.9	-0.6	-7.6	-8.8	-13.4	-9.7	-7.3	-3.2
	real y-o-y, in %											
M2 ¹⁾	10.1	12.0	3.4	-2.2	-2.6	-5	1.2	2.3	1.9	3.5	4.3	6.7
Credit to the non-government sector ²⁾	10.5	8.1	5.9	-2.0	-8.2	-9.2	-8.9	-6.5	-8.3	-5.7	-3.3	1.2
Credit to the non-government sector ²⁾ , adjusted ³⁾	4.9	-1.2	-3.6	-8.1	-8.7	-8.2	-8.5	-7.0	-10.3	-6.7	-5.8	-2.5
Households	2.0	-2.4	-7.2	-9.2	-7.5	-6.1	-1.9	0.4	-0.3	1.2	0.7	1.8
Enterprises	6.3	-0.5	-1.7	-7.5	-9.3	-9.3	-11.8	-10.7	-15.4	-10.8	-9.3	-4.9
	in billions of dinars, end of period											
M2 ¹⁾	1,499.7	1,588.6	1,607.6	1,641.7	1622.7	1659.8	1705.8	1719.3	1691.4	1740.2	1818.4	1864.7
M2 ¹⁾ dinars	445.0	444.6	467.4	480.6	478.8	492.5	519.5	547.6	516.4	555.3	587.1	614.5
Fx deposits (enterprise and households)	1,054.7	1,144.0	1,140.2	1,161.1	1143.8	1167.3	1186.3	1169.3	1175.0	1185.0	1231.3	1250.2
	cumulative, in % of opening M2⁴⁾											
M2 ¹⁾	0.1	6.1	7.3	9.6	-1.2	1.1	3.9	4.6	-1.5	1.4	5.9	8.6
NFA, dinar increase	-5.6	-4.5	-7.9	0.2	7.2	2.7	5.2	10.6	0.2	-0.1	11.7	11.1
NDA	5.7	10.5	15.2	9.4	-8.4	-1.6	-1.3	-6.0	-1.6	1.4	-5.8	-2.4

Source: NBS

1) Money mass: components – see Analytical and Notation Conventions QM.

2) Loans to the non-state sector – loans to the economy (including local government) and households.

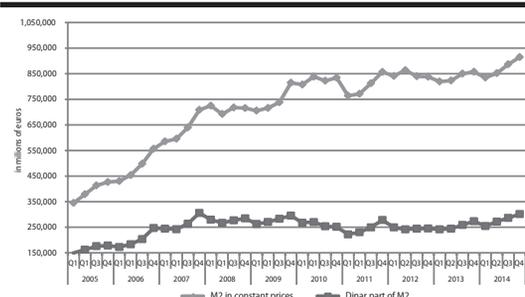
3) Trends are corrected by changes to the exchange rate. Corrections are implemented with the assumption that 70% of loans to the non-state sector (both households and the economy) are indexed in Euro.

4) Initial M2 designates the state of the M2 at the start of the current and end of previous year.

All elements see positive contribution within growth of M2 ...

... with foreign currency deposits leading

Graph T7-5. State of the money mass in permanent prices, 2005-2014



Source: QM calculation

At the end of Q4 the growth structure of the money mass M2 of 8.6% y.o.y. shows a positive contribution of all the individual elements of this monetary aggregate. Although the growth in previous quarters was carried by the increase of the lesser aggregate M1, in Q4 its contribution remained at 2.3 percentage points of the overall growth of the M2. Foreign currency deposits in Q4 once again took the role of the leading elements of growth and they accounted for 4.7 percentage points of the total increase of the

M2 at y.o.y. level (in Q3 the foreign currency deposit contribution was 2.6 percentage points and the M1 explained 3.3 percentage points of the y.o.y. growth of the M2). Although they had the lowest individual contribution, savings and timed deposits contributed to the y.o.y. growth of the M2 with 1.4 percentage points which we feel is a positive trend bearing in mind that this element prior to Q3 2014 recorded negative values from more than two years.

Banking Sector: Placements and Sources of Financing

Loans to the enterprises in Q4 rise ...

... but the population frees itself of debt again

The drop in the placements of business banks which was noted in the previous quarter grew stronger in Q4 which saw a reduction of 432 million Euro (in Q3 the drop in the overall placements of banks stood at 85 million, Table T7-6). The drop in placements was once more the result of the withdrawal of banks from REPO bills which in Q4 stood at 313 million Euro (in Q3 the withdrawal from REPO placements stood at 423 million Euro). Another cause of the drop in overall placements in Q4 was the drop in net loans to the state of 124 million Euro because of an increase in state deposits in this period. The situation was partly better in the case of credit activities in the non-state sector. In Q4, there was an increase in credit placements to the enterprises sector by 61 million Euro which is mainly the consequence of the use of funds from the program of subsidized loans to maintain liquidity and finance permanent turnover funds. The positive effect of the growth of this placement was almost completely neutralized since the households was freed of debts totaling 57 million Euro in Q4. Because of that, the overall rise in placements to the non-state sector stood at just 4 million Euro. Take into account foreign sources of credit and the situation grows worse because of the fact that companies repaid 91 million Euro in debts in Q4 on the basis of cross-border loans. Viewed in total, the enterprises and the households repaid 87 million Euro in debts to both domestic and foreign sources in Q4 (Graph T7-7).

Table T7-6. Serbia: Bank operations – sources and structure of placements, corrected¹⁾ trends, 2012-2014

	2012				2013				2014			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	in millions of euros, cumulative from the beginning of the year											
Funding(-, increase in liabilities)	672	692	472	-384	109	341	213	420	578	540	504	678
Domestic deposits	589	146	15	-459	4	-56	-325	-394	240	-32	-382	-460
Households deposits	-49	-189	-296	-578	-87	-132	-252	-423	45	-105	-149	-250
dinar deposits	30	69	36	11	16	-34	-110	-279	27	-51	-75	-143
fx deposits	-79	-258	-332	-589	-102	-98	-141	-144	17	-54	-74	-107
Enterprise deposits	638	336	311	120	91	76	-73	29	195	72	-233	-210
dinar deposits	362	304	230	99	-11	-11	-109	-162	210	45	-159	-273
fx deposits	275	31	81	21	102	87	36	191	-15	27	-75	63
Foreign liabilities	3	345	335	127	357	406	588	806	358	396	610	907
Capital and reserves	80	200	123	-52	-252	-9	-50	8	-20	176	276	232
Gross foreign reserves(-, decline in assets)	-199	371	164	284	-278	-104	84	-304	193	215	673	1,019
Credits and Investment¹⁾	409	-424	201	521	123	-169	-67	42	-343	66	-19	-451
Credit to the non-government sector, total	309	136	784	589	-23	-348	-551	-875	-577	-382	-300	-296
Enterprises	375	161	741	552	-71	-463	-728	-1,018	-570	-488	-471	-410
Households	-36	-25	42	37	48	115	177	143	-7	105	171	114
Placements with NBS (Repo transactions and treasury bills)	-28	-944	-1,052	-701	321	319	492	628	-176	-133	-556	-869
Government, net ²⁾	128	385	470	632	-175	-140	-8	290	411	581	837	713
MEMORANDUM ITEMS												
Required reserves and deposits	-552	-418	-451	-265	-17	-87	-443	-134	-2	-215	-223	-730
Other net claims on NBS ³⁾	-199	-20	-42	58	-154	-85	118	44	-136	-135	-4	110
a/w: Excess reserves	-187	45	54	10	-151	-96	60	38	-156	-162	-9	112
Other items ⁴⁾	150	222	56	146	100	50	54	-22	-289	-454	-822	-592
Effective required reserves (in %) ⁵⁾	22	23	23	23	25	24	22	23	23	22	22	19

Source: NBS

1) Calculating yield is done under the assumption that 70% of the overall placement is indexed in Euro. Yields for original Dinar values of deposits are calculated based on the average exchange rate for the period. For foreign currency deposits – as the difference in the state calculated under the exchange rate at the ends of the period. Capital and reserves are calculated based on the Euro exchange rate at the ends of the period and do not include the effects of the exchange rate of the calculation of the remainder of the balance.

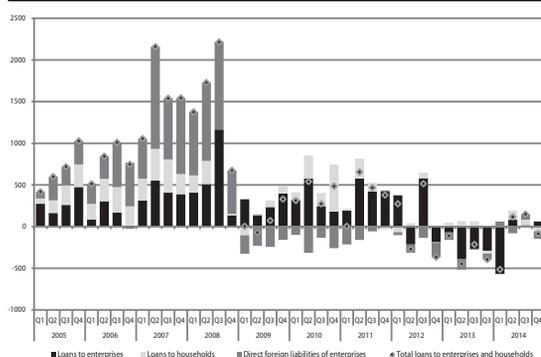
2) NBS bonds includes state bonds and NBS treasury bonds which are sold at repo rates and at rates set on the market for permanent auction sales with a due date greater than 14 days.

3) Net crediting of the state: loans approved to the state are reduced by the state deposits with business banks; the negative prefix denotes a higher growth of deposits than of loans. The state includes all levels of government: republic and local level.

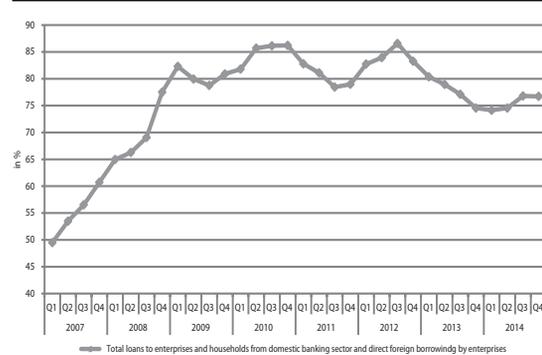
4) Other debts of the NBS (net): the difference between what the banks are owed by the NBS based on cash and free reserves and dues to the NBS.

5) Items in bank balances: other assets, deposits of companies in liquidation, inter-banking relationships (net) and other assets not including capital and reserves.

6) Effective mandatory reserves means the mandatory reserve and deposits in the total of overall deposits (population and economy) and bank debts abroad. The basis to calculate mandatory reserves does not include subordinate debts because they are not available

Graph T7-7. Serbia: yield of new loans to enterprises and households, 2005-2014

Source: QM calculation
See footnote 1 in Table T7-5.

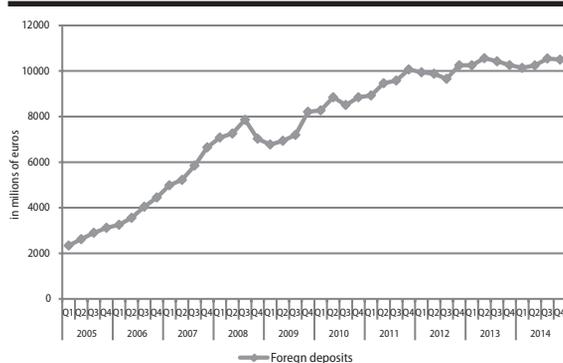
Graph T7-8. Serbia: overall credit debts in % of GDP, 2007-2014

Source: QM calculation

Sources for new placements are dropping ...

... because of repayment of bank debts abroad

On the side of the sources for new placements, there are also negative trends in the domestic banking sector. Following a slight rise in the previous quarter, Q4 registered a drop in the sources by 174 million Euro (in Q3 sources rose by 36 million Euro, Table T7-6). Within the total sources for placements, domestic deposits had a positive effect due to the increase of 78 million Euro. Within that, the households sector increased its deposits with business banks in Q4 by 101 million Euro of which 2/3 in Dinars and the rest in foreign currency. The deposits of the enterprises registered a drop which is typical for the end of the year and in Q4 they stood at 23 million Euro. The increase

Graph T7-9. Serbia: level of foreign currency deposits, 2005-2014

Source: NBS

of the capital and reserves of business banks of 44 million Euro had a positive effect on the rise in the sources for new placements in Q4 which increased the credit potential in this quarter. Despite the positive contributions of these two sources, the repayment of foreign debts by business banks totaling 297 million Euro caused a drop in overall sources for new placements at quarterly level (in Q3 the banks repaid 214 million Euro of foreign debts). Domestic banks repaid a total of 907 million Euro in earlier loans from their central offices abroad which is more than was repaid on the same basis in 2013 when 806 million Euro were repaid.

Table T7-10. Serbia: participation of NPLs according to debtor type, 2011-2014

	2009			2010			2011			2012			2013			2014		
	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec			
	balance at the end of period																	
Corporate	12.14	14.02	17.07	17.72	19.26	19.04	19.06	22.62	27.77	31.13	27.76	28.67	28.12	26.76	25.5			
Entrepreneurs	11.21	15.8	17.07	16.05	18.47	17.56	15.92	16.79	18.19	20.86	20.82	21.11	29.77	43.61	43.29			
Individuals	6.69	6.71	7.24	7.57	7.69	8.05	8.32	8.44	8.37	8.14	8.59	8.7	9.22	11.41	9.97			
Amount of dept by NPL (in billions of euros)	1.58	1.94	2.63	2.67	2.71	2.97	3.19	3.87	4.47	4.82	4.09	4.05	4.07	3.81	3.70			

Source: QM calculation

Stimulating bank credit activities should become an important goal for the NBS

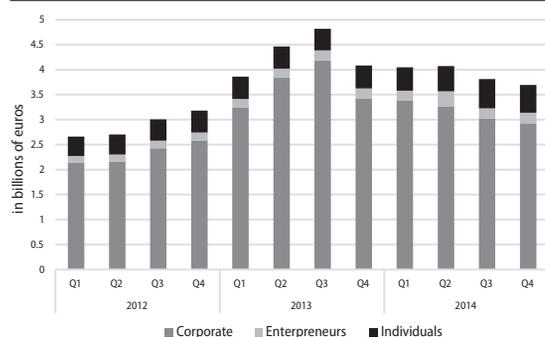
The credit activities of banks has seen a downward tendency for several years with occasional breaks. One thing that is of special concern is the fact that loans to the economy are dropping since without a growth of credit activity its recovery is hard to achieve. Since the start of the crisis, the state has implemented a program of subsidized loans on several occasions managing to stimulate credit activity to a relatively significant degree but only temporarily. Considering the fact that no funds for new programs of subsidized loans were earmarked in the program of fiscal consolidation (and that probably was not even possible) the question arises of how it is possible to

stimulate the growth of bank loans to the economy? In the medium term, the key measures are solving the problem of bad loans and improve the economic environment which would improve the performance of companies making them eligible for bank loans. However, considering the recession in the economy, it would be good if additional measures aimed at credit growth were implemented this year. Easing the restrictive monetary policy by lowering the key policy rate and rates of the mandatory reserves would increase the liquidity of banks and that would, at least partly, spill over into new loans for the economy. Besides that, the NBS should, in cooperation with banks operating in Serbia, consider the possibility that increased liquidity in the EU is partly used to finance companies in Serbia.

