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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 QM24. Since issue QM25-26 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, Q4, 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 first half of the year, the economy of Serbia has achieved relatively modest results, with little chance of improving significantly until the end of the year. The growth of the economy in the first half of the year is only 1.2% of GDP, far below the average of Central and Eastern European Countries, and even below the growth of developed European countries. The modest growth of the economy is partially the result of unfavourable weather conditions, while the other part is a result of the weakness of the economic environment and economic policy. Another unfavourable tendency is the re-growth of the foreign trade deficit and the current account deficit. The good result is that inflation is downsized and stabilized, but the strengthening of the dinar is not in accordance with the movement of the economic power of the economy of Serbia, and if this continues it will have negative effect on exports, employment and growth of the economy. Fiscal policy was overly restrictive this year, which had a certain impact on the slowdown in the economy, but also on the strengthening of the dinar. Economic reforms are still slow, most probably affected by the presidential elections, and then the government's reconstruction.

The growth of the economy of Serbia in the first half of the year amounts to only 1.2%, which is far below the projected growth for this year. In addition, the growth structure is bad, investments which were the main drivers of growth in recent years have now slowed down to only 2%, so the investment rate continues to be 18-19% of GDP, which is well below the required level for long-term sustainable high growth. After years of net exports contributing to the growth of the economy, this year its contribution is negative, primarily due to the strong growth of imports. Current consumption of citizens and the state is growing at a similar rate as GDP, so their additional acceleration would not be desirable given that external deficits are growing, and these components already have a high share in GDP. In the second half of the year, the growth of the economy will likely be somewhat faster, so the GDP growth in this year will be 1.5-2%. The growth of Serbia's economy this year is the result of non-agricultural activity growth of about 2.5% and fall in agricultural production by 10-15%. Production trends in non-agricultural activities can be interpreted as approximations of the growth trend of the economy, which shows that the economy growth would be less than 3%, even without a fall in agricultural production.

The growth of the economy in Serbia over this year is significantly lagging behind the growth of Central and Eastern European Countries. Central and Eastern European Countries recorded an average growth of 4.2% in the first half of this year, and a growth of around 4% is expected at the level of the whole year, which is the fastest growth since the beginning of the world economic crisis. The acceleration of the growth of European economies has resulted in improvements of the fiscal position in most countries, improvement of structural policies and also strong monetary expansion of the ECB. ECB monetary policy has a beneficial effect not only on the growth of the Eurozone countries, but also on the growth of other European economies, including Serbian economy. Expansionary policy of the ECB affects the decline in banking interest rates throughout Europe, as well as the growth in demand in the Eurozone, which then allows for high growth of exports from other countries, while abundant supply of cheap money results in high amounts of foreign direct and portfolio investment and loans.

The unfavourable weather conditions, which have affected the decline in agricultural production, can explain about half of the difference in the growth of Serbian economy when compared to the countries of the region. The remaining difference between the growth of the Serbian economy and the growth of the CEI countries, by about 1.5 percentage points, is the result of a worse economic environment and the absence of timely reaction of fiscal policy to changes in the economy and public finances. Although Serbia made some progress in some segments, which is reflected by the progress of 16 places on the list of World Bank Doing Business report, the economic environment in Serbia remains among the most unfavourable in Europe. Serbia is on the lists of World economic forum, World Bank and EBRD, which rank countries by the level of competitiveness, quality of governance by the state and progress in implementing structural reforms, together with Albania and Bosnia and Herzegovina, in the group of the least-placed European countries. Several weaknesses of the economic environment in Serbia are recognized for a long time, the inefficiency of the judiciary, incompetent and inefficient state administration, high level of corruption, poor management of public enterprises, inequality of market participants, etc. The unfavourable economic environment directly affects low investments, which, despite generous subsidies do not exceed 20% of

GDP. With such low investment rate in Serbia we cannot count on long-term high economic growth, and consequently on catching up with the Central and Eastern Europe Countries. In order for Serbia, as one of the least developed European countries, to gradually catch up with the developed European countries, it is necessary for its economy to grow for a longer period at a rate of 4-5%, which requires investments of at least 25% of GDP.

In 2015 and 2016 major progress was made in the area of fiscal policy - the fiscal deficit was reduced from 6.7% to 1.4% of GDP, while public debt began to decline. In plans for this year, the Government projected economy growth of 3%, as well as the fiscal deficit growth of 1.7% of GDP. However, already after the first quarter it was fairly certain that there are serious economic growth problems and that the fiscal outcome will be much better than planned. Adequate government response to weak economic growth and a growing fiscal surplus could have been giving up on taking public enterprises dividends by the state and the acceleration of existing and the launch of new public investments. The above-mentioned measures would impact the acceleration of the economic growth in this year, but the increase in economic capacity would have beneficial impact on the growth in the coming years. A somewhat more expansive fiscal policy, that would generate a low fiscal deficit of 0.5-1% of GDP, would be more suitable to economic trends in this year, and would also be sustainable in the long run. The delay in taking adequate measures was influenced by the holding of presidential elections, and then the government's reconstruction, as well as the attitudes of economists that are close to current government, who until the beginning of September claimed that a growth of 3% in this year will be achieved.

This year's slow economic growth brings up the question of what can be expected in the following year. Assuming that favourable trends in European economies will continue, as well as that agricultural production will be on an average level next year, and problems in EPS solved by the end of this year, a growth of around 4% in the next year can be expected. This growth could be the result of accelerating activities in non-agricultural activities from this year's 2.5% to around 3% in the following year and agriculture growth of around 10%. Although 4% growth looks as relatively high, behind it there is still a relatively slow growth trend of around 3% and a one-time growth due to the recovery of agriculture.

Given that cyclical fluctuations in the economy are under the influence of a large number of uncontrolled factors, such as weather conditions and developments in the international environment, the focus of economic policy and reforms should in the coming period be to create favourable conditions for accelerating the growth trend of the Serbian economy. Therefore, in the coming years, the improvement of the efficiency of judiciary and state administration, the restructuring and improvement of management in public companies, the suppression of corruption, the acceleration of infrastructure construction and so on, should be the Government's priority. It can be expected that the EU and international financial organizations will insist on mentioned reforms, but a decisive political commitment to their realization is crucial for the progress. The several-year delay of these reforms suggests that there are powerful interest groups in Serbia that are better off without these reforms, so their realization is uncertain in the future. The strongest resistance to the improvement of the economic environment comes from political party structures and bureaucrats as the existing environments enables them to achieve high rents, as well as from businessmen whose privileged jobs allow them extra profits. If, in the future, necessary reforms are not implemented, Serbia can only count on a temporary and limited growth of the economy. Past experience has shown that the lack of reforms cannot be compensated with high state subsidies to investors or strong growth of domestic demand. A synthetic indicator of substantial progress in the economic environment would be the increase of the investment rate to around 25%, whereby these investments would be dominantly financed from their own funds.

For the long-term growth of the economy it is important that the Government continues with a sustainable fiscal policy after the IMF arrangement expires. It is important not to repeat mistakes from the period of 2006-2008 when, after the expiration of the IMF arrangement, wages were significantly increased, followed by pensions, NIP (National Investment Plan) and numerous subsidy programs were launched, while taxes were reduced, leading to a large increase in the fiscal deficit. Adequate fiscal policy target in the next year, which would be in line with economic trends and sustainability of public finances, would be a fiscal deficit between 0.5 and 1% of GDP. In addition to keeping the fiscal deficit in the long-term sustainable framework, there is a need for changes in the structure of public expenditures in order to increase the share of productive expenditures that directly affect the acceleration of economic growth, such as public investments and investments in education and innovations. The state should give up on taking dividends from public companies, as dividends most directly reduce overall investments. Sustainable fiscal result implies that the growth of wages in the public sector essentially follow GDP growth, while the pensions rise at a somewhat lower real rate, in accordance with certain permanent rule such as the Swiss formula. If there is a certain fiscal space after that, a good idea would be to cut some of the taxes which would increase the available funds for investments in companies.

TRENDS

1. Review

Macroeconomic indicators in Q2 clearly reflect the two main characteristics of the domestic economy. The first, favourable, is macroeconomic stability. Inflation is relatively low and stable, at about 3% annually, with a tendency for gradual slowdown. The current account deficit in Q2 was also relatively low for Serbia, and amounted to 3.2% of GDP, while public finances were marked by the budget surplus with a strong decline of public debt. Another, unfavourable feature of the Serbian economy is the inability to accelerate the economic activity. Achieved economic growth of only 1.3% was the lowest in Central and Eastern Europe (except Macedonia). For such a slow economic growth in Serbia, excuse cannot be a drought or even bad EPS management, which led to major problems in the power sector. Low economic growth and systematic lagging behind comparable countries are the result of more permanent weaknesses of the domestic economy.

The two main characteristics of the domestic economy in 2017, mentioned above, (macroeconomic stability, but also low economic growth) are the result of economic policies carried out in the past years. We have written about these policies in detail in QM several times - clearly pointing out their possible outcomes. In short, over the past few years relatively strong fiscal measures have been implemented - public sector pensions and wages have been reduced, certain taxes and excises have been increased, and along with that exceptionally strong increases in public revenue collection was recorded as a result of more decisive work by the Tax Administration. Monetary policy was at the same time very cautious. The NBS gradually lowered the interest rate, with a certain delay related to market signals, and relatively strong interventions on the interbank market maintained a very stable dinarexchange rate. Desirable macroeconomic stability has been achieved with these measures. However, unlike the achievement of macroeconomic stability, economic policy completely failed in the reform which was supposed to support economic growth. Necessary reforms of public companies were not implemented (except for Zeleznica), a large number of state owned enterprises continue to make huge losses and their status is still not resolved (eg.Azotara), public investments are not being implemented efficiently, as well as healthcare and education reforms. In addition to all of this, little has been done to improve the economic environment, which would stimulate the growth of private investments (the rule of law, reduction of corruption, increased efficiency of public administration, and so on).

International circumstances were rarely ever so favourable for the high economic growth of Serbia (and other CEE countries) as in 2017. Expansive monetary policy ofthe ECB transmitted to low interest rates on euro-denominated borrowings, which also spilled over to CEE countries, including Serbia. In addition, the increase in demand on the Eurozone market has stimulated strong growth of CEE exports to the countries of Eurozone. In the first six months of 2017 the exports of Central and Eastern European countries to the countries of the Eurozone increased to more than 10% y-o-y (in 2016 this growth was only 4%). Monetary expansion of the ECB also stimulates growth of FDI in the CEE countries, as most of their foreign investments come from the Eurozone, which also positively impacts the economic growth of the region. In addition to all of this, CEE countries also benefited from low energy prices, since most of these countries are net importers of energy. After a temporary rise at the beginning of the year, energy prices returned quickly to their historically low levels. Due to all this, the CEE region in 2017 has seen the largest growth in economic activity since the outbreak of the crisis in 2008, and this growth is over 4%.

Serbia, unlike other comparable countries, has not taken advantage of this favourable international momentum to significantly accelerate GDP growth in 2017. GDP growth in Serbia in Q2 was only 1.3%, and in the first half of the year it was 1.2% (see section 2 "Economic activity"). It is true that Serbia's poor economic performance in 2017 has been affected by droughts and problems in the electric power sector, but even excluding these factors, Serbia's economic growth in the first half of 2017 would amount to only about 2.5% and would again be the lowest compared to all other CEE countries (excluding Macedonia, which had political instability). The reason for this, systemic lagging of Serbia's economic growth in comparison to other comparable countries, can be seen in low share of investments in the GDP of only 18% (in other CEE countries it is over 22%). Without significant acceleration of investments, primarily by domestic private sector, Serbia will hardly be able to achieve high growth rates. Because of all of this, we once again point out to the importance of urgent implementation of structural reforms that are crucial for increasing investments and accelerating Serbia's economic growth - because such favourable international circumstances will not last long, and Serbia, because of the unformed public sector and poor investment environment, fails to make the best of them.

The gradual growth of employment continued in Q2. According to the data from the Central Registry of Compulsory Social Insurance (CROCSI), the y-o-y growth of registered employment in Q2 amounted to 2.5%, which was in line with non-agriculture GDP growth. In addition, average wages also increased in real terms by 0.9%, so the real growth in the wage mass in Q2 was almost 3.5%. The trend of faster growth of the wage mass compared to the GDP growth rate (increase of unit labour costs) is unsustainable in the long-term, but we do not expect that in the coming quarters a significant slowdown of the current trends of employment growth and average wage growth will happen. Namely, important reasons for low economic growth are drought and poor EPS management, and they do not have much impact on employment trends. For this reason, it is better to compare the growth of the wage mass with the growth of the "trend" GDP - which is actually very close to the real growth of the wage mass, for the assessment of the sustainability of the current growth of employment and wages.

Unlike CROCSI data, data from the Labour Force Survey (LFS, which show a strong fall in unemployment and significantly higher growth in employment, are very suspicious. According to the LFS data, the y-o-y growth rate of formal employment in Q2 amounted to over 5%, which is not in line with employment growth trends based on the CROCSI data, but also not in line with other macroeconomic developments, such as the economic growth or collected contributions for social security (see section 3 "Labour market"). Thus, we find it indisputable that there is an increase in employment and the reduction of unemployment in 2017, but the intensity of these changes is most likely closer to the indications of the CROCSI data, or, in any case, less than what LFS estimates indicate.

As we already announced in the previous issue of QM, the acceleration of the inflation in the first quarter has proven to be temporary. After 2.3% inflation in Q1, in Q2 it slowed down to 0.5%, and we saw deflation of 0.2% in July and August (see section 5 "Prices and the Exchange rate"). Factors influencing price growth at the beginning of the year (seasonal increases in fruit and vegetable prices, oil prices, tobacco products, and telephone services) were rapidly depleted, and some even changed direction (prices of oil and prices of fruits and vegetables). Additionally, the relatively low inflation in the middle of the year was also influenced by the relatively strong dinar appreciation. The dinar in Q2 nominally appreciated when compared to the Euro by 2.5%, and this trend continued and deepened until mid-September, when the dinar reached its highest nominal value in relation to Euro since autumn 2014 - despite the fact that NBS during the period purchased about one billion euros on the interbank foreign exchange market. This appreciation of the dinar is economically damaging, especially in the current circumstances of low economic growth, as it reduces international competitiveness of the domestic economy and should be stopped by the monetary policy measures. By the end of the year, we do not expect large changes in inflation. The rise in the prices of agricultural products is unlikely to occur, despite droughts. The reason for that is that sufficient production has been achieved to satisfy domestic demand (exports will be reduced), and the drought was of local character (Balkans), so the world prices have not risen. Taking all this into account, in 2017 we expect inflation of about 3% annually.

As a reaction to the slowdown in inflation and strong appreciation pressures, the NBS, at the beginning of September, decided to reduce the key interest rate from 4% to 3.75%. Other monetary developments did not show any major changes in Q2 compared to the previous quarters. Credit activities of banks continues to grow solidly, primarily driven by the growth of lending to households, while lending from the business sector continues to lag behind (although there are some indications of gradual revival of activity in this segment also). After a relatively strong decline at the end of 2016, the share of non-performing loans in total loans has stabilized in 2017 at about 15%.

Movements in the Q2 balance of payments also stabilized (as well as the inflation) in accordance with the expectations made in the previous issue of QM. Q1 achieved a very high current account deficit of about 750 mln euros (9% of GDP), which was in Q2 reduced to below 300 mln euros (3.2% of GDP). A slightly more favourable foreign trade movements were significantly influenced by the improvement of the terms of trade, i.e. the reduction of energy prices, where Serbia is a net importer, and the rise in the price of basic metals, where Serbia is a net exporter (see section 4 "Balance of Payments and Foreign Trade"). It is also favourable that in Q2 the current account deficit was again fully covered by the inflow of foreign direct investments (FDIs), which in Q2 reached a level of almost 500 million euros - which was not the case in Q1.

At the level of the whole year, we expect the current account deficit to be about 1.6 billion euros (4.5% of GDP) and fully covered by foreign direct investments, which we expect to reach about 2 billion euros. Although these are not bad balance of payments results for Serbia, especially when compared to current account deficits of over 10% of GDP just a few years ago or the ones over 20% of GDP in years before the world economic crisis - there are certain reasons for caution. First of all, after four years of continuous reduction of the current account deficit, it rose again in 2017 compared to the previous year (when it was below 1.4 billion euros). Additionally, one part of the improvement of foreign trade trends is based on the improvement of the terms of trade (the reduction in world prices of imported products compared to Serbia's exports products), which can easily change. Because of all this, to maintain the achieved results in balancing the foreign trade relations, but also for further necessary improvements, it will be crucial for NBS, with available measures, to prevent the real strengthening of the dinar, but also that the government does not increase pensions and wages in the public sector above GDP growth rate.

Public finances, in Q2 and July,were marked by the continuation of the surplus of the consolidated budget, which reached about RSD 75bn from the beginning of the year to the end of July (see section 6 "Fiscal Flows and Policies"). The surplus over the first seven months hides a strong public revenue growth by about 5% in real terms compared to the previous year, while the public expenditureswere reduced by about 2% in real terms. On the public revenues side, the largest growth in the previous year (and in relation to the 2017 budget plan) had corporate income tax, which is in real terms even more than 45% higher than in the previous year. This was due to the fact that in 2016 the profitability of the economy grew strongly, influenced by the improving terms of trade (primarily the fall in energy prices) and the fall in capital costs on the international market. Compared to the plan, a huge increase is recorded also in non-tax revenues, mostly due to the unusually large payments of state institutions to the budget (NBS has mad unplanned payment of RSD 9.6bn, the Deposit Insurance Agency of 1.5bn., etc.). On the public expenditures side, there was a sharp decrease in interest expenditures compared to the plan, primarily due to the appreciation of the dinar against the dollar and euro (less because ofthe reduction of interest rates), and, in addition, pension expenditures are reduced due to lower inflow of new retirees (increasein the age limit for retirement of women). However, behind a significant part of the reduction of public expenditures, there is an economically undesirable reduction of public investments which were even 20% lower in real terms in the first seven months of 2017 than in the same period last year. By the end of the year, we expect a certain acceleration of public investments, higher payment of subsidies and usual strong increase in expenditures for the purchase of goods and services in December. That is why we believe that the current, large, fiscal surplus will be reduced, but that in addition the state will achieve budget surplus in 2017, which we currently estimate at 20 to 30 billion dinars.

Public debt fell to below 68% of GDP at the end of July, down by almost 7 pp. compared to the end of 2016. Although the public debt reduction was significantly influenced by the achieved fiscal, the greatest credit for this reduction has the exceptionally strong appreciation of the dinar against the dollar and, to a lesser extent, the euro. Since the beginning of the year the dinar has strengthen in real terms against the dollar by about 15%, and since almost one third of Serbia's public debt is in the dollar - this affected the reduction of the public debt by about 5 pp. of the GDP.

Since in 2017, in all probability, a surplus (with relatively strong public debt reduction) will be achieved, this means that in 2018 no additional measures are needed to reduce spending and / or increase revenue - for the first time since the outbreak of the crisis in 2008. This, however, does not mean that it is justified to spend budget funds irrationally, nor to ignore major fiscal risks coming from the unreformed public sector. Good fiscal policy in the coming years should also support faster economic growth, instead of being an obstacle as it is now. For this reason, efforts to reform large public companies must be intensified, above all EPS, whose bad performance has considerably lowered the GDP growth rate in 2017, as well as to solve the fate of the remaining state-owned enterprises, which represent a high fiscal risk and hinder economic growth of the country, but also to significantly increase public investment. A major mistake in economic policy in 2018 (and in the following years) would be to allow faster growth of public sector pensions and wages than the nominal GDP growth. Such an increase in expenditures for pension and wages would not significantly stimulate economic growth and would almost certainly lead to the growth of external and internal imbalances of the Serbian economy (current account deficit and inflation).