Stabilization in NPL segment

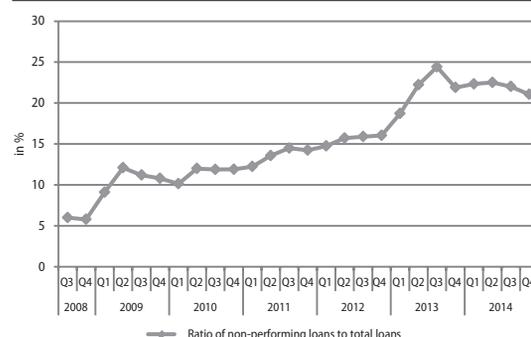
Due to the slightly increased credit activity and unchanged stock of bad loans, their participation in overall credit placements in Q4 registered a drop to 21.06% (in Q2 the participation of bad loans stood at 22.02%, Graph T7-11). A stabilization and slight drop in net amounts has been present since the end of 2013 but because of the drop in credit activities their relative participation continued to grow up to the previous quarter. The amount of debt in NPLs remains unchanged at 3.7 billion Euro compared to the previous quarter with the structure of bad loans seeing slight changes. The corporate segment which also represents the largest part slightly reduced the participation of bad loans to 25.5% which is an improvement of 1.26 percentage points. Following the worrying rise in the entrepreneur segment to more than 43%, Q4 saw an almost unchanged value but we should bear in mind that this segment had the lowest participation of some 6% in overall bad loans. What is a positive change is the improvement of 1.44 percentage points registered in the individuals segment despite the repayment of their debts in this quarter to business banks. In February, changes to the law on banks were adopted and they could lead to a narrowing of room for the growth of NPLs. The changes established a higher level of oversight, control and interventions by the NBS in cases when there is a danger to the stability of the financial system. A reduction of the current participation of NPLs requires the creating of conditions for a speedier recovery of economic activity since it is the main element of growth (see Spotlight On NPLs).

Graph T7-11. Serbia: remaining debt on loans by lateness, 2012-2014



Source: QM calculation

Graph T7-12. Serbia: participation of bad loans in overall placements, 2008-2014



Source: QM calculation

8. International Environment

The global growth continued but at a slower pace. Of the large developed economies only the United States has entered a mature stage of recovery and we expect a divergence in monetary policy. The FED is planning to raise the key policy rate in June or September. On the other hand, China, Japan and the Eurozone are continuing their expansive monetary policies. The European Central Bank (ECB) has launched a program of quantitative easing valued at more than a trillion Euro. Low overall inflation is causing a lowering of key policy rates in many developing countries. The divergence in monetary policy has caused the Dollar to grow stronger against other currencies. Inflation is dropping at global level because of a drop in oil prices and a slowing down of growth. Increased liquidity due to ECB measures will certainly soon cause lower costs of debts in Serbia.

Global recovery is slowing down, the International Monetary Fund (IMF) has lowered its predicted growth rate in the world by 0.3 percentage points for 2015 and 2016. The slowing down is present in both developed and developing countries and of the more significant economies, only the US has a positive correction of the predictions for 2015 from 3.1% to 3.6%. The prediction for the Eurozone has gone from the 1.4% earlier to 1.2%, the prediction for Italy has been lowered from 0.9% to 0.4% and for Germany from 1.5% to 1.3%. The growth rates in 2015 have been corrected downwards for all the BRIC countries – for China from 7.1% to 6.8%, for Russia from 0.5% to –3%, for Brasil from 1.4% to 0.3% and for India from 6.4% to 6.3%. Interestingly, the government of China has lowered the target GDP growth rate from 7.5% to 7% which is the lowest target in the past 15 years.

Besides the slowing down of growth in the world, a drop in oil prices is present along with a rise of the Dollar. The drop in oil prices of more than 50% since September will have a positive effect on world-wide spending. The drop in oil prices was primarily caused by the increased supply of oil since OPEC member states have not lowered their production this time around even though oil prices are low. The increased demand was helped by the production of shale in the US and Canada. The negative effects of the drop in oil prices is primarily evident in Russia, Venezuela and Nigeria where the currencies are growing weaker and the financing of public debts is increasingly difficult. The Eurozone will benefit the most from the low oil prices since it is a large-scale importer and that will help the relatively low personal spending. The slowing down of the world economy and the drop in oil prices has led to a drop in world-wide inflation and 21 central banks have lowered their key policy rates since the start of the year. In periods of low inflation many central banks are using the situation to stimulate the economy with lower rates.

Many developing countries are already feeling negative effects due to the expectations of a rise in key policy rates in the US. Many currencies are dropping in value because of this and the composite index of the Dollar rose by more than 20% in a 12 month period which has not happened for 30 years. The strengthening of the Dollar leads to the “fleeing of hot capital” from developing countries especially those which have high current account deficits and depend on foreign sources to finance their public debts.

The Eurozone

The GDP growth, compared to the previous quarter, speeded up slightly from 0.2% in Q3 to 0.3% in Q4 with the y.o.y. growth standing at 0.9%. Germany showed a solid growth (1.5% at annual level) but Italy had a drop of 0.5% and while the German GDP level is significantly below the level prior to the crisis, the Italian GDP continues to stand 10% lower. Spain recorded a growth of 2% to lead the countries of the periphery while Poland, despite a drop in trade with Russia, saw a growth of 3.2%. Polls show that the Eurozone growth will continue in the first quarter of 2015.

Personal spending is recovering in the Eurozone since retail activity in Q4 grew by 0.4% compared to the previous quarter. Investments in fixed investments is slowly rising and exports are

stimulated by the weaker Euro while public spending grows slightly. The drop in oil prices contributed to the growth since the Eurozone is a large-scale importer.

Overall inflation in the Eurozone dropped in Q4 and it dropped from 0.4% in October to -0.3% in February and was negative in the previous three months. The main reason for the drop is the low price of oil but base inflation also dropped slightly from 0.7% in October to 0.6% in February primarily because of the drop in the price of industrial products (intermediary goods and consumer goods).

The ECB started its quantitative easing. The purchase of 1.1 trillion Euro was announced and it will not buy bonds whose yield is below the rate on ECB deposits (-0.2%) in order to increase the effect on lowering interest rates as much as possible. Also, the amount of bonds which will be bought will not exceed the level of 33% of those overall available from one country which is an elegant way to avoid buying Greek bonds which are already exceeding that limit and the purchase will continue in July when some bonds fall due which will continue the pressure on the Greek government. The purchase will continue until inflation reaches the target of around 2% (medium term). This will not include corporate bonds and the due date of purchased bonds will be between two and 30 years with the common risk not exceeding 20% while the remaining 80% of risk will be borne by national central banks.

Low inflation and weak demand because of high unemployment led to the prediction that the ECB will raise its interest rate after 2018 or even after 2020. The quantitative easing was launched late because of political resistance and the Eurozone will probably resemble Japan over the next few years because of that. Like Japan, the Eurozone has bad demographics, slow growth and low inflation and the yield on state bonds will remain low for another few years. A fourth of Eurozone bonds have negative yields already.

Quantitative easing will not be efficient unless accompanied by structural reforms in the Eurozone. The mechanism is not the same as in the US since Europe the majority of company financing is done through banks and not through financial markets. Also, a smaller number of the Eurozone population own shares and the effects on personal spending because of low share prices will be lesser than in the United States.

The unemployment rate has dropped from 11.5% in October to 11.2% in January. Despite the progress, the relatively high unemployment rate coupled with austerity measures is preventing any significant rise in demand in the Eurozone and recovery will take a long time.

Increased liquidity will probably cause lower costs of debts in Serbia. Croatia has already had a very successful auction of bonds in Euro which can be explained as the consequence of ECB quantitative easing since Croatia continues to have low growth, budget deficit problems and a high level of public debt along with a stalling of reforms... We can realistically expect investors who are looking for higher yields to increase their demand for Serbian bonds.

The USA

The growth of the GDP in the US in Q4 stood at 2.2% which is much lower than in Q3 (5%) and in Q2 (4.6%). The American economy still has not entered a stage of stable recovery because the growth in 2014 stood at 2.4% which is just slightly higher than the 2.2% in 2013. Although growth has slowed down significantly and is below expectations, personal spending has started speeding up (2.8%) as has the construction of housing. On the other hand, business investment has slowed down which means that companies still are not completely convinced in the recovery and are postponing their investments even though they have sufficient funds available. Primarily due to the stronger Dollars, exports have slowed down and imports have speeded up so that the net imports have once again had a negative effect on the growth of the GDP. Investments in stock was lower than expected and in Q1 companies will probably increase their stock levels which will have a positive effect on growth in the next quarter.

8. International Environment

The slowing down of the automobile industry also contributed to the low growth as did lower public spending because of a cut in military spending. The US still has a higher growth rate than the other large developed countries.

The consumer price index dropped in Q4 from 1.7% in October to -0.1% in January at annual level which is the first deflation in five years. Since the drop in prices was caused primarily by a drop in fuel prices, this can be considered a good deflation because it will cause a rise in the purchasing power of the population. For now, the population still have not started significantly increasing their spending but are saving their money most probably because they are not sure whether the drop in oil prices is temporary or not. Usually, a drop in oil prices has a positive effect on spending but not immediately. Base inflation has dropped from 1.8% in October to 1.6% in January and is somewhat under the target level of 2%. The FED will probably increase the key policy rate in the second half of the year because the unemployment rate is approaching a level considered to be full employment (5.5%). Prior to the crisis, the key policy rate at full employment level stood at 3-4% and now it is close to zero. If the increase in the key policy rate is postponed, there is a risk of uncontrolled inflation growth once growth speeds up and balloons appear on the financial markets. The key policy rate will not be raised if base inflation continues to drop. Because of the expected increase of the key policy rate, the Dollar has grown stronger in the previous period, stimulated by the mass lowering of key policy rates by other central banks across the world as well as the announced quantitative easing by the ECB. A strong Dollar causes a lowering of the prices of imported goods which will cause a drop in base inflation. However, data shows indications of an increase in salary inflation (in January) and domestic demand is growing stronger so that the scenario under which base inflation drops further and a deeper deflation comes along is not very probable. Usually, in periods of deflation all index components are lowered together while now the cost of housing is increasing.

Besides inflation, the level of employment is very important for the FED policy. Despite the extremely low temperatures, lay offs in the energy industry because of the drop in oil prices and dock workers strikes, the pace of new employment has picked up and the unemployment rate dropped from 5.8% in October to 5.5% in January which is the framework level of full employment. For a year now, there have been 200,000 new jobs a month which close to the historic record and the number of people with jobs rose by more than three million. However, since the start of the crisis there has been no significant change in wages even though the unemployment rate is at a low level. In January the monthly rise in wages stood at 0.5% but in February it stood at just 0.1% which is in accord with the trend of low rise since the start of the crisis. Economists mainly believe that the pressure on wages did not appear with this low rate of unemployment because the rate of participation on the labor market continues to be low and if employment continues at the same level a shortage of manpower is expected to appear and wages will start to rise which will further increase demand and speed up the recovery. For now the rise in wages is limited with the even lower rise in productivity (less than 1% over the past four years) which means that individual labor expenses are growing and that there is an inflation of earnings. A rise in productivity requires companies to invest in new equipment and we mentioned earlier that those investments are being postponed because of a lack of confidence in the recovery. Pressure on wages due to a shortage of manpower would probably motivate companies to invest because then their growth would be more certain and that would further move the recovery forward.

History tells us that when the FED raises the key policy rate, developing countries could have problems with an outflow of capital which causes their currencies to drop in value and that could cause economic instability in those countries. For example, the Turkish Lira has lost significant value because of the announced normalization of the FED policy (more than 10% in January alone). There is often talk in public that the raising of the FED rate could start a currency crisis in Serbia. Those fears are not realistic for several reasons. First, "hot capital" has not come to Serbia in any great amount since the start of the crisis. Second, the quantitative easing will significantly increase demand for Serbian bonds. Third, the signed agreement with the IMF is a significant motivation for investors especially in the Balkan countries. The only scenario that could destabilize the Serbian economy because of the FED decision is the bankruptcy of some of

the countries of Eastern Europe (probably the Ukraine) leading investors to withdraw from the entire region. That scenario is not very probable and if it does happen Serbia would get through the crisis quickly.

Eastern Europe

Croatia

The growth of the GDP in Q4 stood at 0.3% at annual level primarily because of low domestic demand. Personal spending saw a drop of 0.6% at annual level and investments a drop of 3.7%. A rise in exports of 4.5% helped keep the results positive at quarterly level. In 2014, Croatia had a GDP growth of -0.4% and this year that drop will be at a similar level so that this will probably be the seventh year of recession. Industrial production in January dropped 5% at annual level and no sector reported growth. Unemployment stood at 20.3% in January. There is a danger of permanent deflation because prices dropped in December and January. Croatia had a very successful Eurobond auction. It sold bonds worth 1.5 billion Euro and achieved an interest rate of 3.25% which is a record low rate. That successful auction cannot be explained with Croatian parameters – a high public debt and budget deficit, very low growth, the central bank forced to defend the currency from depreciation... The only explanation is the effect of ECB quantitative easing which caused high liquidity. Investors are looking for alternatives to Eurozone bonds which have negative interest and are prepared to take greater risks. That is the first sign that Serbia will benefit from the expansive ECB policy in regard to financing costs.