Serbia: Selected Macroeconomic Indicators, 2006-2017

	Annual Data																				
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2015				2016				2017	
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Economic Growth										**y-o-y, real growth[1]**											
GDP (in billions of dinars)	2,055.2	2,355.1	2,744.9	2,880.1	3,067.2	3407.6	3584.2	3876.4	3908.5	4043.5	4197.8	…	…	…	…	…	…	…	…	…	…
GDP	4.9	5.9	5.4	-3.1	0.6	1.4	-1	2.6	-1.8	0.8	2.8	-1.7	1.2	2.3	1.1	3.8	2.1	2.8	2.5	1.0	1.3
Non-agricultural GVA	5.1	6.9	4.4	-3.3	0.2	1.5	1.1	1.6	-2.5	1.9	2.6	-1.9	2.7	3.7	2.2	4.1	2.0	2.3	2.1	1.6	2.3
Industrial production	4.2	4.1	1.4	-12.6	2.5	2.2	-2.9	5.5	-6.5	8.2	4.7	-2.0	11.1	13.2	10.2	10.5	2.4	3.7	2.8	0.7	3.1
Manufacturing	4.5	4.7	1.1	-16.1	3.9	-0.4	-1.8	4.8	-1.4	5.3	5.3	4.2	7.3	6.4	3.2	6.5	5.9	4.4	5.3	7.3	5.1
Average net wage (per month, in dinars)[2]	21,745	27,785	29,174	31,758	34,159	37,976	41,377	43,932	44,530	44,437	46,087	41,718	44,717	44,719	46,592	43,588	46,450	46041	48168	45437	48670
Registered Employment (in millions)	2.028	1.998	1.997	1.901	1.805	1,866	1,865	1,864	1,845	1,990	1989	1,983	1,985	1,998	1,989	1,978	2,008	2,023	2,030	2018	2058.5
Fiscal data										**in % of GDP**											
Public Revenues	42.4	42.1	41.5	38.6	-1.5	-4.6	0.6	-3.0	3.2	3.1	7.5	6.9	3.5	4.5	-1.4	7.4	7.8	9.2	5.6	5.2	5.5
Public Expenditures	42.7	42.8	43.7	42.7	-1.7	3.3	3.6	-5.7	5.2	-3.2	1.9	-5.4	-3.8	-1.3	-2.6	5.7	4.9	2.3	-3.7	-1.3	-1.7
										in billions of dinars											
Overall fiscal balance (GFS definition)[3]	-33.5	-58.2	-68.9	-121.8	-136.4	-158.2	-217.4	-178.7	-258.1	-149.1	-57.1	-21.2	-14.2	-15.8	-98.0	-16.0	-2.1	13.8	-52.8	11.7	32.3
Balance of Payments										**in millions of euros, flows[1]**											
Imports of goods[4]	-10,093	-12,858	-15,917	-11,096	-11,575	-13,614	-14,011	-14,674	-14,752	-15,350	-16,209	-3,648	-3,869	-3,777	-4,057	-3,701	-4,230	-3,939	-4,339 0	-4,271	-4,662
Exports of goods[4]	5,111	6,444	7,416	5,978	6,856	8,118	8,376	10,515	10,641	11,357	12,732	2,601	2,997	2,882	2,877	2,956	3,294	3,131	3,351	3,245	3,685
Current account5[)]	-3,137	-4,994	-7,054	-2,084	-2,037	-3,656	-3,671	-2,098	-1,985	-1,577	-1,370	-511	-279	-343	-445	-378	-309	-293	-390	-746	-287
in % GDP[5]	*-12.9*	*-17.2*	*-21.6*	*-7.2*	*-6.8*	*-10.9*	*-11.6*	*-6.1*	*-5.9*	*-4.8*	*-4.0*	*-6.7*	*-3.2*	*-3.9*	*-5.2*	*-4.8*	*-3.6*	*-3.3*	*-4.5*	*-8.6*	*-3.2*
Capital account[5]	7,635	6,126	7,133	2,207	1,553	3,340	3,351	1,630	1,705	1,205	790	427	139	243	396	184	197	127	282 0	503	236
Foreign direct investments	4,348	1,942	1,824	1,372	1,133	3,320	753	1,298	1,236	1,804	1,861	339	441	510	514	480	404	492	485 0	501	487
NBS gross reserves (increase +)	4,240	941	-1,687	2,363	-929	1,801	-1,137	697	-1,797	166	-302	111	-32	300	-213	-836	-317	332	519	-455	222
Monetary data										**in millions of dinars, e.o.p. stock[1]**											
NBS net own reserves[6]	302,783	400,195	475,110	578,791	489,847	606,834	656,347	757,689	788,293	931,320	923,966	854,636	858,972	902,526	931,320	884,093	846,969	899,959	923,966	894,102	881,125
NBS net own reserves[6], in mn of euros	3,833	5,051	5,362	6,030	4,609	5,895	5,781	6,605	6,486	7,649	7,486	7,094	7,125	7,509	7,649	7,180	6,864	7,303	7,486	7,217	7,221
Credit to the non-government sector	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	1,982,974	2,031,825	1,919,958	1,918,917	1929573	1,982,974	1,961,626	2,009,537	2,044,160	2,031,825	2,042,971	2,050,579
FX deposits of households	260,661	381,687	413,766	565,294	730,846	775,600	909912	933,839	998,277	1,014,260	1,070,944	1,004,948	1,010,179	995123	1,014,260	1,027,439	1,048,123	1,053,841	1,070,944	1,087,084	1,067,142
M2 (y-o-y, real growth, in %)	30.6	27.8	2.9	9.8	1.3	2.7	-2.2	2.3	6.7	5.5	8	6.4	5.8	2.6	5.5	7.2	7.3	9.4	8	6.4	4.8
Credit to the non-government sector (y-o-y, real growth, in %)	10.3	24.9	25.2 5,2		13.9	0.5	-2.1	-8.3	1.2	1.4	0.9	3.7	2	0.7	1.4	1.6	4.2	5.2	0.9	0.5	2.7
Credit to the non-government sector, in % GDP	28.6	35.0	42.0	45.8	54.0	52.4	54.7	48.3	49.5	48.4	47.2	47.4	47.0	46.9	47.8	46.8	47.6	48.0	47.2	40.4	47.7
Prices and the Exchange Rate										**Y-o-y growth[1]**											
Consumer Prices Index[7]	6.5	11.3	8.6	6.6	10.2	7.0	12.2	2.2	1.8	1.6	1.5	1.8	1.9	1.4	1.6	0.6	0.3	0.6	1.5	3.5	3.6
Real exchange rate dinar/euro (average 2005=100)[8]	92.1	83.9	78.5	83.9	88.0	80.43	85.3	80.2	81.8	83.1	84.21	83.8	83.0	82.6	83.2	83.48	84.31	84.08	84.21	83.1	82.5
Nominal exchange rate dinar/euro[8]	84.19	79.97	81.46	93.90	102.90	101.88	113.03	113.09	117.25	120.8	123.26	121.6	120.4	120.2	120.8	122.85	123.01	123.3	123.26	123.88	122.91

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 that 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

The economic activity growth in Q2 was very weak. With year on year (y-o-y) GDP growth of only 1.3% of GDP, Serbia had the lowest economic growth compared to all other Central and Eastern European countries (CEECs) except Macedonia. The poor performance of economic activity in Q2 was partly affected by temporary factors - a drop of 10% in agriculture due to the drought and the continuing problem of electricity production in April and May resulting in a sharp fall of this sector of 5%. Without these factors GDP growth in Q2 would be considerably higher and would amount to 2.4% instead of 1.3%. However, even then, we would have maintained a relatively unfavourable assessment of the trend of economic activity in Serbia, as the economic growth of all other CEE countries (except for Macedonia) in Q2 was higher than 2.4% and amounted to over 4% in average. Thus, relatively bad economic indicators in Serbia and lagging behind the comparable countries cannot be completely explained by drought and poor EPS management, but there are them are other structural problems in the functioning of the domestic economy behind them. As a reaction to low economic growth, the government has announced short-term measures to boost economic activity related to the launch of new public investments, and in this context a reduction in taxes and an increase in current consumption of the state has been mentioned (announcements of relatively high growth of public pensions and wages in 2018).

However, these measures will not be implemented in 2017, when we expect GDP growth to range from 1.5 to 2%, and we also rate them as insufficiently well-thought out. The announced increase in wages and pensions is many times tried out, inefficient measure for stimulating economic growth in Serbia, while one-off tax reductions have limited range and should be very cautiously accessed, as the tax system in Serbia does not differ significantly from other comparable countries and is not a significant barrier for a high economic growth of the country. Finally, the start of new investment projects is not disputable (if economically justified), but before this it should be examined why the realization of public investments already planned in the existing budget is late. The key to long-term high and sustainable economic growth of over 4%, instead in announced short term measures, should be sought in significantly more severe systematic structural reforms of the public sector and state owned enterprises, increase of efficiency in the implementation of public investments and in the improvement of the economic environment (rule of law, reduction of corruption, increased efficiency of the state administration and others).

Gross Domestic Product

A relatively low GDP growth of 1.3% was achieved in Q2

According to the most recent SORS data, the y-o-y GDP growth in Q2 was 1.3%, which is estimated as a bad result. Although in previous QM issue we estimated that a significant acceleration in economic activity will happen in Q2 in comparison to Q1, i.e., that despite the poor results in Q1, GDP growth rate of 3% in 2017 was still attainable - results from Q2 now exclude this option. Compared to the spring, when we made the previous forecasts, it turned out: 1) that the agricultural season in 2017 will be very bad because of the drought; 2) that EPS did not, as we assumed, set up normal electricity production in April, instead its problems lasted longer, until May; and 3) that the rest of the economy did not speed up its activity in accordance with our expectations. Because of all this, it is already certain that instead of the estimated GDP growth rate of 3% in 2017, a significantly lower economic growth of between 1.5% and 2% of GDP will be achieved.

Permanent growth rate of economic activity is about 2.5% ...

As we already mentioned, bad results of the economic activity in Q2, as well as in the whole of 2017, are significantly influenced by the drought which (by recent SORS estimates) reduced total agricultural production by about 10%, but also poor EPS management which lead to large fall of coal production (Kolubara) at the end of 2016 and in Q1 2017, and then the electricity production (thermal power plants) which lasted from the end of 2016 until May 2017. Since these factors were one-off by their nature and were unpredictable at the beginning of the year - for comparison with the forecasted growth rate of 3% in 2017 and assessment of a more sustainable trend in economic activity, these factors should be excluded. With the exclusion of agriculture and EPS, the y-o-y growth of the "underlying" GDP in Q2 was 2.4%, and in Q1 2.3%. This would, therefore, significantly improve the estimate of economic trend in 2017, i.e., it would appear that in 2017 the "underlying" trend of economic growth is not slowing down compared to 2016[1].

... but it is still lower than the planned 3% of economic growth

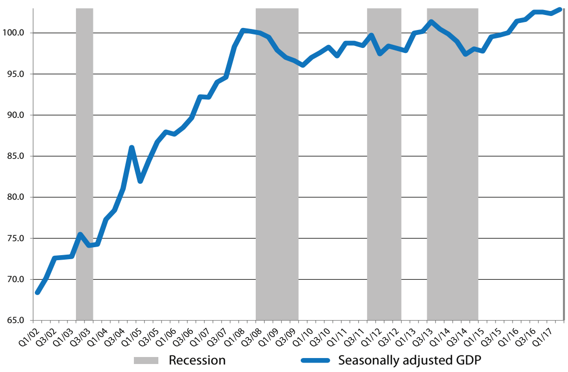
However, although in 2017 there hasn't been a slowdown in GDP growth trend compared to 2016, it was estimated that GDP growth in 2017 will accelerate faster than in 2016 and reach 3%, while some state officials and economists went a step further by calling the economic growth forecast of 3% conservative and announced a growth of GDP in 2017 from 3.5 to 4%. Our analysis shows that GDP growth of 3% would be achieved in the first half of the year even without the drought and with EPS working "normally", so independently of temporary factors influence, we can say that the economic trends in the first half of 2017 were about 0.5 pp lower than forecasted. Other announcements of economic growth above 3% that were widely publicized before the beginning of 2017 were more politically motivated than economically based, and the results of the economy in the first half of 2017 show that unambiguously.

Seasonally adjusted GDP growth in Q2 of 0.5% confirms the estimated trends

Graph T2-1 shows a series of seasonally adjusted GDP growth that shows short-term trends in economic activity from the y-o-y indices somewhat more reliably (shaded periods represent a recession according to the Bry-Boschan procedure). Unlike the year-on-year GDP indices, which will be reduced throughout 2017 due to a fall of agricultural production, for seasonally adjusted indices the effect of one-off factors was mainly exhausted in Q[2]1, so seasonally adjusted GDP growth in Q2 compared to Q1 may be an additional indication of "underlying" economic trends (without temporary factors). Seasonally adjusted GDP growth in Q2 compared to Q1 amounted to about 0.5, which would indicate an economic growth rate of about 2% annually. Although this quarterly indicator is not so reliable for a more accurate assessment of annual economic activity trends (if the seasonally adjusted quarterly Q2 growth was only slightly higher, for example 0.7% instead of 0.5%, then we could easily conclude that GDP growth rate was about 3% annually) - in Q2 it is approximately in line with our previous estimate that the growth of "underlying" GDP, without the effects of the drought and problems in EPS, was in the first half of 2017 around 2.5%.

GDP growth in Q2 is well below the regional average

Graph T2-1. Serbia: Seasonally adjusted GDP growth, 2002-2017 (2008 = 100)



Source: *QM* estimates based on SORS

In this section of the text we will hold on a little more on the assessment of the results of economic activity in the first half (H1) of 2017, observing them also in an international context. To this end, in Table T2-2 we have shown the GDP growth of Serbia and Central and Eastern European countries (CEE). Although we have shown only the last three years in the Table, Serbia has, since the beginning of the crisis (since 2010), achieved a steady economic growth compared to the CEE countries. In H1, this lag was further deepened as GDP growth in Serbia was 1.2%, average y-o-y growth of Central and Eastern Europe countries 4.2%, and in countries in the immediate neighbourhood of Serbia 4.3%. The only country in Central and Eastern Europe that had a lower growth than Serbia is Macedonia, but the reason for such bad result of the Macedonian economy is the political instability that marked the first half of the year in this country.

1 In fact, when we consider that the agricultural season in 2016 was above average, or that "carrying" GDP growth in 2016 was slightly lower than the 2.8% achieved, we come to the conclusion that the permanent trends of economic activity in 2017 even mildly accelerate (Table T2-2).

2 SORS methodology is such that the y-o-y impact of bad agricultural season is roughly distributed over all four quarters throughout the year. This, on the other hand, reflects a higher one-off seasonally adjusted decline in GDP only in the first quarter, while the impact of agriculture on seasonally adjusted quarterly growth in the following quarters is relatively small. Similarly, the effect of falling EPS production on seasonally adjusted indices was depleted in Q4 2016 and Q1 2017.

In Table T2-2, we also added the growth rate of Serbia's GDP, which we called "underlying" economic growth, were we excluded the changes in GDP growth caused by agricultural seasons and the production of electricity and coal mining which were under large influence of the 2014 floods, and the problems in EPS in the first half of 2017. It can be seen from the Table that the GDP growth in Serbia, even after the exclusion of these factors, systematically lags behind the growth of the countries in the region and that the reasons for the low economic growth in Serbia should not be sought solely in the temporary effects of droughts and problems in the electric power sector.

Table T2-2. Serbia and countries in the region: GDP growth and share of investments in GDP, 2014-2017

	2014	2015	2016	H1 2017	Share of investments in	Share of private consumption in
Serbia	-1.8	0.8	2.8	1.0	17.7	74.7
Serbia– underlying growth [2)]	-0.8	1.2	2.3	2.4	-	-
Neighbouring countries (weighted average)	2.7	3.4	3.5	4.3	22.7	60.1
Albania	1.8	2.2	3.4	3.9	27.2	80.9
Bosnia and Herzegovina	1.2	3.0	3.1	2.7	17.3	79.5
Bulgaria	1.4	3.6	3.4	4.0	21.0	62.5
Croatia	-0.5	2.3	3.0	2.7	19.5	58.8
Hungary	4.1	3.1	2.0	3.7	21.7	49.3
Macedonia	3.6	3.8	2.4	-0.9	23.0	68.5
Montenegro	1.8	3.4	2.5	3.2	20.3	79.2
Romania	3.0	4.0	4.8	5.8	24.7	61.9
CEE (weighted average)	2.9	3.7	3.0	4.2	22.0	57.4

1) In 2015
2) Effects of drought, flood and poor EPS management
Source: Eurostat, Statistical offices of individual countries and EU Commission (European Economic Forecast – Winter 2017)

The permanent defect resulting in the low growth rate of Serbia's economy is the lack of investment

Therefore, even if Serbia recorded a growth in the first half of 2017 of about 2.5% it would have been the lowest economic growth in comparison to all Central and Eastern European countries (except for Macedonia) - and we remind that Serbia has been lagging behind the region since 2010. Therefore, we conclude that not only temporary factors were the reason for relatively low growth of GDP in 2017, but that such result is only a continuation of the long-term unfavourable economic trends. We also showed indication of structural problems that hinder high GDP growth in Table T2-2. Specifically, in the second to last column of the Table we have show that the share of investment in GDP in Serbia is considerably lower than in the neighbouring countries - amounts to only about 18%[3] of GDP compared to around 23% of GDP in the neighbouring countries and 22% in all CEE countries. With such low level of investment, far lower than in comparable countries, Serbia cannot expect to begin catching up in the near future. We have written in detail in several previous issues of QM about the reasons for low investments so we will not describe them here again. It is important to note that these reasons are mostly of a structural nature (rule of law, inefficiency of the state administration, high level of corruption, poor state of the infrastructure and others) and only can be solved via medium-term reforms in these areas that are permanently avoided in Serbia.

Instead of implementing economic policies aimed at steady increase in investment, recent ideas revive the idea that accelerating economic growth in Serbia could be achieved by increasing consumption, i.e. by increasing public sector pensions and wages above nominal GDP growth. This is politically popular, but this measure has repeatedly proved ineffective in terms of boosting economic growth in Serbia. Perhaps the best example for this is 2015 (Table T2-2), when, in spite of a significant reduction in pensions and wages in the public sector, economic activity accelerated rather than slowed down compared to the previous year. An additional strong indication that the increase in private consumption is an ineffective measure for stimulation of economic growth can also be found in Table T2-2 where it can be seen that Serbia already has a higher share of consumption inGDP compared to other comparable countries, and this did not result in larger economic growth in Serbia - on the contrary, economic growth in Serbia was systematically lower in comparison to comparable countries. Encouraging private consumption to stimulate

3 Accurate data on investment participation in GDP in 2016 for Serbia and the countries of the environment are not yet available, but on the basis of slightly faster growth of investments than other components of GDP in 2016, we conclude that this share in Serbia will increase from 17,7% of GDP to around 18% of GDP.

economic growth can only be effective in large economies with unused and competitive production capacities - which does not apply to Serbia. In Serbia, the growth of pensions and wages in the public sector above GDP growth would primarily reflect in the growth of foreign trade and internal imbalances (current deficit and inflation).

The structure of GDP growth in Q2 was not economically favourable

The structure of GDP growth in Q2 by expenditure method is presented in Table T2-3. Unlike in 2016, when economic growth was driven by investments (growth of about 5%) and net exports (growth of exports by 12% almost twice higher than the growth of imports), with significantly slower growth in personal consumption –the structure of growth in Q2 and in the whole first half of 2017 is considerably different. Personal consumption accelerated the year-on-year growth compared to the previous year and in the first half of 2017 it recorded a real y-o-y growth of 1.8%. On the other hand, investments slowed down to only about 2%, which is not enough for (needed) increase of their GDP share. Finally, net exports in 2017 negatively contribute to GDP growth (the foreign trade deficit is increasing). Such structure of GDP growth, which is not based on investments and growth in net exports, cannot, in the medium term, result in a high overall growth rate of GDP, but it leads to an increase of macroeconomic imbalances. Economic policies should recognize these unfavourable trends and react to their change, rather than announcing an even greater increase in private consumption and further deepening the imbalances.