Romania

Romania achieved a Q4 GDP growth of 2.5% at annual level and 0.5% compared to the previous quarter. The main carriers of growth were industrial production and telecommunications. The central bank lowered its key policy rate by 0.25 percentage points to 2.25% to increase domestic demand in the period of low inflation which is far from the target. Overall inflation is dropping in Romania. It dropped from 1.8% at annual level in October to 0.4% in February. Another cut in the key policy rate is expected in March or April. Following the successful auction in Croatia, Romania announced its own auction worth 2 billion Euro to make use of the high liquidity and secure favorable financing conditions. The finance minister indicated that the VAT rate would be lowered this year from 24% to 20%. Also, a lowering of the rate on dues paid by employers and employees has been announced from 2017 and a lowering of the tax rate on personal income to 14% in 2019. The lowering of the VAT rate this year will be a risk step and the IMF is opposed to that measure. Although Romania achieved a deficit of -2.1% of the GDP last year, it is probable that the lowering of the VAT rate would increase the deficit – highly unlikely that the lost income from the lower VAT would be compensated by suppressing the gray economy.

Hungary

The Hungarian GDP rose 3.4% at annual level in Q4, primarily because of the construction industry, agriculture and the processing industry. The trade surplus stood at 6.4 billion Euro in 2014 and the export of machines and equipment in December rose by 8.9% at annual level. Hungary had a GDP growth of 3.6% in 2014 and expected a growth of more than 2.5% in 2015. Overall inflation at annual level dropped from -0.3% in October to -1.4% in January. The government is supporting the weak Forint in order to stimulate exports and since inflation is below the target of 3% the central bank will probably start lowering its key policy rate again. Budget income is growing because of an improved collection of VAT and the budget deficit is planned to stand at 2.4% this year. Confidence in budget control will have a positive effect on investors and Hungary is expected to see a drop in the cost of debt. The unemployment rate stands at 7.4%.

HIGHLIGHTS

Highlights 1. Scope, limitations and possible corrections of the agreement between Serbia and the IMF

Milojko Arsić¹

The three year agreement between Serbia and IMF, which entered into force at the end of February of the current year, includes three key components: fiscal consolidation, restructuring of state owned enterprises, privatization of former public enterprises and improvement of the stability of the financial sector. Signing the agreement increased the chances for the ambitious plans of the Government in economic policy and reforms to be achieved, and macroeconomic risks, such as the crisis of public debt and balance of payments crises, are substantially reduced. We expect that financial markets will react favourably to the signing of the agreement, and that the conditions of borrowing for the Government and companies from Serbia in international financial markets will improve. The consistent implementation of the agreement will benefit the business conditions and growth prospects as well as the gradual increase in foreign direct investments in Serbia.

The agreement, in addition to the fiscal and monetary policy measures, contains a number of structural reforms in the banking and enterprise sector. The reforms in the banking and enterprise sector have a dual purpose - on the one side they should contribute to establishing a macroeconomic stability by stopping the spillover of their losses to the state budget, while on the other side they should provide favourable conditions for economic growth. The agreement with the IMF is relatively detailed², it contains concrete measures at the level of individual enterprises, and also very detailed savings measures. Although, entering these details into the agreement indicates certain lack of trust of the IMF in the Government of Serbia, we estimate that such detail level is desirable because it reduces the space for feigning the reforms. The agreement contains relatively precise dynamics of the implementation of economic measures, and also regular quarterly audits of the agreement implementation are agreed, which significantly reduces risks of delays in the implementation of measures, their mitigation or remission.

¹ Ekonomski fakultet Univerziteta u Beogradu

² By details this agreement resembles the agreement between Serbia and Montenegro and the IMF for the period 2004-2006. The agreement was preceded by difficult negotiations, and trust of the IMF in the Government was very low, but the agreement itself was successfully implemented.

Although the arrangement with the IMF covers a larger number of areas it, however, does not cover all reforms and policies Serbia needs to implement in the following years, nor is this its goal. Therefore the economic policy of the Government should not be reduced only to the implementation of the conditions given by the IMF. Besides the measures contained in the arrangement the Government should implement additional reforms which will improve the quality of the public administration, judiciary, cadastre, education, health, etc. Also, it is justified for the Government to prepare special sectorial development plans for activities such as agriculture, construction, IT sector, innovation enhancement, ecology, etc. In the agreement with the IMF there are no special limitation for the realisation of the mentioned policies, except the limitation that these policies cannot increase the fiscal deficit and the borrowing of the State. Besides reforms, antirecession measures should be implemented in line with the fiscal consolidation, such as the significant increase in public investments, while NBS should stimulate the credit activity of the banks.

Although the arrangement with the IMF contains a number of measures dedicated to the improvement of the economic environment, restructuring of the enterprises and the financial sector, we estimate that some measures of the fiscal consolidation are not contributing to the long-term growth of the economy and the development of the society, and also that in the agreement not enough attention has been paid to antirecession measures. From the standpoint of the economic growth and general development of the society we assess that the planned savings on subsidies are insufficient, savings on salaries of employees in the public sector are exaggerated and probably unachievable, while the growth of public investments is modest and that is why they remain on very low level in the entire period. Therefore, it should be justified to change the structure of the fiscal consolidation during the implementation of the arrangement, holding the approximately same goals of fiscal deficit reduction. In comparison with the current arrangement, subsidies would be reduced while the expenditures for employees and public investments would be increased.

Subsidies in Serbia for a long time now have been significantly higher than in other countries. During previous years, subsidies in the broader sense³ in Serbia were between 3 and 4% of GDP, which is two or three times more than in other European countries. According to

³ Subsidies in a broader sense include all types of state aid to the economy: direct budget subsidies, tax incentives, expenses from payment of guarantees, etc.

Table 1. Cost share of employees in the public sector in total GDP, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average (2005-2009) -2014	Max-2014
Bulgaria	9,3	8,6	8,5	8,9	9,6	9,3	8,8	8,8	9,6	9,9	-0,9	0,0
Czech Rep.	7,3	7,2	7,0	7,0	7,5	7,2	7,0	7,1	7,2	7,1	0,1	0,4
Estonia	:	:	:	:	:	11,6	10,8	10,4	10,7	10,9		0,7
Croatia	11,2	10,9	11,3	11,2	12,3	12,2	12,4	12,2	12,0	12	-0,6	0,4
Latvia	9,5	9,4	9,9	11,4	11,9	10,2	9,5	9,1	9,2	9,4	1,0	2,5
Lithuania	10,3	10,4	9,8	10,6	12,7	10,9	10,2	9,7	9,5	9,6	1,2	3,1
Hungary	12,4	12,0	11,5	11,4	11,3	10,9	10,2	10,0	10,1	10,5	1,2	1,9
Poland	:	:	:	:	:	11,0	10,6	10,4	10,3	10,3		0,7
Romania	8,7	9,2	9,7	10,3	10,7	9,5	7,8	7,7	8,0	8	1,7	2,7
Slovenia	11,3	11,0	10,4	10,8	12,2	12,4	12,5	12,5	12,5	11,5	-0,4	1,0
Slovakia	7,8	7,7	7,2	7,4	8,5	8,4	8,2	8,1	8,5	8,5	-0,8	0,0
Average	9,8	9,6	9,5	9,9	10,7	10,3	9,8	9,6	9,8	9,8	0,1	1,0
Serbia	11,5	11,7	11,9	12,5	12,4	11,8	11,8	12,3	11,9	11,8	0,2	0,8

Source: Eurostat Ministry of Finance of Republic of Serbia

the agreement with the IMF subsidies will be relatively rapidly reduced in 2015 to 2.6% of GDP, and in the next two years a modest reduction to 2.4% of GDP should be achieved. The agreement for subsidies to remain at such a high level is probably a result of the fact that the Government was not prepared to commit to eliminate various types of subsidies for investments and employment, and it is possible that the high subsidies are in part the result of commitments given up to this moment. We estimate that it will be more appropriate for subsidies to be reduced also in the following years so that they are reduced to around 1.5% of GDP already in 2017. The elimination of subsidies would not have adverse effects on the level of investment and employment if the plans to improve the business environment would be implemented (reduction of administrative barriers, improvement of the work of courts, cadastre and state administration, build infrastructure, etc.).

In the agreement it is agreed to reduce expenditures on employees in the public sector from 11.8% of GDP in 2014 to 8.3% of GDP in 2017 (in other words, from 10% to 7% of GDP according to the IMF methodology¹), which is over 3.5 percentage points of GDP. Planned reduction of the labour costs would be achieved by reducing the salaries higher than 25 thousand by 10% (done in the last year), keeping the nominal wages at the fix level in the next three years (with the planned inflation of around 4% a year), and also reduction of the number of employees in the public sector by 15%. Real reduction of wages in the public sector, as a result of the last year's reduction of nominal wages and expected inflation de-

valuation, would amount to between 12 and 20%. Minimal real reduction of 12% would refer to salaries up to 25 thousand, while the maximum² real reduction of 20% would be achieved with employees whose salaries were reduced in the last year by 10%. Real salaries of relatively large number of employees in the public sector (teachers and professors in primarily and secondary schools, nurses and doctors, police officers, etc.) would be at the level below existential minimum, which would reduce the motivation to work, encourage different forms of "managing", while the most competent workers would leave the public sector or even the country.

Expenditures on employees in the state sector, without state owned enterprises, (so called general state), in the Central and Eastern Europe countries are in average 9.8% of GDP, where the lowest expenditures are recorded by Czech Republic (7.1% of GDP), and the largest by Slovenia (12.5% of GDP). While the expenditures on employees in public sector in Serbia in 2014 were significantly above the average of the Central and Eastern Europe countries (11.8% of GDP compared to 9.8%), the goal was set that in the course of three years it will be significantly lower than the average of this group of countries (8.3% of GDP to 9.8% of GDP). If the set goal would be achieved in three years the ratio of expenditures for public sector employees in Serbia to GDP would be among the lowest in the Central and Eastern Europe - Czech Republic (7.2% of GDP) and Romania have lower share (8% of GDP).

The number of employees in the public sector in Serbia amounts to 520-530 thousand, i.e. 7.3 employees per 100 residents, according to this data Serbia is above

¹ The EU methodology in labor costs in the government sector includes contributions paid by the employee and also by the employer, while the IMF methodology includes only contributions paid by the employee. We use the EU methodology because of the comparison with other countries, and in addition to that Serbia switched to this methodology at the beginning of the year.

² One part of the employees in the public sector had a greater decrease in wages because wages decreased in the second part of the year on the basis of the past work.

Box 1. Number and the structure of employees in the public sector in Serbia

In the last two years a considerable confusion was created regarding the number of employees in the sector of general state in Serbia (all levels of administration, education, health, justice, security, etc.) and the public sector (general government sector plus state-owned enterprises and banks). The number of 780,000 employees in the public sector was presented to the general public as a "discovery", calculated by adding approximately 250 thousand employees in the public enterprises, state-owned banks and the former socially-owned enterprises which are now owned by the state to the earlier known number of about 520-530 thousand employees in the sector of general government. Previous data include full-time employees as well as the employees on temporary work, based on service contracts, etc. Additional confusion is created by the fact that all public sector employees were declared as "clerks", therefore the state administration. However, about 60,000 people in total is employed in the national and the local administration, while others work in education (about 150,000), health care (about 125,000), security services (police, military and other - about 80,000), the judiciary (approximately 18,000) and other. Hardly could the term "clerk" be attributed to the majority of public sector employees (teachers, doctors, officers, judges, firefighters, researchers, developers, etc.).

Parallel to untrue data, the public was faced with claims from politicians, and even some economists, that in Serbia there is a huge parasitic public sector that employs far more employees than in other countries. In the largest number of cases these claims about enormous number of employees were not supported with statistical data, but were just based on real or fictional anecdotic examples. However, even when these claims were supported with comparisons with other countries, they contained rough methodological errors, such as:

- a) the number of employees in the public sector in Serbia included the employees in state owned enterprises (including former public companies), while this was not the case with other countries,
- b) the number of employees in the sector of the general state included all levels of the state (republic, social security funds, provinces and the local municipalities), while for other countries only data corresponding to the central state were used, without employees in local municipalities, provinces, and sometimes without the employees in the public health sector.

Comparable data which are presented earlier convincingly show that the number of employees in the public sector in Serbia in ratio to 100 residents is now already lower than the average in the countries of Central and Eastern Europe. Difficult situation in the public finances, but also in the economy, imposes that the number of

employees in the public sector must be further reduced, but this reduction should not worsen the quality and the availability of public services which are already low.

The main problem of the public sector in Serbia is its inefficiency, which is only partly the result of excessive employment, while largely the result of poor quality of services that this sector provides. Therefore, in parallel with the reduction in the number of employees by about 10%, the main effort should be directed at improving the quality of work of all parts of the public sector. Reducing the number of employees should not be linear, because while in some institutions there is a surplus of employees, there is a shortage of employees in others. Therefore, in parallel with dismissals the mobility of employees within the public sector should be increased.

average among Central and Eastern Europe countries. In Central and Eastern Europe countries 7.5-8%³ people is employed in the public sector per 100 residents, without those employed in the state owned enterprises, where the number of employees ranges between 6.2% in Czech Republic and 10.3% in Lithuania. If the number of employees in the public sector would decrease by 15% then the number of employees per 100 residents in Serbia would be 6.2 which combined with the Czech Republic would be the lowest in the Central and Eastern Europe⁴.

The question is raised whether the planned reduction of the costs and in the number of employees in the public sector is possible and whether it is desirable? Since the beginning of the crisis none of the Central and Eastern Europe countries has succeeded to reduce the share of the expenditures on public sector employees in GDP by 3.5 percentage points compared to the multi annual average⁵. The largest reduction of the share of these costs in GDP was achieved by Rumania, Hungary, Latvia and Lithuania, but this reduction in 2014 compared to the average from the period 2004-2009 does not exceed 1.7% of GDP. Furthermore, even after the reductions

³ According to Eurostat data in the countries of Central and Eastern Europe in the public sector, without enterprises, 8 workers per 100 residents is employed - although no data are available for all countries. According to other sources the number of employees in the public sector in the countries of Central and Eastern Europe is 7.6 per 100 inhabitants.

⁴ If it turns out that the number of employees in the sector of general government in Serbia is about 510 thousand then after the reduction of 15% of employees in the public sector in Serbia, in relation to the overall population, would be lower than in the Czech Republic.

⁵ Latvia, Lithuania and Romania have reduced the share of labor costs in GDP by about 3 pp in 2014 compared to the maximum share in 2008-2009. However, the maximum share is not relevant as a benchmark, because it is the result of a great unexpected fall in GDP in these countries, which is why the participation of all expenditures, and the expenditures for employees in relation to GDP increased. This is not the case in Serbia, because the share of labor costs in GDP in 2014 near the long-term average.

all observed countries have the share of the labour costs in the public sector above 8%.