Table T2-3. Serbia: GDP by expenditure method, 2009-2017

	Y-o-y indices														
	2009	2010	2011	2012	2013	2014	2015	2016	2016				2017		Share
									Q1	Q2	Q3	Q4	Q1	Q2	2015
GDP	96.9	100.6	101.4	99.0	102.6	98.2	100.8	102.8	103.8	102.1	102.8	102.5	101.0	101.3	100.0
Private consumption	99.4	99.4	100.9	98.2	99.4	98.7	100.5	100.8	100.8	101.0	100.5	101.0	102.0	101.6	74.7
State consumption	100.6	100.8	101.1	102.4	98.9	99.4	98.5	102.3	102.3	103.7	100.8	102.3	100.5	101.7	16.2
Investment	77.5	93.5	104.6	113.2	88.0	96.4	105.6	104.9	106.8	104.4	106.2	102.6	101.9	102.0	17.7
Export	93.1	115.0	105.0	100.8	121.3	105.7	110.2	111.9	112.4	110.7	110.7	113.8	109.7	111.5	46.7
Import	80.4	104.4	107.9	101.4	105.0	105.6	109.3	106.8	104.3	111.1	105.7	105.9	111.7	110.3	56.4

Source: SORS

Large decline in agriculture, relatively high growth in trade, traffic and tourism

Table T2-4 shows GDP growth by activity. In Q2, a sharp drop in agriculture of 10% is evident, which is the consequence of the impact of the drought on the farming. On the other hand, growth of services accelerates, i.e. the trade, transport and tourism sector, with a real annual growth of 4.4% which is practically the largest since the outbreak of the crisis in the second half of 2008[4]. The growth of GDP by activity in Q2 was therefore consistent with the growth of GDP by expenditure method–it can be seen that the GDP growth is increasingly attributed to the growth of personal consumption, resulting in acceleration of the growth of services, while investments have slowed down compared to the previous years, which is indirectly indicated by a slight decline in construction activity. Other production sectors have relatively uniform annual growth rates ranging from 1.3% to 2.8% (Table T2-4).

Table T2-4. Serbia: Gross Domestic Product by Activity, 2009-2017

	2009	2010	2011	2012	2013	2014	2015	2016	2016				2017		Share
									Q1	Q2	Q3	Q4	Q1	Q2	2015
Total	96.9	100.6	101.4	99.0	102.6	98.2	100.8	102.8	103.8	102.1	102.8	102.5	101.0	101.3	100.0
Taxes minus subsidies	98.6	99.5	101.1	97.8	98.9	99.2	100.9	101.1	101.0	101.7	100.2	101.4	102.2	101.9	16.0
Value Added at basic prices	96.6	100.8	101.5	99.2	103.3	98.0	100.7	103.1	104.4	102.2	103.3	102.7	100.7	101.2	84.0
Non agricultural Value Added	96.7	100.2	101.5	101.1	101.6	97.5	101.7	102.6	104.1	102.0	102.3	102.1	101.6	102.3	90,5[2)]
Agriculture	95.2	106.4	100.9	82.7	120.9	102.0	92.3	108.3	107.7	104.6	111.8	108.1	92.0	90.0	9,5[2)]
Industry	96.8	100.8	103.2	105.6	106.0	92.4	103.2	103.0	106.9	100.3	102.7	102.3	101.4	102.8	24,4[2)]
Construction	87.1	97.6	105.9	90.2	96.1	98.5	102.7	106.4	112.9	107.8	108.6	99.4	96.9	97.2	5,2[2)]
Trade, transport and tourism	92.9	100.0	99.5	99.3	102.3	101.1	102.2	103.9	105.1	103.1	103.4	104.2	103.2	104.4	18,4[2)]
Informations and communications	97.0	103.2	102.6	102.8	99.9	96.1	101.7	102.3	102.3	102.3	102.0	102.6	101.1	101.7	5,1[2)]
Financial sector and insurance	102.6	101.9	98.4	92.0	90.5	97.2	102.3	103.4	102.7	103.5	104.2	103.2	104.6	101.8	3,2[2)]
Other	99.7	99.8	100.9	101.8	100.2	99.9	99.8	101.1	101.4	101.4	100.6	101.2	100.6	101.3	34,3[2)]

Source: SORS
1) Prices in thepreviousyear
2) Participation in GAV

4 Only the third quarter of 2010 saw a slightly higher year-on-year growth in this sector, but it was the result of a comparison with a very low base from Q3 2009 and did not prove to be sustainable.

We expect GDP growth in 2017 to be between 1.5 and 2%

Since in the first half of the year a low GDP growth of 1.2% was recorded, by the end of the year, this result cannot change significantly. However, in the second half of the year we expect a certain acceleration of economic activity. Economic growth of the whole EU and Serbia's most important foreign trade partners in mid-2017 is speeding up[5], which encourages the growth of Serbia's exports and the increase of FDI (and exports and FDIs have a relatively strong growth of more than 10% compared to the previous year). In addition, we expect to see a rise in construction activity in the coming quarters, among other things because the government has accelerated the implementation of infrastructure projects after their very slow execution in the first five months. Also, a relatively sharp decline in EPS production began in Q4 2016, which is why there will be a comparison between the electric power sector's results at the end of the year and a low base from the previous year (of course, assuming that EPS solves the problems that led to its production decline at the end of 2016 and in the first half of 2017). Taking all this into account, by the end of the year, we expect a certain acceleration of the growth of economic activity, which will result in total GDP growth rate in 2017 between 1.5%and 2%.

In 2018it is possible to temporarily accelerate GDP growth to around 4%

At the end of this analysis we note once again that the growth of GDP in 2017 is lower than forecasted partly as a result of the effect of the factors which will, most likely, be exhausted by the end of the year (drought and EPS production drop). At the same time, these factors reduced the 2017 base, with which the results of the economy will be compared in 2018. Therefore, it is highly likely that the GDP growth rate in 2018 will be relatively fast, i.e. around 4%, without significant acceleration of the "underlying" trend of economic activity, which could amount to about 3% in 2018. We note, however, that this kind of "acceleration" of economic growth in 2018, if it happens, should not be interpreted positively without critics. A more detailed analysis undoubtedly shows that the Serbian economy has major structural weaknesses, because of which for a longer period of time Serbia significantly has been lagging behind the growth of other comparable CEE countries.

Industrial production

Total industrial production is gradually recovering in Q2 due to a smaller fall in the electrical power sector

Industrial production in Q2 recorded a growth of 3.1% (Table T2-5), which represents a solid acceleration of 0.7% compared to Q1. This, more favourable result actually only hides better trends in the electric power sector than in the previous quarter, rather than the widespread acceleration of industrial production. These individual trends have led to an acceleration in the growth of total industrial production despite the fact that the manufacturing industry slowed down its y-o-y growth of around 7% from Q1 to around 5% in Q2 (Table T2-5).

Table T2-5. Serbia: Industrial Production Indices, 2009-2017

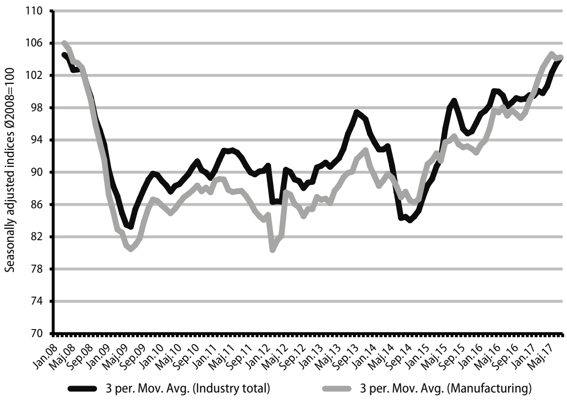
	Y-o-y indices														Share
	2009	2010	2011	2012	2013	2014	2015	2016	2016				2017		2015
									Q1	Q2	Q3	Q4	Q1	Q2	
Total	87.4	102.5	102.2	97.1	105.5	93.5	108.2	104.7	110.5	102.4	103.7	102.8	100.7	103.1	100.0
Mining and quarrying	96.2	105.8	110.4	97.8	105.3	83.3	110.5	104.0	114.3	99.2	103.4	100.5	93.7	107.3	7.0
Manufacturing	83.9	103.9	99.6	98.2	104.8	98.6	105.3	105.3	106.5	105.9	104.4	105.3	107.3	105.1	80.1
Electricity, gas, and water supply	100.8	95.6	109.7	92.9	108.1	79.9	118.8	102.7	120.9	90.2	102.1	95.9	85.5	94.1	12.9

Source: SORS

Electricity production in Q2 decreased its y-o-y drop by as much as 10 pp, or from 15% to about 6%, and mining left the zone of the y-o-y decline (the decline in Q1 was a result of problems of coal mining) and recorded a growth in Q2 of about 7%. For now it is not yet fully known whether these indices indicate that EPS, in the first six months of the year, succeeded in resolving problems in its operations that led to a sharp decline in its Q1 production, or a slightly better y-o-y results of the electric power sector in Q2 are the consequence of the end of heating season which is always followed with the usual, seasonal, slowdown. The latter would mean that

5 Y-o-y growth of GDP in EU28 is around 2.4%, and of the Eurozone 2.3%

Graph T2-6. Serbia: Seasonally Adjusted Industrial Production Indices, 2008-2017



Source: SORS

EPS with ongoing production problems was able to meet the reduced need for production when the winter ended, but that the actual condition of this company will be seen when a new heating season begins. So, the definitive answer to this question will be given in the last months of 2017.

The analysis of industrial production trend, which was made on the basis of the y-o-y indices, is fully corroborated by the seasonally adjusted indices we have shown in the Graph T2-6. The graph shows that the overall industrial production (darker line on the graph) accelerated its seasonal growth in Q2, but that the manufacturing industry (lighter line on the chart) stagnated.

A significant fall in motor vehicle production and slowdown in the food industry in Q2

The slowdown in the manufacturing industry is the consequence of the decline in the production of a smaller number of sectors, while the largest part of the manufacturing industry continues with relatively high rates of growth as in Q2. Within the manufacturing industry, the largest change in Q2 compared to Q1 had the production of motor vehicles, which passed from the area of positive y-o-y growth of more than 7% to the y-o-y decline of around 10% (which culminated in July with a fall of about 20%). The reason for this decline is the strike of employees in FAS. Given that the strike was ended by the end of July, we expect the results of this field of industrial production to be more favourable as of August. However, the slowdown in food industry may last longer, as the poor agricultural season certainly affects the results of this area. The food industry has reduced its annual growth from over 5% in Q1 to about 1% in Q2. These two sectors are most responsible for slowing the y-o-y growth of the manufacturing industry (and the stagnation of the seasonally adjusted index), while the remaining areas generally have similar growth rates in Q2 compared to Q1. On the positive side, there are sectors that stand out with the high double-digit growth and are mainly export-oriented: chemical industry, rubber products production, furniture production, basic metals (privatization of the Železara) as well as the tobacco industry. Among the most important sectors of the manufacturing industry which during the whole of 2017 have had a significant decline compared to the previous year, only the production of petroleum products stands out with the decline of about 10%.