The planned reduction in the number of employees in the sector of general government by 15% (i.e. 75 000) is significantly based on the natural outflow (retirement, transit to the private sector, etc.) which annually amounts to about 3% or about 15,000. The government plans to apply the rule according to which, on five employees who leave the sector of the general government one new employee is hired, which means that with the natural outflow each year the number of employees will decrease by about 12,000. Applying this rule in industries that employ people with heterogeneous education such as health and education would lead to major problems in the functioning of these activities, even if the mobility of employees in these activities is increased, because it is not possible to substitute a history teacher with a chemistry teacher, or a surgeon with an internist. It is therefore quite certain that the application of this rule cannot achieve the planned reduction in employment, and at the same time not jeopardizing the quality and availability of their services. Therefore, the government will have to rely more on targeted reduction than on the natural outflow.

From the above mentioned, it can be estimated that the planned reduction of the share of labour costs in GDP will be difficult to implement, because none of the neighbouring countries succeed to do that.⁶ The realization of the agreed policy would move Serbia from one extreme, in which the share of labour costs for employees in the sector of the general government to GDP was among the highest in comparison to similar countries, to the other extreme where the expenditures on employees in the sector of the general government would be among the lowest. We estimate that the reduction of expenditures on employees in the sector of the general government (health, education, justice, military, police, etc.) for over 2.5 p.p. of GDP (i.e. 2 p.p. by the IMF methodology) would aggravate the functioning of the state institutions. Large reduction of nominal wages would encourage outflow of competent employees (doctors, teachers), reduce the commitment on the job, and encourage corruption. In these circumstances it is not realistic to expect that any reform would lead to the improvement of educational, judicial, security, administrative, or other services provided by the employees of the public sector, which are important for economic development and the development of the society. If the plans to reduce the number of employees in the public sector and to reduce their salaries would be realized, the ava-

ilability and quality of public services would aggravate, which would adversely affect economic equality. Wealthy citizens would turn to private education, health care, while the poor would be directed to less-quality and less accessible public services.

Therefore, in the course of the arrangement with the IMF it would be desirable to change the objectives related to labour costs, reduction of the number of employees and the indexation of wages in the public sector. We estimate that more adequate objectives would be: share of public sector wages in GDP decreased to around 9% (around 8% according to the IMF definition). This would be achieved by reducing the number of public sector employees by 10% in a three year period, as well as the freezing of salaries in 2015 and 2016, but not in 2017. The labour costs and the number of employees in the public sector would be somewhat below average, while the number of employees would be significantly below the average among the countries of Central and Eastern Europe. Reduced savings on costs of public sector employees would be compensated with a larger reduction of subsidies or improved tax collection. If these measures fail to achieve desired effect, for example if the subsidies cannot be reduced because of the previous commitments, then it will be justified to consider the activation of some of the replacement measures, such as VAT increase. We estimate that from the standpoint of the whole society it is better to increase VAT in a year or two, than to aggravate public sector services due to the lack of commitment of teachers and professors, police officers, or to reduce the availability and quality of health services due to the departure of the best doctors in the private sector or abroad.

The arrangement with the IMF foresees a relatively modest increase of public investments, which is not good from the standpoint of antirecession policy, nor from the standpoint of long-term economic growth. Public investments which were in 2014 at 2.6% of GDP, according to the arrangement with the IMF will be increased to 3% of GDP. Investments of 3% of GDP are low for a country which is building its transport and other infrastructure, which is exactly the case with Serbia. Besides, investments of 3% of GDP are not in line with the concrete Government plans which are, in the next three years, related to the realization of infrastructure projects (road corridors 10 and 11, modernization of railroads, construction of Beograd-Budapest railroad, construction of communal infrastructure, etc.). With investments of 3% of GDP the speed of construction of road and communal infrastructure and the railroad reconstruction would in the following years be similar as in the previous years, which is insufficient.

⁶ The example of Romania which reduced share of labor costs in GDP for 1.7% of GDP, therefore half as Serbia, is very instructive as it has led to a deterioration of public sector services.

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Therefore we estimate that it would be desirable to agree the increase of public investments of around 4% of GDP with the IMF. The increase of public investments, which have higher fiscal multiplier than current consumption, could mitigate and shorten the recession period caused by the implementation of fiscal consolidation. Of course, antirecession effects of public investments will be higher if domestic resources (workers, material, etc.) are engaged in their implementation. Increase of public investments that build modern infrastructure would be favourable to the long-term growth of the Serbian economy. Construction of modern highways and railroad lines, which would connect Serbia with the neighbouring countries, modernization of municipal infrastructure, etc., would reduce the costs of doing business in Serbia, which would have a positive effect on the growth of domestic and foreign investment.⁷

⁷ Positive impact of public investments on suppression of the recession and the long-term economic growth is supported by a number of empirical research.

Highlight 2. Clampdown on shadow economy – first results and further steps

Saša Ranđelović¹

1. Shadow economy in Serbia – its extent, determinants and measures against it

According to recent empirical studies, the shadow economy in Serbia accounts for 30.1% of GDP, which is by 1/6 larger than in other Central and Eastern European Countries (CEE). Most of these countries have smaller shadow economy, and Bulgaria is the only one with bigger shadow economy than Serbia's (Krstić, et. al. (2013)). At the same time, average size of the shadow economy in EU is 19% of GDP. According to the reasons for the shadow economy (degree of economic development, institutional efficiency, quality of public goods etc.), Serbia is more similar to CEE countries than to the EU average. Therefore, reduction in the shadow economy down to the average in CEE countries would be a realistic goal in the medium term (two to three years). In that case, tax revenues would increase by 1% of GDP. Further actions against the shadow economy with the aim of reducing it to the average in EU countries would push up tax revenues by additional 1% of GDP, which could be achieved in seven to ten years. This means that a clampdown on the shadow economy

However, it is justified to ask how would the additional increase of public investments for 1 percentage point of GDP impact the fiscal deficit and the borrowing dynamics of the State? One part of the additional investments (around 0.5% of GDP) could be financed by additional revenues from the suppression of the grey economy. The remaining 0.5% of GDP (around 500 million euros in a three year period) would mean additional deficit increase compared to the actual agreement with the IMF, which could be financed with a part of revenues from the Telekom's privatization – therefore without additional borrowing. Using revenues from Telekom's privatisation for public investments is justified from the economic standpoint because in this way the state assets will remain unchanged, while the wealth of the society would increase.

might help reduce fiscal deficit by 1% of GDP (by 2017), and the remainder of the necessary reduction (by 5% of GDP) would require implementation of some other measures (primarily reduction in current public expenditure).

Shadow economy comprises all legal economic activities (trade in goods and services, income payments, possession of property etc.) done informally, i.e. off the official records. Tax evasion is the main reason for shadow economy, though there are many others, as well (avoiding the costs of harmonization with other, non-tax regulations etc.). Before deciding whether to engage in the shadow economy/tax evasion, one weighs the potential benefits (tax savings) against the related costs (the amount of the fine weighted by detection probability). Furthermore, some other socio-economic factors, such as the degree of tax morality or the quality of government services, affect the size of the shadow economy. Accordingly, the government could discourage engagement in the shadow economy by reducing the taxes, by raising the fines for tax evasion and by increasing the probability of detecting evaders. Empirical studies show that an efficient government control over tax evasion is the most productive mechanism against it, followed by fine increase, while tax decrease has a limited impact on reduction in tax evasion (observed separately). Given that the tax rates in Serbia equal the European average and are close to the average tax rates in the region, and since Serbia had one of the largest fiscal deficits in Europe in 2014, there is not much room

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for tax reduction. Effective strategy against the shadow economy in Serbia should therefore be based on a corresponding fine increase and tighter control on these activities by the competent inspection services (primarily the Tax Administration). Accordingly, significant institutional changes which improved the efficiency of measures against the shadow economy were made in the first half of 2014. The following are the most important:

i. The Tax Administration increased the number of employees responsible for tax control – The Tax Administration of the Republic of Serbia employs about 6,000 people, only 10% of whom is responsible for tax control, and the rest of them do administrative and technical work. Taking into account that there are hundreds of thousands of taxpayers (of different taxes) in Serbia, the probability of detecting a tax offence is very low. After the introduction of a unified collection of taxes and contributions, and electronic tax return filing system for some of the most important taxes (VAT, wage taxes and contributions etc.) at the beginning of 2014, scope of workload of several hundreds of employees who were in charge of reception and registration of paper tax returns decreased considerably. Since these were mostly the people with secondary school background, they were not qualified for complex tax control, and therefore were assigned some more simple tax control tasks (issuance of fiscal receipts etc.). They received professional training in the first half of 2014, and some regulatory changes which allowed them to do the field work were made. Consequently, about 300 people have been engaged in control on the issuance of fiscal receipts as of the middle of 2014. This is necessary and right, because extremely large number of taxpayers, especially hospitality establishments where the value added is high, had avoided issuing fiscal receipts.

ii. Reform in penalty policy – According to the amended Law on Tax Procedures and Tax Administration adopted in June 2014, penalties for all tax offences are defined in one law (before that, they were defined in a number of substantive tax laws, and in the foregoing umbrella law, which caused a great deal of legal uncertainty about which provisions to apply). Additionally, penalties are expressed in a different way (as a percentage of the overdue tax wherever possible, which proved to be the most efficient punitive mechanism). Finally, a considerable effective increase in fines was made. Penalty system has thus become more transparent, simpler, more rigorous and more efficient.

iii. Amendments to the Labor Law reduced the risks and costs related to in formal employment – In the amended Labor Law adopted in July 2014, a number of provisions which make labor market more flexible, and reduce the costs involved in formal employment have been adop-

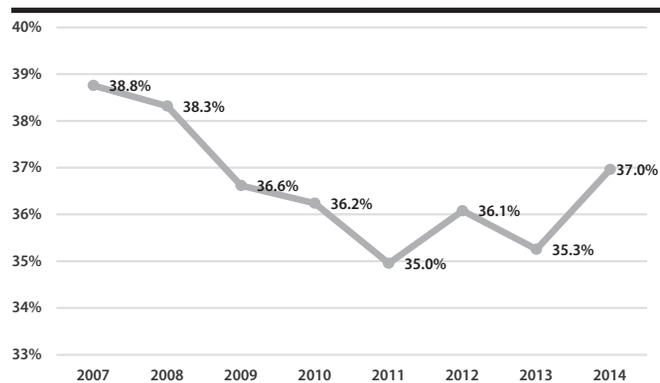
ted (obligation to pay severance only for the years of service at the current employer, clarification of reasons for termination of employment contract and simplified termination procedure, extension of the maximum duration of fixed-term employment contract etc.). One of the main reasons for informal employment has thus been eliminated. Furthermore, the system for electronic control of registration of employees in the Central Registry of the Mandatory Social Security Payers has been implemented, which facilitates real-time control of registration of employees in the field. However, this measure needs to be accompanied by intensified controls by the Labor Inspection to reduce informal employment.

These institutional changes, and intensified tax controls as of the middle of 2014, when the government decided to reduce the tolerance of the shadow economy and increased the number of employees responsible for tax control, were accompanied by increased media coverage of the actions taken by the Tax Administration and Labor Inspection, which heightened the impression among taxpayers that the likelihood of being subject to tax inspection increased.

2. Results of the activities against the shadow economy achieved so far

The foregoing institutional changes and intensified controls by the Tax Administration led to reduction in the size of the shadow economy and increase in tax revenues (primarily from VAT and social security contributions) in the second half of 2014.

Table 1 Serbia: Tax revenues (% GDP)



Source: QM calculations based on the data published in the Bulletin of Public Finance and other data published by the Ministry of Finance

Consequently, tax revenues increased by 1.7% of GDP in 2014 relative to 2013. This rise was mainly caused by the following: *i)* increase in lower VAT rate from 8% to 10%², *ii)* increase in corporate income tax rate from

² Increase in VAT rate produced its full effect on revenues only after the government intensified its efforts to reduce the shadow economy in the middle of 2014.

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10% to 15% as of 2013 – this increased tax fell due for payment in 2014, *iii*) rise in other tax revenues, caused by the property tax increase after the abolition of construction land usage fee, which was a non-tax revenue, *iv*) reduction in the size of the shadow economy. As a result of the intensified activities against the shadow economy, in Q4 2014 the share of public revenues in GDP was by 15% larger than the average for the preceding three quarters. In the preceding years, average seasonal discrepancy between public revenues (as a % of GDP) collected in Q4 and the average for the preceding quarters was 11%. Assuming that this increase, i.e. additional RSD 4-5 billion of tax revenues collected in Q4, was caused by the reduction in the shadow economy, continuation of such trend would lead to annual rise in tax revenues of RSD 18-20 billion (about 0.5% of GDP), which would be a considerable output.

3. Recommendations for sustainable and efficient further action against shadow economy

Implementation of some systemic measures that would enhance the actions against the shadow economy could increase tax revenues by additional RSD 20 billion (0.5% of GDP) by 2017, so the overall effects of these actions would reach 1% of GDP. This would imply full and persistent implementation of a number of measures, the most important being the following:

- *Systemic reform in the Tax Administration and other inspection services* – Long-term sustainability and effectiveness of the battle against the shadow economy require a comprehensive reform in the Tax Administration. This would imply reform in its work organization, faster implementation of electronic tax returns for all types of taxes (by the end of 2015 instead of the end of 2017, as planned), and a sweeping reform in the human resources management. The reform in work organization would imply transformation of the organizational structure and establishment of a strong department responsible for risk assessment and analysis and systemic supervision of the performance of tax inspectors. Human resources management would be improved through implementation of a completely new employee selection, promotion and compensation system, meaning that only the candidates who actually (and not only formally) meet the selection requirements and deliver good performance would be selected, promoted or rewarded. Along with this measure, a continuous systemic cooperation with educational institutions, which would give the students the opportunity of specialization in this field throughout undergraduate studies, master studies or specialist studies, should be established.
- *Ban on sale of new industrial products on farmer's markets and flea markets* – This is politically unpopular but economically justifiable measure that would produce considerable effects in a short term. This ban should therefore be announced several months before being imposed to give enough time to individuals and entrepreneurs who want to formalize their operations to do so.
- *Intensified efforts to combat excise goods smuggling* – In 2014 the government curbed petroleum products smuggling by fuel marking, and intensified its efforts to combat illegal sale of tobacco products at the end of the year. Accordingly, these activities should be even more intensified and made systemic in 2015.
- *Greater coordination between inspection services* – Systemic exchange of data and coordination between different inspection services when planning and executing field control is necessary. Accordingly, the Law on Inspection Oversight adopted in February should be a good institutional framework for this process.
- *Cross-check of property and income with the aim of disclosing undeclared income* – Undeclared income can be detected by contrasting the data kept by different government bodies with the data from the submitted tax returns. This especially applies to individuals possessing large assets. Defaulters would then be penalized, which would discourage taxpayers from engaging in tax evasion.
- *Systemic incentives for local-self governments to upgrade their real property tax registers and to improve property tax collection* – Rewards for local self-governments who increase their efforts to identify undeclared real property, and penalties for those who do not do so (in the form of different transfer payments) would encourage them to upgrade their tax records and reduce the shadow economy in this domain.
- *Media campaign aimed at making people aware of how important it is to reduce the shadow economy* – This would encourage people to pay taxes (and to report the defaulters). Importance of public goods which are financed from tax revenues and which are often taken for granted and considered to be free (public safety, education etc.) should be pointed out in such campaign.
- *Systemic improvement in the quality of public goods* – There is a close correlation between the readiness of taxpayers to pay taxes and the quality of public goods they thus „buy“. It is therefore crucial to improve the efficiency of public administration, and

to upgrade the quality of education system and healthcare system, along with other services delivered by the public sector, to incentivize people to pay taxes.

Although these measures produce effects in the long run, their implementation should start immediately. It is the only way to maintain the results that have been achieved so far, and to possibly improve them in the future. Consequently, through further reduction in the shadow economy budget revenues would increase and Serbia would become a more attractive destination for investments and for doing business, because tolerance for the shadow economy implies existence of unfair competition.

Highlight 3. Connection Between Socio-economic Factors and PISA Test Results Among High School Students in Serbia^{1,2}

Mladen Stamenković³

Abstract: This paper presents an overview of student achievement on PISA tests in Serbia. Determinants of student success were examined, with a special emphasis on the effects of socioeconomic factors. The paper points out the clear differences in student performance depending on different socioeconomic statuses. It confirms the quality of gymnasium-type high schools as the best educational profile. In line with the presented differences in the progress possibilities of students depending on their socioeconomic status and educational profile that the student attends, recommendations for institutional reforms are given toward creating a more equitable educational system.

1. Aims, Importance and Concept of PISA Testing

The importance of education and its effect on economic development has been recognised in many theoretical and empirical papers. In growth models, human capital presents one of the most important factors of economy.

¹ This is the second in a series of papers dedicated to the problems and measures of improving education in Serbia. Previous paper of Professor Branko Urošević, which dealt with measures for improving doctoral studies, was published in Issue no.35 of the Quarterly Monitor.

² The author wishes to thank Milojko Arsić and Dragica Pavlović-Babić for their comments and suggestions.

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Zakon o poreskom postupku i poreskoj administraciji ("Službeni glasnik RS", br. 80/02, 84/02, 23/03, 70/03, 55/04, 61/05, 85/05, 62/06, 61/07, 20/09, 72/09, 53/10, 101/11, 2/12, 93/12, 47/13, 108/13, 68/14, 105/14)

Also, the issue of education's effect on equality and distribution of income has an important place in the research, as well as attempts to determine the present value of future income in relation to education. When talking about human capital, Madžar (2011) stresses the following: "In labour force, it is not the mere number or the quantitatively defined head count that matters, but primarily the level and quality of knowledge and skills which are incorporated in labour force. The term that has long been used for labour force is *human capital*, which highlights the fact that it is not a mechanical selection of people, but a mass of knowledge and skills that these people have in themselves and which they have mastered over time. And knowledge and skills are neither god-given nor are they a product of mere demographic processes; these attributes of human capital that are production-relevant are acquired and systematically accumulated through numerous, surprisingly diverse, and in most cases highly complex educational processes. Knowledge and skills are the result of *investment* into education system and activities performed within that system. And the more you invest, the more the results are comprehensive and production-effective. That is why in economic science, supply of human resources is not determined as a property measured by a head count, but rather as possessing the sufficient mass of the human factor that incorporates the equally comprehensive mass of production-relevant knowledge with an adequate differentiation and a quality necessary for efficient earning. *Tout court*, labour force is not demographically determined and naturally given, but a produced natural factor."

The second half of the 20th century marked the beginning of the development of international surveys of

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educational achievements and student competitions. The expansion of scientific papers, especially empirical ones, occurred thanks to these surveys (Hanushek & Woessmann, 2010). The development of first international testing started in 1958, when a group of eminent professors from different educational fields met at the UNESCO Institute for Education in Hamburg to talk about student evaluation. After that, International Association for the Evaluation of Educational Achievement (IEA) was founded, which today conducts one of the most famous international surveys TIMSS (*Trends in Mathematics and Science Survey*), as well as PIRLS survey (*Progress in International Reading Literacy Study*). In addition to this association, OECD conducts significant international surveys, such as the International Testing and Teaching Survey, and PISA testing.

PISA (*Programme for International Student Assessment*) is certainly the most significant testing in the field of education currently conducted, both in sense of methodology and the impact on creation of education policy. It has been conducted every three years since 1997, and in the last survey conducted in 2012, 64 countries participated, which create almost 90% of the world Gross Domestic Product. PISA survey tests fifteen-year-olds and tries to answer the question of whether or not the students are ready to face challenges of the future. The focus is not on the process of learning, but on testing student ability to reason, analyse and create ideas. Baucal & Pavlović-Babić (2009) agree with this and stress that: “Specificity of PISA study is that it doesn’t test the students’ ability to reproduce what they have learned in school, but how equipped they are to understand and use information (that is provided to them) in solving relevant problems from everyday life.”

Testing is conducted in three areas: mathematics, reading literacy, and natural sciences. In addition to tests, students, schools and even parents fill out detailed surveys, which serve as basis for further research and deeper economic analysis and implementation. Each three-year cycle focuses on one of the three tested fields. For example, the central field of the PISA 2009 study was reading literacy, while in 2012 it was mathematics. The questionnaire that the students fill out contains a large number of questions related to their attitude toward the central field of the study, as well as information about the social and economic status of each student. In addition, detailed analyses are conducted of achievement in the central field on all levels of student competencies that are being tested, which enables a better insight into the quality of the teaching programmes and implementation of relevant changes in line with the results.

PISA 2012 study integrated a new area in the basic testing – solving situational problems. Testing in this field

was done on computers. Students were faced with real problems that have no direct link to any curricula being taught in school. Still, through solving these problems, they demonstrate the ability to reason and reach conclusions, competencies that are increasingly taking over in relation to educational degree when applying for many positions on the labour market, and they certainly make a difference among the candidates with the same level of education and present a clear competitive advantage in the process of finding future employment.

2. PISA Test Results of Students from Serbia

PISA study results are given on a scale, which is standardised in the same way in all achievement fields, the mean at the level of the entire tested sample is 500, while standard deviation is 100. Serbia’s position over the last four cycles changed minimally. Government’s indifference toward the issue of education can be shown clearly on the example of PISA testing. Serbia will not be participating in PISA testing this year. This discontinuity cannot be justified, neither from an economic nor any other aspect. Lack of similar tests in our country means that we will not have relevant information about the quality of Serbian education system before 2019 at the earliest, when PISA 2018 test results would be published. Aside from that, international surveys are especially important for the education system in Serbia, which has no national sources of information about the quality of education. The only exception is the final exam at the end of primary education, but it includes a limited number of tasks, which can hardly yield conclusions about the quality of educational outcomes.

When it comes to our achievements, with a moderate improvement on each testing, we are still in the bottom half of European countries, with results that surpass only Montenegro, Albania, Bulgaria and Romania, and are at approximately the same level as Turkey, Cyprus and Greece. The remaining European countries are more or less ahead of us. By comparison, at the last testing in 2012, our students scored 449 points in math on PISA scale, while Croatian students scored 471. How big is this difference? Experts estimate that a little less than 40 points on PISA scale equals one year of studying in school. That means that Croatian students at age 15 have acquired knowledge that Serbian students will acquire after additional six months of school studying. The gap with Slovenia, another former republic of Yugoslavia, is even larger. Its students are somewhere around the OECD average with 501 points scored.

In addition to the results, students are ranked by achievement levels for each tested field. The achievement scale is divided in six levels and each level is described

by competencies required from the student in order to solve the tasks at that level. One achievement level covers around 70 points on the PISA scale, which is a relatively high range, so the students who are at different levels demonstrate qualitatively different skills and knowledge (Pavlović-Babić & Baucal, 2013). Students who are below the second achievement level are considered functionally illiterate. Functionally illiterate means that the person is not able to use its knowledge for the advancement of its community or group, as well as for the personal improvement of its reading, mathematical and other competencies⁴. These persons most often do not continue their education, they enter the work force early, and have problems finding work. On the other hand, the fifth and the sixth achievement levels contain the most complex tasks, which require hypothetical and critical thinking, argumentation and execution of tasks and solutions. Students at the fifth and the sixth level present the most talented children and future leaders of economic development, people who will most certainly obtain college education, and whose stay in this country or return after studying abroad, should be one of our country's main priorities.

The importance of PISA studies is also evident in the fact that the European Union, in developing the 2020 Education Strategy, included PISA test results as a performance benchmark of education systems. One of the goals of the Lisbon Agenda is to reduce the number of functionally illiterate children in EU member states below 15% by year 2020. The significance of PISA testing is acknowledged in Serbia as well, so these study results are used in assessments of the performance of the education system. National Education Council indicated in its report that the reference value that Serbia should reach by 2020 is the 25% threshold. According to the latest results, at the PISA 2012 testing, 38.9% of our students fell into the category of functionally illiterate in the field of mathematics, 33.1% in the field of reading, and 35% in the field of natural sciences. In 2012, a mild improvement was achieved compared to 2009 in mathematics, and a mild decline in other two tested areas, but in all three cases, they are statistically insignificant. This clearly speaks to the inertia of the education system and lack of substantial action toward eradicating functional illiteracy in Serbia. Also, most of our children are at the first or second level of achievement, which indicates that our system is still based on pure repetition. At an age when it is no longer enough to memorise given information, but to be able to adequately use a large number of easily accessible information. Our education system is still based on memorising and

studying facts, i.e. pure repetition, and the results that are repeated from one test to another indicate that the concept of learning throughout our education is wrong. How well do other countries fare? If we only look at the math results, our students are better than Montenegrin (56.1% of functionally illiterate) and Bulgarian (43.8%). Still, Croatia has only 29.9% of students who fall into this category, while countries like Finland and Estonia are far ahead of us with 12.3% and 10.5%, respectively.

What is lacking at the state level year after year, is a deeper analysis of micro data from the PISA studies and their use in further development of educational strategies, and not mere comparison of final PISA results as the only significant measurement. To prove that PISA study micro data speaks volumes, it is enough to state that for almost 5,000 tested students, there are almost 200 pieces of data that can describe in detail the determinants of success and point out the deficiencies of our education system.

3. Effects of Socioeconomic Status on Student Achievement

According to all research, confirmed by PISA study as well (OECD, 2013), the socioeconomic status is a factor that affects student educational performance the most. Socioeconomic status also presents the biggest source of inequality in education regarding student possibilities and providing equal opportunity for education to all categories. At the OECD level, students with higher socioeconomic status score 39 points more in mathematics than students with a lower status, which is equal to one year of studying.

We want to examine the socioeconomic effects on student achievement in Serbia. In order to do that, we will divide the students in four groups (quartiles) according to socioeconomic status (SES) index, where each group contains 25% of students. The first quartile includes students with the lowest socioeconomic status, and in the fourth are students with the highest status. The socioeconomic status is assessed through an index, marked in the PISA study as ESCS (Economics, Social and Cultural Status index). This index, measured by OECD as a component of PISA survey, presents a composite index, which includes detailed information about the economic, cultural and education status of students and their families. More precisely, the index consists of three components – highest parental occupational level (HISEI⁵), highest parental educational level measured by years of education, and home property index, which includes a

4 Handbook of Household Surveys, Revised Edition, Studies in Methods, Series F, No. 31, United Nations, New York, 1984, para. 15.63.

5 For more details about the methodology of forming the ESCS composite index and its determinants, as well as other indices created by OECD, please see OECD (2014).

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large number of information and questions from the survey filled out by the students, such as the number of books in the house, etc. Percentage of children who fall into the illiterate category (below the second level of achievement) and children from the higher achievement levels (fourth, fifth and sixth level of achievement) are presented in Table 1 for all four SES quartiles.

The effects of socioeconomic status on student achievement in Serbia are undeniable when looking at Table 1. These effects are evident in the number of functionally illiterate students, as well as the number of students at higher achievement levels. Almost four times higher share of capable students who are in the group of 25% of the richest children, compared to the poorest quarter indicates considerable differences in possibilities of further advancement of children from different socioeconomic groups. Reducing this difference should be one more goal of the government's education policy. And how this will be achieved is a question for the creators of public policy in Serbia. How big these differences are can be seen in the second half of Table 1. The difference of 77 points between the poorest and the richest group of students is disconcerting, as it represents two years of school studying. Also, we can see that there are almost no differences in tested fields, so the gap between these two groups of students is evident even when it comes to overall achievement. Such a large difference is not unusual in other countries as well, so for example, Croatia has a similar gap, while in Finland it is 60 points. This does not diminish the importance of the problem and future reforms of education systems in the world will have to deal with the issue of equal educational opportunities.

Table 1: Student Achievement Levels by SES Quartiles

	Q1	Q2	Q3	Q4
Functionally illiterate	54.5%	44.3%	36.3%	23.5%
Higher achievement levels	6.8%	9.5%	12.0%	23.7%
Scores – mathematics	408	433	445	485
Scores - reading literacy	413	434	444	478
Scores – natural sciences	414	435	443	481

Table 2 shows, for each educational profile, how the students are distributed by socioeconomic groups. We can see that almost 50% of all students attending gymnasium-type high school (hereinafter: gymnasiums) fall in the group of children with the highest socioeconomic status. Vocational-technical type of school is mostly attended by students with the lowest socioeconomic status (42.9%), while only 8.4% of all students from this type of school belong in the group with the highest socioeconomic status. Similar observation can be made in

Table 3, which shows which schools students apply to for each quartile. We can see that only 7.9% of students with the lowest socioeconomic status apply to gymnasiums. On the other hand, if we look at students with the highest socioeconomic status, 40.6% apply to gymnasiums. It can be said that these students are on a clear path to obtaining higher education, as it is realistic to expect that almost all students who attend gymnasiums will continue their education.