Table T2-7. Serbia: Components of Industrial Production by Use, 2009-2017

	Y-o-y indices													
	2009	2010	2011	2012	2013	2014	2015	2016	2016				2017	
									Q1	Q2	Q3	Q4	Q1	Q2
Total	87.4	102.5	102.1	97.1	105.5	93.5	108.2	104.7	110.5	102.4	103.7	102.8	100.7	103.1
Energy	98.8	97.7	106.2	93.6	113.2	82.6	116.9	101.9	118.3	94.3	96.5	97.1	88.0	95.2
Investment goods	79.3	93.6	103.2	103.8	127.6	95.9	103.0	101.6	97.7	100.3	104.7	102.6	113.0	107.0
Intermediate goods	78.4	109.2	102.2	91.2	99.0	96.8	105.3	109.5	111.2	110.6	108.0	106.5	110.3	109.5
Consumer goods	86.8	102.1	95.4	103.2	100.7	100.7	104.0	105.6	107.4	103.9	107.0	105.6	105.8	105.3

Source: SORS

The decline in energy production reduces

Observing components of industrial production by use (Table T2-7), the only group that recorded the y-o-y decline in Q2 was energy production, while other groups had a solid growth of about 5% (consumer goods) to about 10% (intermediate goods). The changes that we observed by analysing industrial production by sectors are reflected in the movement of industrial products by use. In Q2 the huge decline in EPS production from Q1 was reduced, which led to a decrease in energy production decline from 12% to about 5%. On the other hand, the strike at FAS has affected the decrease in the production of investment products (including car production). Production of intermediate products prevails over other products as a result of high production in privatized iron works from Smederevo and the chemical industry. The production of consumer goods has somewhat slowed down under the influence of the food industry, but this slowdown is partly compensated with a slight acceleration in the production of other activities from this group.

Construction

Official statistics shows fall in construction activity

According to data from National Accounts statistics, construction activity had a mild y-o-y decline of about 2.5% in Q2. This estimate is mostly based on the index value of construction works published by SORS in the field of civil engineering statistics, which shows a y-o-y drop in the value of construction works in Q2 of about 5% at constant prices. We note, however, that construction activity is very difficult to estimate statistically in the short term and in a reliable manner. Construction is a highly dynamic sector where there is a large number of small businesses which are easily founded and closed, and a good part of construction activity is carried out in a gray zone and remains unregistered. Because of the easier monitoring of large and state-owned enterprises, the indexes of construction activity of official statistics are biased towards their results, which do not necessarily have to fully describe the movement of the whole sector. Our analysis suggests that this was probably the case in the first half of 2017. In other words, the slow execution of public investment in the first half of the year reduced the activity of the part of the construction sector which is better monitored by the statistics, resulting in presented results of the overall sector worse than the actual results.

Table T2-8. Serbia: Cement Production, 2001-2017

	Y-o-y indices				
	Q1	Q2	Q3	Q4	Total
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
2015	77.9	112.4	104.5	108.7	103.1
2016	120.2	109.8	109.9	100.4	108.9
2017	110.4	104.1	-	-	-

Source: SORS

However, construction activity in Q2 is likely to have a slight growth compared to the previous year

In order to assess the real trends of construction activity in Q2 more reliably, we use cement production index as an additional indicator (cement is used as construction material in almost all construction works, used by small and big companies including those in grey area), and other available indicators. Table T2-8 shows that the cement production in Q2 had y-o-y growth of about 4%, which indicates that the real trends of the construction activity are probably mildly positive, and not negative as shown by the construction statistics. Additional indicator we also analysed, and which confirms this conclusion, is the movement of a number of employees from the data of the Central registry of compulsory social insurance (CROCSI)[6]. According to this data, the number of employed persons in construction increased in Q2 compared to the same period of the previous year, by 0.75%. If the trend of construction activity was its reduction, this would affect the firing rather than increasing the number of employees in this activity.

We expect a certain acceleration of construction activity by the end of the year

Acceleration in the realization of public investments, which will happen in the mid-2017, is likely to have an impact on the increase in the construction activity by the end of the year. As statistics records developments in this part of the construction sector more easily, this acceleration will most probably affect the official estimates of the movement of construction activity as well, which we expect to enter a positive zone after a slight fall in the first half of the year.

6 These data are far more reliable than the data from the Labour force survey (LFS)

Trends

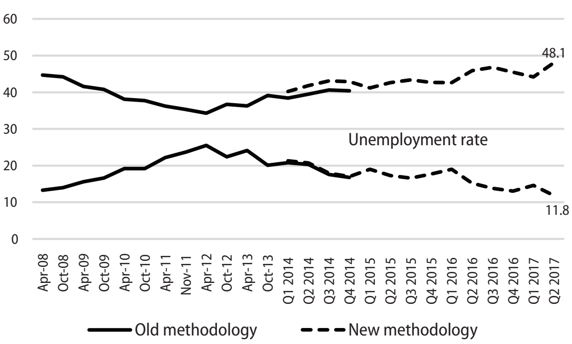
3. Labour Market

Labour Force Survey data indicate continued improvements on the labour market, which significantly surpass the growth of economy and imply a high decline in productivity and an increase in unit labour cost. Unemployment rate in the second quarter of 2017 reached the lowest value since 2008 and was 11.8%, while the employment rate reached its highest value of 48.1%. In Q2 2017, the number of unemployed persons according to the LFS data was 384 thousand, which compared to 2014 (since comparable data has been available) is a reduction of as much as 36.8%. In Q2 2017, total employment and formal employment continued their growth trend, which was significantly faster than the growth of GDP. Year-on-year growth of employment in Q2 2017 was 4.3%, while formal employment increased by impressive 5.1%. In H1 2017 (first half of the year), the total employment increased by 3.8% compared to the same period of the previous year, and formal employment increased by 5.0%. On the other hand, the data of the Central Registry of Compulsory Social Insurance (CRCSI) indicate a more moderate year-on-year growth of formal employment of 2.5% in Q2, i.e. 2.2% y-o-y in H1. The rate of informal employment was 22.1%. Year-on-year growth of informal employment was moderate and was 1.8% and 2.6% in agriculture. In the second quarter of 2017, compared to the same period of the previous year, the average net wages nominally increased by 4.6% and by 0.9% in real terms. Average net wages in euros were higher by 5.6% compared to the same quarter of the previous year, which was mostly the result of the strengthening of the dinar in June 2017. Employment trends and real Gross Value Added (GVA) indicate a decline in productivity. The decline is somewhat smaller if we use CRCSI data rather than LFS data. The productivity decline (according to the data on registered employment) and the growth of wages lead to the growth of unit labour cost of 1.9% and 1.1% (total and excluding agriculture, respectively) compared to the same quarter of the previous year. Faster growth of net wages in euros than the growth of GDP and the growth of unit labour cost indicate a weakening of Serbian economy's competitiveness.

Employment and Unemployment

Unemployment rate is 11.8%, employment rate is 48.1%...

Graph G3.1 Movements of Unemployment and Employment Rates, 15+, 2008-Q2 2017.



Note: Due to a change in methodology, the data for the periods before and after 2014 are not fully comparable.
Source: SORS, LFS

The basic labour market indicators show significant improvement in the second quarter of 2017 compared to the same quarter of the previous year, as well as compared to the previous quarter. Activity rate was 54.5% and was by 0.4 pp higher compared to the same quarter of the previous year. The unemployment rate reached a record low since LFS survey is being conducted, and was 11.8%. Compared to Q2 2016, it was lower by 3.4 pp. Employment rate reached its highest value and was 48.1%, which was by 2.2 pp higher compared to the same quarter of the previous year. Graph G3.1 shows the movements of unemployment and employment rates from 2008 to Q2 2017.

Considerable reduction of unemployment and growth of employment according to the data of the Labour Force Survey, with a modest growth of GDP…

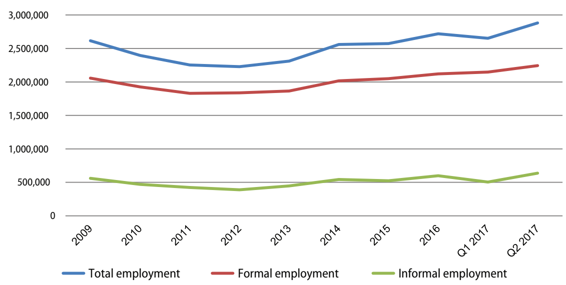
According to LFS data, the number of unemployed persons in the second quarter of 2017 was 384 thousand. This implies a reduction of as much as 22.5% (111.4 thousand) compared to the same period of the previous year. Compared to the 2014 average, the number of the unemployed decreased by 224 thousand, i.e. 36.8%. On the other hand, the number of persons registered at the National Employment Service at the end of June was 639 thousand, which is by 61 thousand or by around 9% less than in the same month of the previous year. According to LFS, the number of employed persons in Q2 increased by 4.3% year-on-year, which significantly surpasses the modest 1.2% growth of GDP.

Considerable growth of total and formal employment

Informal employment moderately increasing

The total number of the employed in Q2 2017 was 2.881 million. Compared to the second quarter of 2016, the number of the employed increased by 4.3% (119.5 thousand), while the real GVA in the same period increased by 1.2%. In H1 2017, compared to the same period of the previous year, total employment increased by 3.8%. While the reduction of the number of the unemployed could be partly explained by demographic factors (emigration), the significantly faster growth of employment than the growth of GDP in the longer term cannot be explained neither by demographic nor economic factors. Moreover, if the growth of employment were real, and not a result of statistical errors, it would have had quite worrisome consequences as it would imply a higher decline in productivity and a growth in unit labour cost, which would mean that the international competitiveness of Serbian economy had significantly declined. However, the strong growth of exports in the previous years, as well as the growth of real wages on the liberalised labour market indicate that the stated decline in competitiveness never happened, which brings into question the accuracy of LFS employment data.

Graph G3.2 Trend of Total, Formal and Informal Employment, 2009-Q2 2017.