Table 2: Student distribution by SES within each educational profile, in %

Educational profile	Lowest SES	Low SES	High SES	High-est SES	Total
Gymnasium	9.4	15.4	26.3	48.9	100.0
Technical high school	28.8	30.4	25.1	15.7	100.0
Vocational-technical high school	42.9	28.1	20.6	8.4	100.0
Medical high school	21.9	29.6	27.8	20.7	100.0
Economic high school	26.2	26.5	25.6	21.7	100.0
Agricultural high school	41.2	24.9	22.5	11.4	100.0
Art high school	10.1	18.5	26.6	44.8	100.0

That is why the Government of Serbia and the Ministry of Education, Science and Technological Development (albeit in previous mandate), within the Education Development Strategy in Serbia, has foreseen an increase in the number of students in gymnasiums as a natural path toward increasing the number of people with higher education in Serbia. Achievement of this goal is possible only through integration of children with lower socioeconomic status into gymnasiums and through motivating them to apply. This is possible only through a clear motivation of successful students, whose socioeconomic status must not affect their further education. This means providing scholarships, which will be targeted to this population. Also, the scholarships that are created with the aim of motivating our best students to study abroad, have to be defined in such a way to give those students incentives to come back to our country, and not to stimulate further outflow of intellectuals, which is perhaps one of the most alarming issues of the Serbian education system.

Table 3: Student distribution by educational profiles for each SES quartile, in %

Educational Profile	Lowest SES	Low SES	High SES	Highest SES
Gymnasiums	7.8	12.9	21.8	40.6
Technical high school	27.2	28.6	23.4	14.6
Vocational-technical high school	16.3	10.7	7.7	3.2
Medical high school	9.3	12.5	11.7	8.7
Economic high school	20.0	20.3	19.3	16.4
Agricultural high school	16.6	10.0	8.9	4.4
Art high school	2.8	5.0	7.2	12.1
Total	100.0	100.0	100.0	100.0

PISA data can also help us answer the question of whether the students who attend gymnasiums are really so much better than their peers in other educational profiles. That result would justify this kind of strategy and the attempt to integrate a large number of students into this educational profile, due to the expected positive peer influence that this environment would provide. Naturally, a better quality and more comprehensive curriculum should not be neglected.

Stamenković et al. (2015) conducted this type of analysis relying on the results from Table 4 and 5, as well as equivalent results from other tested areas in PISA 2009 study. The tables show the percentage of students below the second achievement level in mathematical literacy for each educational profile and each socioeconomic quartile (Table 4), as well as the percentage of students from higher achievement levels (Table 5) also in math.

Table 4: Functionally illiterate students in mathematics by educational profiles and SES, in %

	Lowest SES	Low SES	High SES	Highest SES
Gymnasiums	24.5	16.7	14.8	9.8
Technical high school	54.4	47.7	47.0	40.7
Vocational-technical high school	76.3	71.3	59.0	62.8
Medical high school	27.2	27.2	23.3	22.9
Economic high school	49.8	40.7	39.9	28.7
Agricultural high school	70.9	74.8	56.6	54.8
Art high school	40.5	35.3	28.6	20.0

We can see a drastic difference between the educational profiles, which was the expected result. Gymnasiums are certainly the highest quality of educational profiles, as can be seen in each SES quartile. Also, only 9.8% of students who attend gymnasiums and belong to the highest socioeconomic quartile fall into the cate-

gory of mathematically illiterate. The lowest percentage of functionally illiterate children in all quartiles is in gymnasiums, which further proves the quality of this profile. It is important to note the quality of medical high schools. Achievement of students in medical high schools is almost unaffected by the changes in socioeconomic status, as can be seen in both tables. This suggests that equality and equity in educational outcomes are best realised in this educational profile and further analysis could indicate the reasons behind this result. The quality of gymnasiums is also evident in Table 5, where almost one quarter of students with the lowest SES are among the better students. This result completely justifies integration of students from this level into gymnasiums in large numbers. On the other hand, percentage of students who attend vocational-technical high schools and agricultural high schools and fall into the group of better students can be considered a statistical error.

Table 5: Students at higher achievement levels in mathematics by educational profiles and SES, in %

	Lowest SES	Low SES	High SES	Highest SES
Gymnasiums	22.6	27.6	24.2	38.7
Technical high school	6.3	6.2	7.5	10.1
Vocational-technical high school	1.4	0.7	1.9	0.0
Medical high school	18.4	13	13.2	21.2
Economic high school	5.2	10.6	10.3	13.9
Agricultural high school	0.4	0.0	2.5	1.6
Art high school	10.8	5.9	14.3	19.4

Conclusion

Education is one of the basic mechanisms of creating human capital and is one of the main determinants of economic growth. Therefore, advancement of education at all levels presents a necessary condition for economic and social progress of Serbia that is sustainable in the long term. The reforms, which would improve the quality and accessibility of education to all social strata, present a long-term process which far exceeds the duration of a government's mandate. That is why education reforms can only be implemented by governments who care about the long-term interests of the society, and not only short-term political interests. From the perspective of economy, low quality education is a form of unproductive waste of resources. Improvement of the quality of education, which encourages argumentative and cri-

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tical thinking, is not only important for productivity, but for successful functioning of a democratic society as well.

When it comes to primary and secondary education, a fairer education system in which all students have equal opportunities for further advancement will be one of the biggest challenges of educational reforms in the 21st century. Serbia has pronounced differences in student achievement depending on their socioeconomic status. The difference between the 25% of the richest and 25% of the poorest children is 77 points on the PISA scale. This gap presents the difference in knowledge acquired over two years in school. If we take into account that the students are tested in their ninth year of education, we can conclude that this difference is a considerable one.

Instruments that can affect the reduction of this gap have to be directed toward creating equal opportunities for further education. Gymnasiums are the best educational profile in Serbia, which we have shown in this paper. Education Development Strategy foresees increasing the number of students applying for this type of school as the best way to increase the number of highly educated people. In addition, it is necessary to provide the students from the lower socioeconomic groups with an access to this educational profile, probably with scholarship-type stimulation and by reducing the need for private tutoring, which is not available to poorer students, so that lower socioeconomic status would not affect their further education⁶. Properly formulated government intervention, with the expected positive peer influence, could lead to high achievement of our students and to a much better quality and equitable education system – a goal which will in near future take increasing priority in creating education policy.

The state's attitude toward education is also reflected in the fact that Serbia will not be participating this year in PISA 2015 testing. This way, after the results received from the 2012 testing, the first results about the state of Serbian education system will not be received before December 2019, when the PISA 2018 testing results will be published. Applications for the PISA 2018 cycle are open until September this year, and this will be a good test for the current Government as to where on its priority list is education and the reform of this important sector.

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⁶ More about the tutoring market in one of the following issues of the Quarterly Monitor.

SPOTLIGHT ON:

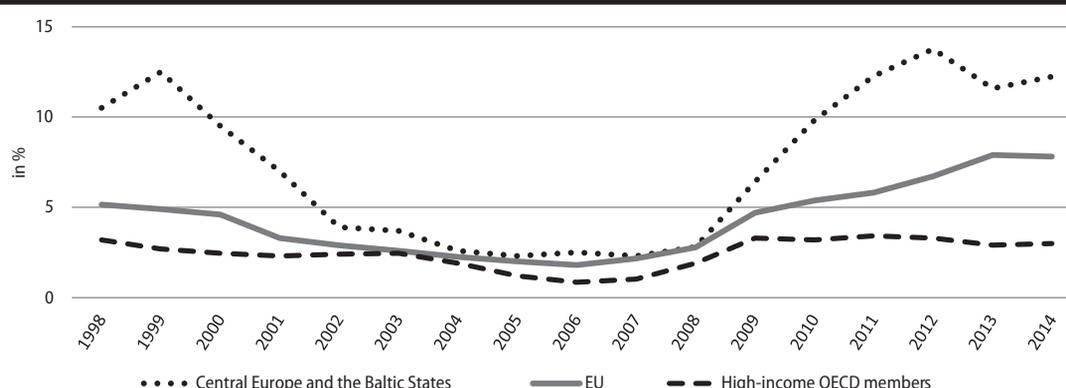
Problematic Loans: Determinants of Growth and Possible Solution¹

Tanasković Svetozar², Jandrić Maja³

1. Regional Trends

The growth of problematic loans over the past few years has been a key problem facing the countries of central and eastern Europe. Following the start of the global financial crisis in 2007-2008, a growth of problematic loans was noted in most of the economies in the world. However, there are significant differences from country to country in terms of the participation of problematic in the overall loans (Graph T-1).

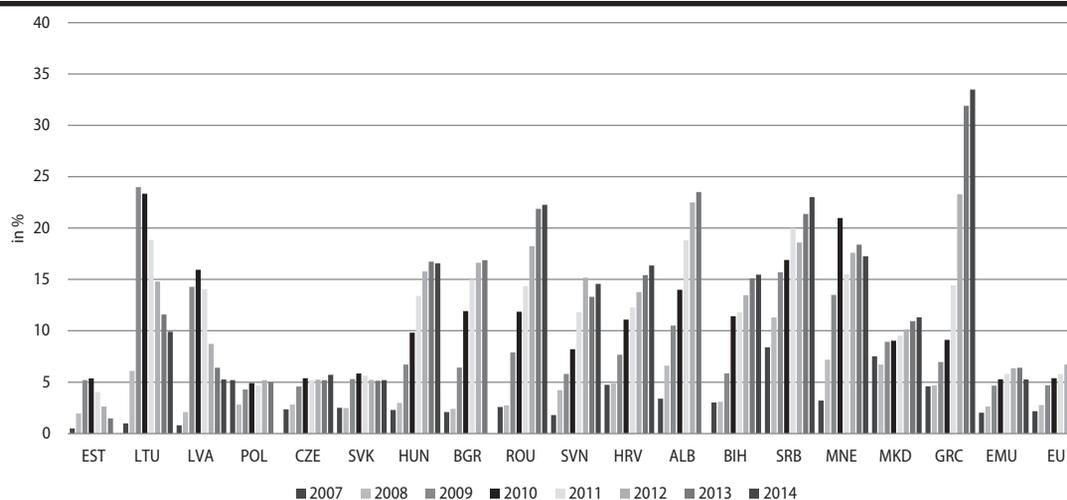
Graph T-1. Participation of problematic in overall loans, 1998-2014.



Source: World Development Indicators

There are differences among the countries of central, eastern and southeastern Europe as well (Graph T-2). The observed group of countries have seen the participation of problematic loans grow in the overall loans by 3.3% in 2007 and by 14.1% in 2013 (if we take Greece out of the equation, the participation of problematic loans in the observed period rose by 3.2% to 13.01%). Over the same period in the Eurozone, this indicator stood at 2% in 2007 and at 6.4% in 2013.

Graph T-2. Participation of problematic in overall loans for select countries, 2007-2014.



Source: World Development Indicators

¹ The authors thank Milojko Arsić for his valuable comments and suggestions

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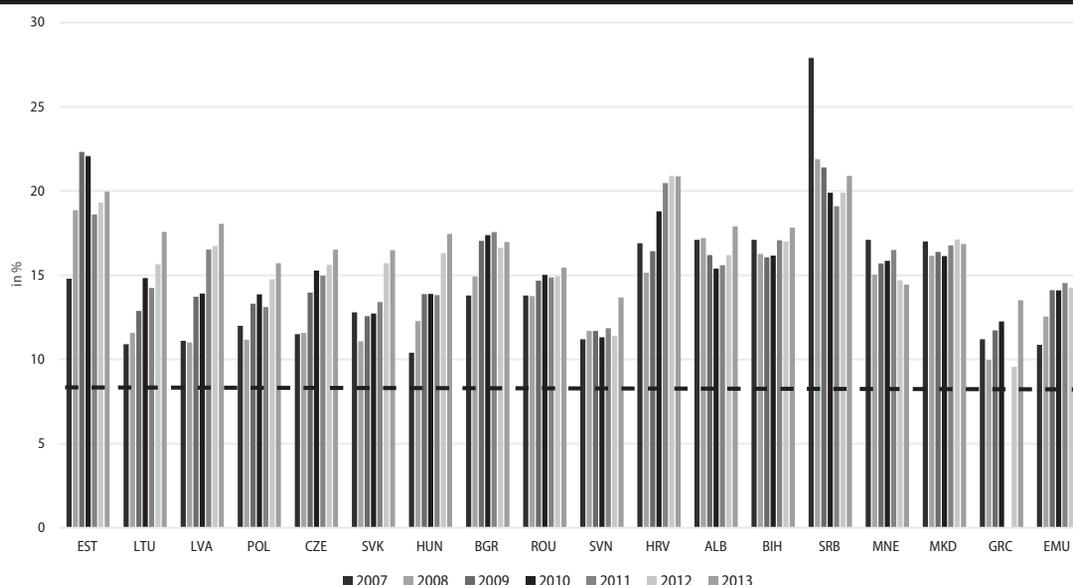
On the basis of the evident difference in the speed of growth of problematic loans, the observed countries can be divided into several groups according to the size of the growth and level of participation of problematic loans (Table T-3). The countries with small growth and medium level of participation were in the best position: Estonia, Poland, the Czech Republic and Slovakia. As a rule, the countries of southeastern Europe fell in the category of bad performance – the growth of the participation of problematic loans is higher and the level was moderately high or high. Based on the participation of bad loans, Serbia was with Greece, Albania and Romania in 2013 at the very top among the countries of central and eastern Europe. Serbia is specific compared to other countries in that prior to the crisis (2007-2008) it had the highest participation of bad loans in overall loans within the group of observed countries. That leads to the conclusion that the problem of bad loans existed in Serbia prior to the crisis and that it only deepened during the crisis. That then leads to the important conclusion that the causes of the bad loans in Serbia lie to a significant extent in the problems that existed before the crisis and which are probably due to institutional elements and a strong credit expansions in that period.

Table T-3. Countries in categories based on height and rate of growth of NPL in overall loans in 2007-2013 period

Level/ Growth	Medium level	Moderately high level	High level
Small growth	Estonia Poland Czech Republic Slovakia	FYRM	
Medium growth		Bosna and Hercegovina Croatia Hungaria Slovenia	Lithuania Serbia
High growth		Latvia	Romania Albania Montenegro Greece Bulgaria

The level of adequacy of capital which places bank capital and risky assets into a relationship is often taken as one of the important elements of financial stability. This indicator is practically a shock absorber in the case of negative effects which could appear in the form of a writing off of a number of problematic loans. The European Banking Authority (EBA) sets the lower level of this indicator at 8% while some economists advocate the idea of raising it to more than 15% in conditions of financial crises. The adequacy of capital for the EMU countries is registering a rise following the start of the financial crisis (Graph T-3) but in most economies it is at the level of 10%-15% except in the cases of Estonia, Croatia and Serbia where it is constantly above that level. The average level of adequacy of capital in the banking sector in Serbia since the start of the crisis is at the level of around 20%. Bearing in mind the regulatory standards and the values in other countries, this high level of adequacy of capital is having a positive effect on the assessment of the stability of the banking sector in regard to problematic loans. Still, the high values of this indicator do not have influence on the process of decreasing the participation of NPLs except for the function of signaling stability.

Graph T-3. Level of adequacy of capital for select countries 2007-2013



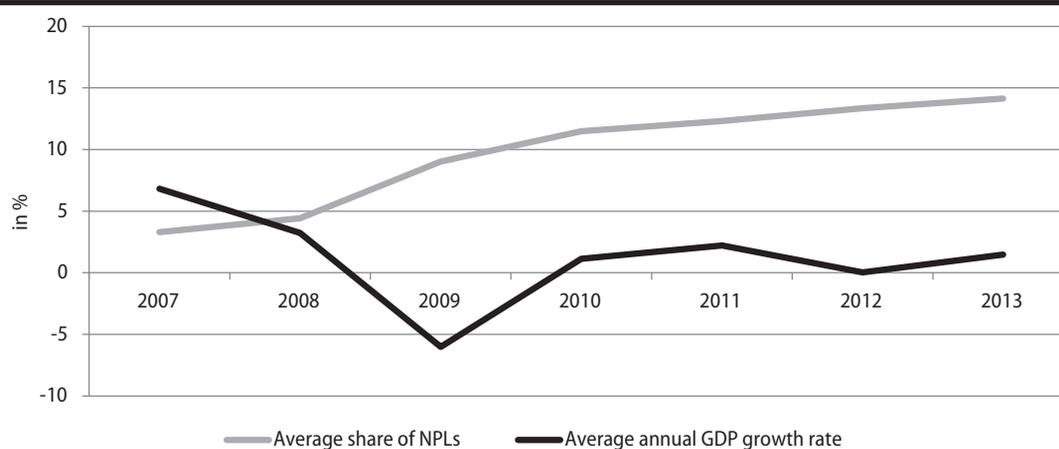
Source: IMF-FSI (October 2014)

2. Determinants of Problematic Loans

Although economists dealt with the determinants of the level and dynamics of the participation of problematic loans earlier, interest in this topic gained in significance over the past few years. The problems that can appear in economies with a high level of participation of problematic loans demand better understanding of this problem in order to clearly define measures to reduce them in as short a period as possible. In analyses to date, researchers most often linked two groups of factors as the factors of participation of problematic loans: macroeconomic determinants and specific determinants linked to the operations of banks. Besides those two groups, more recent research has noted attempts to partly explain the problem of problematic loans through the effects of institutional factors which determine the rules of behavior in the banking sector of a given country.

Empiric analyses of a group of countries confirm the strong dependence of problematic loans on GDP trends (Espinoza and Prasad, 2010; Nkusu, 2011, Bock and Demyantes, 2012, Beck, Jakubik and Pilou, 2013). Recent research indicates that the effects of economic trends on NPLs is not linear – during the period of crisis the influence of macroeconomic conditions on credit risks grows stronger (Buncic and Melecky, 2012). Still, even in the observed sample of 17 countries of central, eastern and southeastern Europe, we noted that the participation of problematic loans continued to grow after the economy started to recover which shows that along with GDP trends other factors make a significant contribution in explaining the differences between individual countries (Graph T-4).

Graph T-4. Average GDP growth rate and participation of NPL in select group of countries



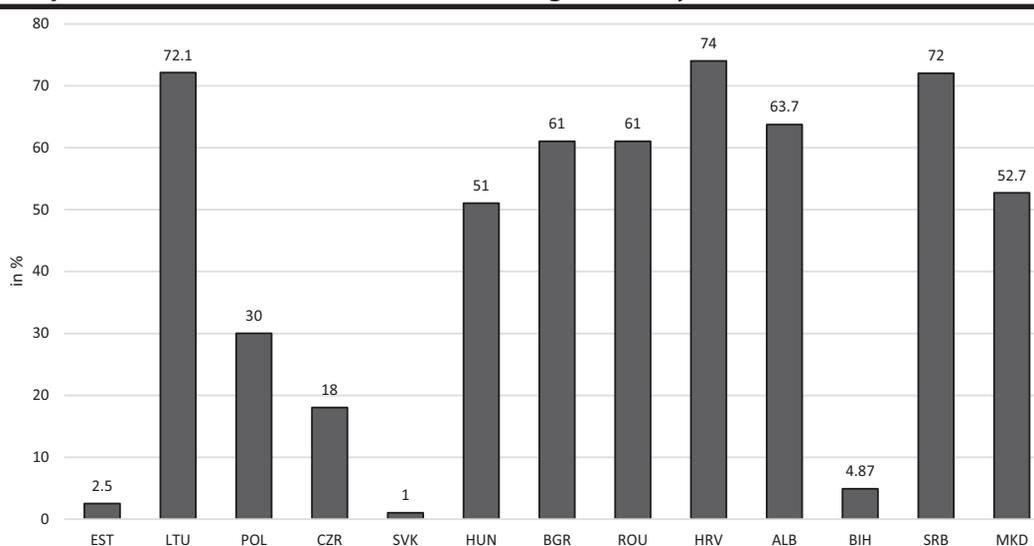
Source: World Development Indicators

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Along with economic growth, the contribution of other macroeconomic factors has been determined such as: interest rates, unemployment rates, inflation, exchange rates and the level of participation of loans indexed in foreign currency.

The rise of interest rates additionally increases the participation of problematic loans through the increased burden on debtors who, because of increased dues to service interest, are no longer able to meet their obligations on the basis of credit. This is especially evident in cases of loans with variable interest rates. A large number of empiric research confirms this connection but it is still at a much lower level than the influence of economic conjuncture (Berg and Boye, 2007 ; Espinoza and Prasad, 2010, Buncic and Melecky, 2012 ; Nkusu, 2011 ; Beck et al, 2013, Louzis et al, 2011, Messai and Jouini, 2013). The effects of *inflation* on trends with problematic loans is less clear. One of the possible channels of influence is the fact that because of monetary policy efforts to lower the inflation rate, interest rates rise (Nkusu, 2011). Viewed theoretically, higher inflation can lower the value of debts and cause a reduction of problematic loans while on the other hand it can reduce income in real terms if earnings do not follow the rise of prices and in that way have the opposite effect. The result of research into macroeconomic determinants of problematic loans in Serbia (Otasevic, 2013) shows that the first effect was dominant in Serbia in the period between Q3 2008 to Q2 2012: higher inflation caused a reduction of problematic loans. Other analyses of the determinants of problematic loans in the countries of central and eastern Europe found that higher inflation leads to the growth of problematic loans (Klein, 2013, Škarica, 2014).

The effects of the *depreciation of the domestic currency* is fairly direct in almost all research into this topic. The weakening of the exchange rate can cause very unfavorable effects in economies which have a high participation of loans indexed in foreign currency. Research into the determinants of problematic loans in the countries of central and eastern Europe (Jakubik and Reiniger, 2013) showed that the depreciation of the domestic currency can have a negative effect on the participation of problematic loans with the power of this influence depending on the participation of loans indexed in foreign currency in overall loans. On the other hand, if these are open economies which do not have this problem, depreciation could improve the financial position of companies through its positive effects on exports and in that way cause a reduction of problematic loans (Beck et al, 2013.). The effects of depreciation have an immediate effect on increasing the amount of debt in domestic currency while the positive effect on exports comes with a delay which can sometimes be longer than one year. Because of that, economies with a high participation of loans indexed or loans in foreign currency are more exposed to this risk. Based on this indicator (Graph t-4) Serbia, together with Lithuania and Croatia is in the group with an extremely high participation. In a regime with a fluctuating exchange rate such as Serbia has, this represents an additional danger in periods of depreciation of the Dinar exchange rate. In the past five years, the Dinar has nominally depreciated against the Euro by more than 30% which has affected those debtors who took loans indexed in Euro and whose earnings are in Dinars. A more recent example of the effects of fluctuations in the exchange rate through indexed loans was felt recently following the decision by the Swiss central bank to remove the lower limit of the Franc exchange rate against the Euro. Foreign currency markets reacted instantly and the outcome was a strengthening of the Swiss currency against the Euro by 13% (and against the Dinar at the same time) which had an immediate effect on some 20,000 debtors who took out housing loans in Serbia indexed in Swiss Francs through their monthly installments in Dinars.

Graph T-4. Participation of indexed loans and loans in foreign currency in select countries in 2013

Source: IMF, ECB, central banks of select countries.

An additional problem which appears with problematic loans is the presence of the so-called *ripple effect* (problematic loans → economy) which is reflected through a further deterioration of economic activity: a rise in problematic loans weakens the macroeconomic performance of the economy which activates a “vicious circle” in which the problems of the banking sector and the drop in economic activity mutually strengthen each other. Several empiric research papers confirmed the influence of this effect (Nkusu, 2011; Bock and Demyantes, 2012; Espinoza and Prasad, 2010). Empiric analyses devoted solely to the countries of central and eastern Europe (Klein, 2013) also confirm the presence of the ripple effect in this group of countries which points to the fact that the high level of problematic loans in a large number of observed countries hamper the recovery of the economy.

Research confirms that besides macroeconomic factors, the institutional environment in which banks operated also affect the participation of problematic loans. The economic logic to include institutional factors into the analysis is based on the assumption that an inefficient court system, problems in revision and control of bank operations, interference of politics into business decisions and insufficiently developed other institutions that the system is based on can have a negative effect on the operations of banks. Godlewski (2005) in research which covered 30 countries in central and eastern Europe, South America and Asia found that an efficient court system and higher level of rule of law suppress the motivation to take higher-risk loans. Bodriga et al (2010) also stated that better control of corruption, better rule of law and other institutional elements play an important role in reducing the participation of bad loans in MENA countries. The empiric results which Breuer (2006) lists also confirm the influence of a large number of institutional elements on bad loans including corruption which is listed as a very significant factor.

3. The Effects of Macroeconomic and Institutional Factors on Problematic Loans in Serbia

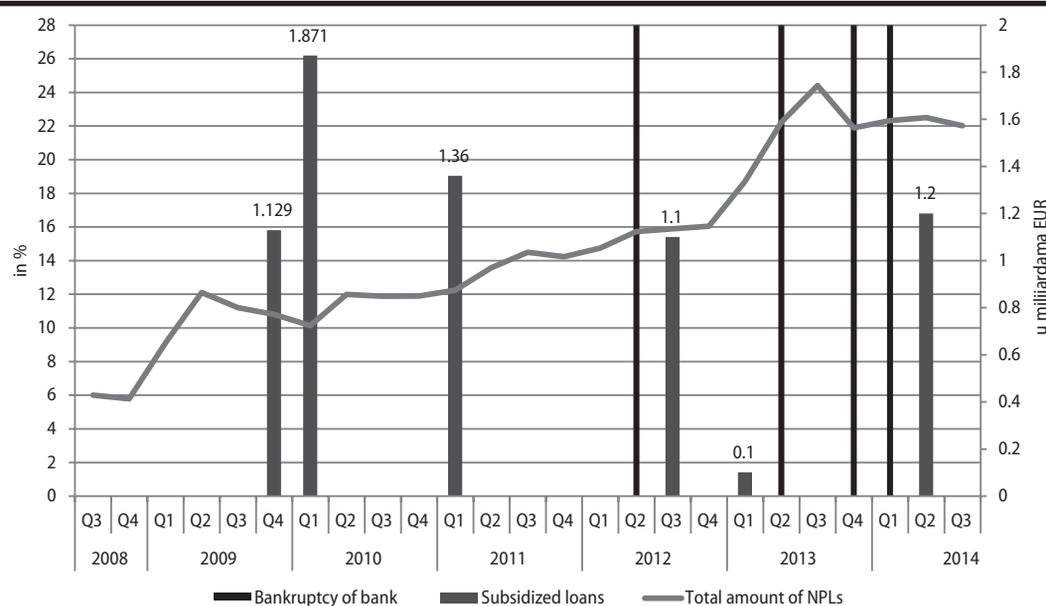
The analysis of the factors which have an effect on the level of problematic loans in 2006–2013 period on the group of countries which includes Serbia (Tanasković and Jandrić, 2015) confirms the significant effect of macroeconomic variables and some institutional variables. The variable that stands out as the one with the most significant marginal effects of some 2.4% is the GDP of the country which confirms the very strong link between economic cycles and the level of problematic loans. It also confirms the effects of the variation of the exchange rate and participation of problematic loans on the dependent variable while the influence of inflation is not statistically significant. The model which includes institutional variable for the observed countries gives a statistically significant effect of the quality of financial monitoring and control as well as the level of development of the financial market. This finding shows that the growth of problematic loans is partly the consequence of the regulatory framework which did not define sufficiently strict guidelines for conditions of loans and the determining of credit abilities of clients in the period of credit expansion. In the case of Serbia, credit expansion in the 2003–2008 period of the crisis is borne not just by good performance and credible client plans and indications of positive economic growth but also the powerful struggle of newly formed banks for as high a market share as possible. The specific reason for a strong credit expansion in Serbia in the period prior to the crisis is the level of debt of the economy and population which was very low at the start

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of the transition – the earlier hyperinflation and inflation made old loans worthless. In the struggle for as much of a market share as possible, banks mainly relied on collateral in real estate when approving loans while the business operations of clients were deemed secondary. The problem appeared when the value of the collateral dropped significantly during the period of crisis and the liquidity of the real estate market dropped. The problem of the speedy credit expansion of the time in the countries of the region was visible prior to the crisis as well. Besides potential problems linked to the rise of inflation and foreign trade deficit of the current segment of the balance of payments, warnings appeared in 2006 that the risk of banking problems increased with the increase of the speed of growth of overall loans with the risks in individual countries varying depending on the initial quality of the banking system, capitalization, rules of oversight and competencies and similar. Besides that, the indexation of loans which at the time managed to successfully neutralize the currency risk, threatened to become one of the possible sources of the problem in regard to the ability to collect on loans in the future. The warnings linked to potential macroeconomic shocks indicated that the upsets in the banking system in case of large-scale shocks such as the rise of interest rates, slowing down of economic growth and pressure on the exchange rate will depend directly on the exposure of the banking sector to those risks and on the extent of their capital reserves.