Note: Due to a change in methodology, the data for the periods before and after 2014 are not fully comparable.
Source: SORS, LFS

According to LFS data, formal employment since the second quarter of the previous to the second quarter of current year increased by 108 thousand, while informal employment increased by 11 thousand. Measured in percentages, year-on-year growth of formal and informal employment in Q2 was 5.1% and 1.8%, respectively. In H1 2017, compared to the same period of the previous year, formal employment increased by 5.0%, while informal employment, on the other hand, decreased by 0.6%. The rate of informal employment was 22.1% and was slightly lower compared to the same quarter of the previous year (-0.6 pp).

The table shows trends in employment (LFS and CRCSI) and GVA overall and by sectors (agriculture, industry, construction, and services). While formal employment, according to the Labour Force Survey, increased year-on-year by a significant 5.1%, the registered employment according to CRCSI increased by 2.5%. During 2016 and in the first two quarters of 2017, we saw that the growth of formal employment was always higher according to LFS than the registered employment according to CRCSI. Since these two surveys measure the same phenomenon by applying different methodologies, it is expected that any discrepancy between them is accidental, but over the last year and a half, it has been systematic – employment according to LFS is always rising faster than according to CRCSI. Also, it can be observed that the growth of total employment according to LFS is significantly higher than the growth of GVA in the last year. Employment in industry and services was also significantly higher than the growth of their GVA.

Industry, construction, and services realised a higher growth of employment than the growth of real GVA. Employment in agriculture is falling, but less than the real GVA. The smaller decrease of employment in agriculture than the fall of GVA is in line with what is happening in other countries. When activities of GDP in one of the sectors are declining, employment also falls, but with a delay and at a somewhat lower rate. However, the problem is that over the last few years, during the periods of production growth in agriculture, the employment grew even faster – which is contrary to what is happening in other countries.

Table 3.1 Trends in the number of employees and real GVA by sectors, Q1 2016-Q2 2017, year-on-year change, %

	2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2
Total employment CRCSI	-0.3	1.2	1.3	2.1	2.3	2.5
Formal employment LFS	1.9	2.7	3.8	5.2	4.9	5.1
Total employment LFS	2.7	6.7	7.2	5.8	3.2	4.3
Total GVA	4.4	2.2	3.3	2.7	1.0	1.2
Employment- agriculture	-3.7	6.0	6.1	-3.4	-8.0	-1.6
GVA-agriculture	7.7	4.6	11.8	8.1	-2.2	-10.0
Employment-industry	4.2	7.8	7.9	7.6	9.3	8.4
GVA-industry	6.9	0.3	2.7	2.3	1.3	2.8
Employment-construction	4.7	6.8	8.2	9.1	5.7	4.6
GVA-construction	12.9	7.8	8.6	-0.6	-5.1	-2.8
Employment-services	4.7	6.8	8.2	9.1	5.7	4.6
GVA-services	2.6	2.1	1.7	2.4	1.6	2.3

Note: Source for employment is LFS, except for total employment which is stated both according to LFS and CRCSI.
Source: SORS, LFS, CRCSI and SNA.

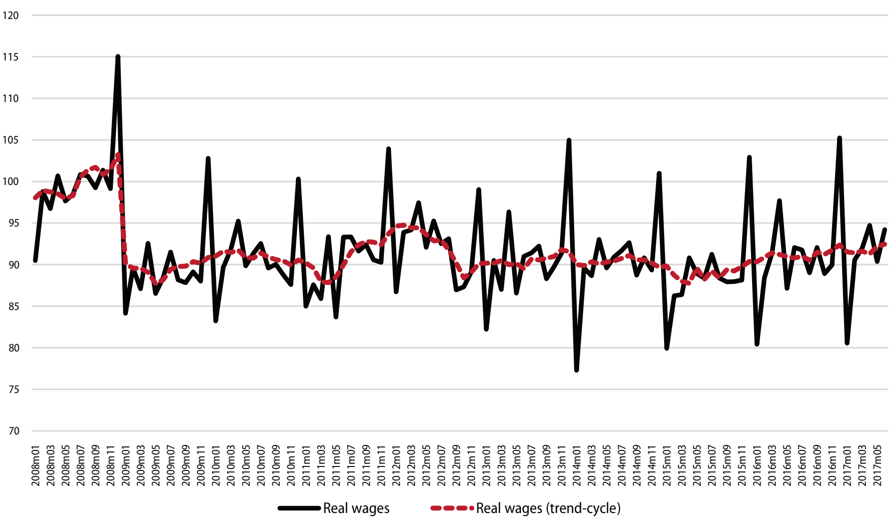
Wages

Wages were nominally higher by 4.6%, and by 0.9% higher in real terms in Q2 2017 compared to the same period of the previous year

Average nominal net wages were 48,670 RSD in Q2 2017. Compared to the same period of the previous year, average net wages in Q2 2017 were nominally higher by 4.6%, while the real growth was 0.9%. In the first half of 2017, the nominal growth was 4.4%, i.e. 1% in real terms, compared to the first half of 2016. Graph G3.3 shows the trend of real net wages, as well as the trend cycle since 2008. Even though monthly data have certain seasonal fluctuations, the trend is in line with economic activity, i.e. real wages stagnated in the last few years.

For international competitiveness, trend of wages in euros is important (Graph G3.4). Average net wages were 400 EUR, while cost to the employers was 648 EUR in Q2 2017. Compared to the same period of the previous year, a significant increase in wages in euros was recorded of almost 6%. This was mostly the result of the strengthening of the dinar against the euro[1] in June 2017. Growth of wages and of employer's cost in euros in H1 2017 compared to the same period in 2016 was 4.5% and 4.6%, respectively. While we express some reserve about the data on high decline in productivity, due to dubious employment data, we estimate that the deterioration in competitiveness due to growth of wages in euros is real. If the growth of real value of dinar would sustain and deepen, it would have a negative effect on Serbian economy's competitiveness, primarily through the increase of foreign deficit, and

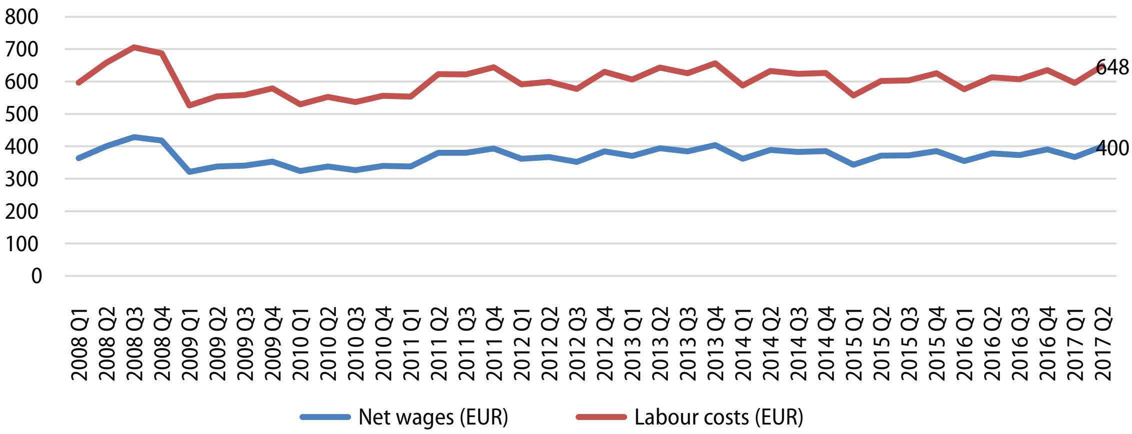
Graph G3.3 Average Real Net Wages Index (2008=100)



Source: Author's calculations using SORS data

1 Significantly faster growth of wages in euros compared to the growth of wages expressed in dinars in constant prices indicates that the wages in euros increase mostly because of the strengthening of the dinar against the euro. Growth of wages in USD is even higher due to the strengthening of the dinar against the dollar, which could have negative effects on exports which is charged in USD (Russia, arspek countries, USA, etc.).

Graph G3.4 Trend of Average Net Wages and Cost of Labour in EUR, 2008-Q2 2017



Source: Author's calculations using NBS data.

Net wages and cost of labour in EUR was higher by 6% year-on-year

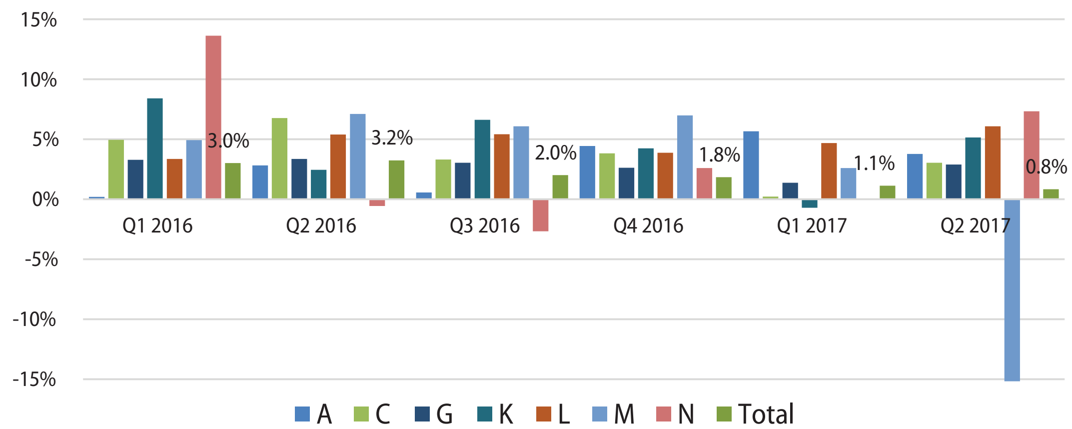
The highest year-on-year growth of seasonally adjusted real net wages was realised in the Administrative and Support Services, as well as in Real-Estate

Education and Healthcare recorded a modest growth of wages, while public administration recorded a year-on-year decline in wages

then through the slower growth of GDP and employment. High growth of imports and deteriorated deficit of the current balance of payments in the first half of the current year could be a signal of deteriorating price competitiveness of Serbian economy.