In the case of Serbia, in the 2009-2014 period all macroeconomic variables contributed to the growth of the participation of problematic loans (Graph T-5). As one of the ways of resolving this and the problem of the general drop in credit activity, the Serbian government introduced a program of subsidized loans late in 2009. For that purpose, between 55 and 94 million Euro were allocated from the budget depending on the year with the exception of the year 2013 when the subsidies for interest rates on loans stood at just 5 million Euro. Graph T-5 shows that the effects of these subsidies was the creating of new loans worth between 1.1 and 1.8 billion Euro except in the year 2013 when some 100 million Euro in fresh loans were created in that way. Besides these measures, we note that the growth of the participation of problematic loans did not stop in 2014 and that is shown by the problems of business banks owned by the state which surfaced in mid-2012. In the 2012-2014 period, four banks in which the state had a majority stake lost their licences because of constant losses which reduced the amount of capital below the regulatory minimum after which their debts and obligations were transferred to the Postal Savings Bank. Obviously the participation of problematic loans in these bank was significantly higher than the average in the banking sector which suggests that these banks were subject to macroeconomic and other factors, primarily of an institutional nature. The overall amount of funds which the state used to guarantee deposits and the recapitalization of the Postal Savings Bank because of the bankruptcy of these four banks reached the level of 1.75% of the GDP which shows the seriousness of the problem and the need for a significantly more serious approach to the problem of problematic loans.

Graph T-5. Participation of bad loans in overall placements in Serbia 2008 Q3 –2014 Q3

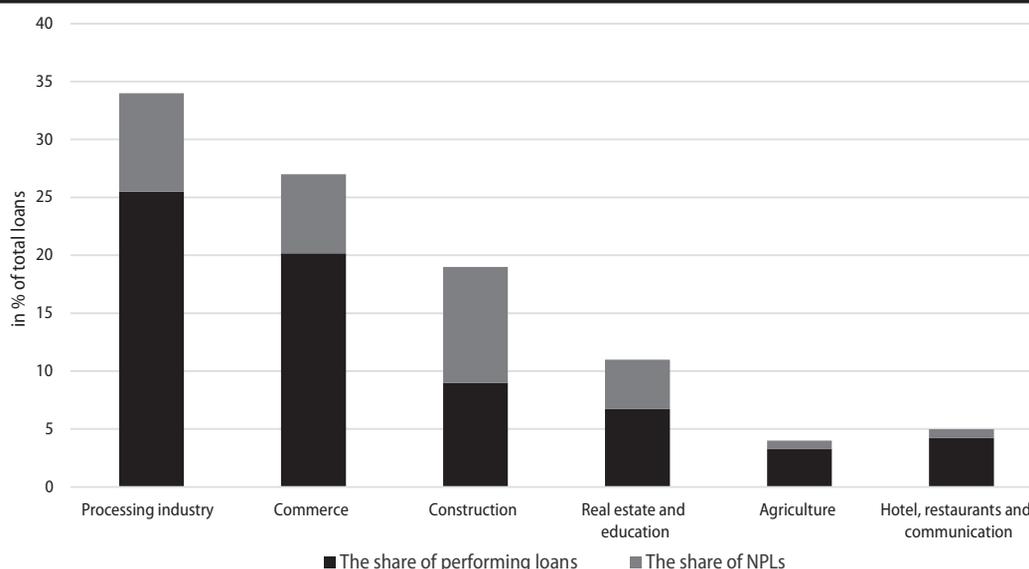


Source: QM

A current review of the structure of problematic loans shows that their highest participation is within the segment of entrepreneurs at around 45% (see section Monetary Trends and Policy). Since loans to entrepreneurs account for just some 3% of the overall placed loans on this market, a much bigger problem has been observed among companies

which have had 65% of all loans placed with them. As part of these loans at the end of 2013 27.7% of debtors were late with their payments by more than 90 days which puts them in the category of problematic. This number dropped at the end of 2014 to some 26.5% but it continues to represent a great danger to the stability of not just the banking system but also the overall economy if there is not system approach to finding a solution to the problem. Within the economy, the greatest percentage of problematic loans, viewed nominally, is with the construction and processing industries and trade (Graph T-6). The construction industry has been hit very hard by this problem since more than half of the loans taken fall into the category of problematic and we observe something similar in the real estate sector.

Graph T-6. Participation of problematic loans in regard to overall placed loans by branch of the economy in 2013



Source: NBS

4. Examples of Solutions in International Practice

Solving the problem of a high participation of problematic loans is a great challenge for the carriers of economic policy which is confirmed in the examples of countries which had this problem before the financial crisis broke out. The experiences of other countries shows that there is no simple cure but that any ignoring of the problem will be paid dearly in the end with the money of the taxpayers. One of those cases is the banking crisis in Turkey which started with political-economic problems back in 1996. It peaked in the year 2001 with the sudden drop in the value of the Lira which caused a rise in the number of problematic loans to almost two thirds of the overall placements of loans in a very short period (recall that Serbia the participation stands at 21.06%). The Turkish deposit insurance fund, which is under the patronage of the Agency regulating and supervising banks, took over in the space of two years the management of 20 banks which faced the danger of going bankrupt because of a shortage of capital and great participation of problematic loans in their portfolios. The entire program was named the Istanbul approach and was formulated on the model implemented in the case of the Asian financial crisis in 1997. The idea was to adopt a common framework within which commercial banks, financial mediators, state banks and banks in receivership would work to solve the problem of the problematic loans. That framework included clearly defined rule for financial restructuring, writing off problematic loans, approving new credit lines and the easier resolving of court cases so that private banks could be brought into a situation as soon as possible in which they would use funds set aside to insure problematic loans. The success of the Istanbul approach was partial. Part of the banks which were owned by the state were recapitalized or were completely sold but the expected financial aid for private banks never came. The cost of restructuring state-owned and the most seriously affected banks was covered with funds from the taxpayers and stood at 30% of the GDP of Turkey in 2002 which made this banking crisis one of the most expensive in recent history.

Because of all that, there was just a delay of the repayment of debts for a longer period instead of restructuring and that meant there was not great reduction of the problematic loans. Turkey tried to revive the entire process again in 2002 by introducing a law on the founding of asset management companies which would buy up the NPLs from banks but despite that there were no significant changes in the participation of problematic loans until economic growth in Turkey returned to the level it was prior to the crisis.

In contemporary financial crises which had an effect on the banking sector, two methods were most often present in efforts to resolve the problem of problematic loans. The first model relies on financial aid from the state through the forming of special banks or agencies to buy up the NPLs and in that way remove the “toxic” assets from the balance of the banking sector. By issuing bonds or guarantees, the state finances the operating of these banks or, as in the case of the crisis in China in 1997, the central bank writes off the debts of business banks for funds at the level of NPLs which the business banks wrote off. This approach is efficient but places the burden of resolving the problem on the taxpayers and because of that it is not often the preferred option for countries with problems in public financing. Ireland also formed a state company on the basis of this model to manage the problematic capital “NAMA” which in 2009 started buying up NPLs to a certain amount on the basis of issued state bonds. Besides the high cost to the state, another negative characteristic of this approach is the moral hazard which appears in the banking sector which is partly responsible for the appearance of problematic loans and does not bear the cost of their reduction.

The second model for resolving problematic loans is based on the creating of conditions for banks to, independently or in cooperation with other financial institutions, resolve the problem by restructuring debts, writing them off in the case of companies going into receivership or the sale of problematic loans to third parties. The success of this program requires an increase in the efficiency of courts in resolving receivership proceedings which in Serbia could last up to five years or more in recent history. Also, a system of tax stimulations needs to be introduced for banks to write off problematic loans to a greater extent which would partly neutralize bank losses. Although this method is in the spirit of market economy since it demands coordinated efforts by the state on multiple fronts, it is less successful in regard to lowering the participation of problematic loans.

5. Measures and Plans in Serbia to Date

The solutions that the NBS started implementing at one point in the struggle against problematic loans rely in part on the previously described “Istanbul approach” with the assessment that it was impermissible to wait for 2012 to devote more attention to this problem for the first time. One of the attempts to secure more space for business banks to restructure problematic loans for private individuals is the change to the Decision on the Classification of Balance Assets and Non-Balance Items of December 2012 when the assessment of the credit abilities of clients and the level of credit debt were completely transferred to each individual bank. In terms of companies, that same decision allowed the relinquishing of problematic debts to companies which do not have to have their headquarters in Serbia nor do their business operations have to be primarily financial. Following those changes, most of the efforts by the NBS were directed towards a stabilization of inflation and the volatility of the Dinar exchange rate but there were not further efforts to solve the problem of problematic loans.

That meant that an opportunity was missed to stop the participation of problematic loans at a level which would be much less risky to the stability of the entire banking system. During the 2012-2014 period, four banks went into receivership despite the earlier recapitalization which was at the expense of the taxpayers since those were banks which were majority-owned by the state. That lack of a more active approach in resolving the problem of problematic loans had a negative effect on credit activity which is showing no signs of recovery and that lowers the chances of a speedier economic recovery. It seems that the gravity of the problem which was finally noticed won a lot of attention in the recently signed agreement with the International Monetary Fund. The latest report by the IMF mission said that the problem of the high level of participation of problematic loans has to be resolved on multiple fronts. In order to prevent receivership episodes in the banking sector, new regulatory mechanisms need to be introduced and the existing level of control increased. One of the results of the negotiations with the IMF was the adopting early in February of changes and amendments to the Law on Banks which will be implemented as of April 1 this year. The new changes primarily cover the defining of competencies and the regulating of relationship in cases of potential danger to the stability of the financial system because of the bad operations of some banks. Based on those changes, competencies in implementing control and undertaking specific measures with the aim of preserving financial stability will be completely in the hands of the NBS. Unlike the previous law which covered only banks owned by the Republic of Serbia, the new articles of the law will cover all banks operating in Serbia. That brings a higher level of coverage and oversight whose goal is to be able to see potential risks to the financial system as early as possible.

In regard to measures of control, a clear set of oversight and intervention procedures (when the need for them is determined) has been defined and has to be implemented with the possibility of using the discretionary rights of individuals or institutions. The first stage defines the instruments to notice early warning signals and after that if

any negative elements are noticed, business banks implement measures set out in an earlier prepared plan of recovery which does revisions at annual level and submits them to the NBS for adoption. Another NBS obligation under the changes is the implementing of analyses for all solutions and their effects on the entire financial system in order to determine which manner of regulating the problem carries the least cost. In cases when banks act contrary to the articles of the law which define the criteria of stability in operation or a sudden deterioration of liquidity and similar is determined on the basis of reports, the NBS can implement measures of early intervention which in extreme cases can go to the point of dismissing members of management bodies or imposing receivership management on the bank. In cases when the restructuring process is being implemented after all other options have been exhausted, the NBS takes over all activities with the aim of resolving the problem at minimal cost to the involved parties and the entire financial system. Another novelty under the changes to the law is the defining of the legal framework to found a bank for special purposes which only the Republic of Serbia can do. If founded, the authority over the operations of those banks in regard to monitoring the criteria to found and meet the goals, that is the restructuring of the basic bank would fall within the competencies of the NBS. This solution is similar to the examples in international practice and the solution in Ireland but because of the fact that it creates a huge expense to public finances, in our case it is virtually an unusable option. If we bear in mind the problem in public finances and the obligation to stop the growth of the public debt by the year 2017 which is already in doubt, the realistic solutions for Serbia are the creating of a mechanism in which the biggest expense would be borne by the players in the credit transaction itself including the original bank. The problem of the high participation of problematic loans in the banking sector in Serbia was dominantly present in banks which are Serbian-owned whether state-owned or private but in time it spilled over into the rest of the system. That meant that an increase in supervision will not have too great an effect if the regulatory framework, which existed earlier and included certain measures of oversight and control, continues to be side-stepped. As long as decisions by bank managers are not independent of the interests of the structures of power (as is the case in the public sector), we cannot expect progress in that segment. A possible solution which was implemented in the case of Turkey is privatization in the case of state-owned or concentration and recapitalization of private banks which have been reporting bad results for some time (Srpska banka, JUBMES, NLB, OTP and others).

One measure which has been included in the agreement with the IMF and which could have a greater effect in reducing the participation of problematic loans is the introduction of a new mechanism for restructuring debts outside of court and the speeding up and simplifying of court proceedings when debtors declare bankruptcy. The removal of obstacles in the law on bankruptcy which hamper the finding of quick solutions to relationships between debtors and banks could free significant funds which are currently locked down to cover problematic loans. Besides that, better tax treatment of banks which write off some problematic loans, the use of an existing framework for out of court restructuring of debts and stimulation of the development of a market for the purchase of problematic debts could speed up the resolving of the existing problem. The experiences of countries which implemented a similar solution shows us that in cases when the state is not capable of implementing planned reforms, the solution to the problem is postponed instead of being resolved. Also, a complete solution to the problem of high participation of problematic loans can be expected only if a recovery of production comes along with the proposed solutions since, according to all analyses to date, it has a dominant effect on their growth.

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CIP - Katalogizacija u publikaciji
Narodna biblioteka Srbije, Beograd

33 (497.11)

QUARTERLY monitor of economic trends and policies in Serbia / Editor in Chief Milojko Arsić. - 2011, iss. 1 (january/july)- . - Belgrade (Kamenička 6) : The Foundation for the Advancement of Economics, 2005- (Belgrade : Alta Nova). - 30 cm

Dostupno i na: <http://www.fren.org.yu>. - Tromesečno. - Ima izdanje na drugom jeziku: Kvartalni monitor ekonomskih trendova i politika u Srbiji = ISSN 1452-2624 ISSN 1452-2810 = Quarterly monitor of economic trends and policies in Serbia

COBISS.SR-ID 126940428