Seasonally adjusted real average net wages were 0.8% higher in Q2 2017 compared to the same period of the previous year. Graph G3.5 shows the trend of seasonally adjusted real net wages by selected sectors. Seasonally adjusted real net wages realised the highest growth in Administrative and Support Services (7.3% year-on-year). Significant growth was also realised in Real-Estate Business, 6.1%, which was considerably higher than the growth of GVA which was a modest 0.1% in the same period. In the last few quarters, a pronounced discord was recorded in the movement of wages in the real-estate sector and in the movement of GVA in that sector. Processing Industry realised a growth of wages of 3%, which was in line with the trends of Gross Value Added in Mining, Processing Industry, and Other Industry (2.8%), but also with the trends in Production and Processing Industry. In June 2017, compared to the same month of the previous year, production in the Processing Industry increased by 6%, while in the first half of 2017 it increased by 6.3% compared to the first half of 2016. Growth of production in the Processing Industry was significantly higher than the growth of real net wages. Extreme decline was realised in Expert, Science and Technical industry, 15.2% year-on-year. Education and Healthcare recorded a modest growth of wages (0.8% and 0.9%), while public administration, Defence and Compulsory Social Insurance realised a decrease in wages of 2.1%.

Graph G3.5 Trend of Seasonally Adjusted Average Real Net Wages, Q1 2016-Q2 2017, | year-on-year changes, %



Source: Author's calculations using SORS data

Legend: A – Agriculture, Forestry and Fishery; C – Processing Industry; G – Wholesale and Retail; Repair of Motor Vehicles and Motorcycles; K- Finance and Insurance; L – Real-Estate Business; M – Expert, Science and Technical Activities; N – Administrative and Support Services

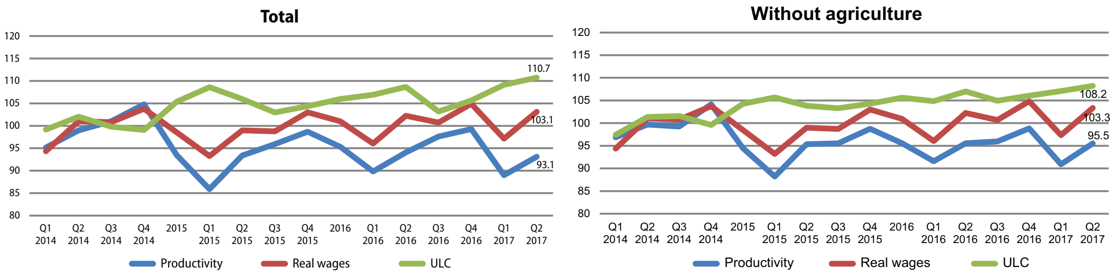
Trends

Productivity

Productivity is falling, while unit labour cost is rising. Productivity decline and growth of unit labour cost is significantly higher if LFS data is used rather than CRCSI data

Graph G3.6 shows the movement of productivity, real wages and unit labour cost, total (left graph) and excluding agriculture (right graph). Year-on-year growth of employment in Q2 according to LFS of 4.3% with growth of GVA of 1.5% implies a decline in productivity of 2.7%. If we use CRCSI data instead, the decline in productivity is lower due to the lower growth of employment and is 1%. According to CRCSI data, productivity in non-agriculture activities remained unchanged, while according to LFS data, it declined by 3%. That further leads to the growth of total unit labour cost by 1.9%, i.e. by 4.2% excluding agriculture, according to CRCSI data.

Graph G3.6 Labour Productivity and Unit Labour Cost, Indices (2014=100), 2014-Q1 2017.



Source: Author's calculations using SORS data.
Note: CRCSI data was used for the number of the employed.

Compared to the 2014 base, productivity decreased by 6.9%, while unit labour cost increased by 10.7%.

Graph G3.6 shows the basic productivity index and unit labour cost compared to the 2014 average using the CRCSI data on registered employment. Compared to the 2014 average, productivity of the overall economy in Q2 declined by 6.9% (in H1 2017 compared to the same period in 2014 -6.2%), while the decline in non-agriculture activities was 4.5% (in H1 2017 compared to the same period of 2014, -5.2%). In the same period, unit labour cost expressed in dinars increased in the overall economy by 10.7%, while in non-agriculture activities it increased by 8.2%.

Annex 1 Basic Labour Market Indicators According to LFS and CRCSI, 2014-Q2 2017

	2014					2015					2016					2017	
	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Q1	Q2
Activity rate (%)	51.9	51.0	52.6	52.5	51.6	51.6	50.8	51.5	52.0	51.9	53.3	52.6	54.1	54.3	52.3	51.8	54.5
Employment rate (%)	42.0	40.2	41.8	43.1	42.9	42.5	41.2	42.6	43.4	42.7	45.2	42.6	45.9	46.8	45.5	44.2	48.1
Unemployment rate (%)	19.2	21.3	20.7	17.9	17.0	17.7	19.0	17.3	16.6	17.7	15.3	19.0	15.2	13.8	13.0	14.6	11.8
Informal employment rate (%)		19.7	20.4	22.8	21.8	20.4	19.7	19.7	21.5	20.4	22.5	20.3	22.7	24.1	20.9	19.0	22.1
Employment in 000, (LFS)	2,559	2,454	2,548	2,627	2,609	2,574	2,504	2,588	2,624	2,581	2,719	2,571	2,762	2,814	2,731	2,652	2,881
Employment, index, (2014=100), (LFS)		95.9	99.6	102.6	101.9	100.6	97.8	101.1	102.5	100.8	106.3	100.4	107.9	109.9	106.7	103.6	112.6
Formal employment in 000, (LFS)	2,017	1,969	2,030	2,028	2,041	2,050	2,011	2,078	2,059	2,054	2,137	2,049	2,135	2,137	2,161	2,148	2,243
Formal employment, index, (2014=100), (LFS)		97.6	100.6	100.5	101.2	101.7	99.7	103.0	102.1	101.8	105.9	101.6	105.9	105.9	107.1	106.5	111
Total employment in 000, (CRCSI)	1,845	1,836	1,845	1,850	1,851	1,989	1,983	1,985	1,998	1,989	2,008	1,978	2,008	2,023	2,030	2,024	2,059
Total employment, index, (2014=100), (CRCSI)		99.5	100.0	100.3	100.3	107.8	107.5	107.5	108.2	107.7	108.8	107.2	108.8	109.6	110.0	109.7	111.5

Note: Registered employment in 2017 does not include June data, as it was not available.
Source: SORS

Annex 2 Real Net Wages and Labour Productivity, 2014-Q2 2017

	2014				2015					2016					2017	
	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Q1	Q2
Average real net wages, index, (2014=100)	94.3	101.0	100.8	103.8	98.5	93.3	99.0	98.8	103.0	101.0	96.1	102.2	100.7	104.9	97.2	103.1
Average net wages, total, (€)	361	389	383	386	368	343	371	372	386	374	355	378	373	391	367	399
Average net wages, industry, (€)	359	382	378	378	374	351	376	379	389	385	369	391	382	399	376	417
Labour coss, total (€)	588	633	623	626	597	557	601	603	626	608	576	613	607	635	596	648
Labour costs, industry (€)	582	622	617	615	607	570	611	617	632	627	599	635	623	649	611	677
Productivity, without agriculture, index, (2014=100)	96.9	99.7	99.3	104.2	94.5	88.2	95.3	95.6	98.7	95.6	91.6	95.5	96.0	98.7	90.9	95.5
Productivity, total, index, (2014=100)	95.2	99.0	101.0	104.8	93.5	85.9	93.4	95.9	98.7	95.3	89.8	94.1	97.6	99.2	89.0	93.1

Note: Industry includes activities B, C & D, weighted average wages. The exchange rate of the dinar against the euro, period average (NBS). Labour productivity is calculated using registered employment data.
Source: SORS and NBS

4. Balance of Payments and Foreign Trade

In Q2 2017, the current account deficit was 287 million euros, i.e. 3.2% of GDP. The current account deficit was slightly below the level of Q2 2016, while it was significantly lower than the deficit recorded in Q1 2017 – 8.9% of GDP. The lower level of current account deficit in Q2 compared to Q1 2017 was mostly the result of the changes in trade ratios, which were more favourable in Q2 than at the beginning of the year. Therefore, in the first six months of 2017, the current account deficit reached 5.9% of GDP. Exports and imports in Q2 recorded a significant growth, observed year-on-year, while their seasonally adjusted values indicate a growth compared to the previous quarter. During Q2, a significant inflow of capital was recorded, primarily because of the still high quarterly value of net FDI inflow. In Q2, the net FDI inflow was 487 million euros (5.4% of GDP), 992 million euros since the beginning of the year, which is by 12.2% above the net inflow of H1 2016. Despite certain fluctuations in foreign trade trends, which were determined both by external factors – primarily by economic growth in the Eurozone countries, trends in global prices of goods – and internal factors – delayed effects of the strengthening of the dinar, trends on domestic market – we expect, as we have stressed in the previous issue of QM, the current account deficit in 2017 to be around 5% of GDP and that it will be completely covered by the net inflow of FDI.

In Q2, current deficit was 287 million euros…

....i.e. 3.2% of GDP...

Balance of payments current account deficit in Q2 2017 was 287 million euros, i.e. 3.2% of GDP (Table T4-1). Such a value of current account deficit is considerably lower compared to the level from the beginning of the year, when in the first three months the current account deficit reached 733 million euros, i.e. 8.9% of GDP (Graph T4-2). Therefore, in the first six months of 2017, the current account deficit reached 5.9% of GDP. Actually, the current account deficit in Q1 2017 was at a higher level as a result of the increase in the trade of goods deficit (due to accelerated imports, primarily because of the deteriorated trade ratio due to increased energy prices), as well as relatively high spending on the Primary Income account[1]. Compared to Q2 of the previous year, the current account deficit was by 0.4 pp of GDP lower, which was the net result of a lower level deficit on the Primary Income account (0.6 pp of GDP), higher goods deficit (0.1 pp of GDP), lower surplus on the Services account (0.3 pp of GDP), and higher level of deficit on the Secondary Income account (0.1 pp of GDP).

Export of goods and services in Q2 was at a record high

In Q2 2017, goods in the amount of 3,685 million euros were exported (40.5% of GDP), while the imports were 4,662 million euros (51.3% of GDP), making the coverage of imports by exports 79%[2]. Exports of goods and services in Q2 was at a record high 54.2% of the quarterly GDP value. In the period Q2 2016-Q2 2017, the share of exports of goods and services in GDP was higher by 3.7 pp (increase from 50.5% to 54.2%), while at the same time, a 4 pp of GDP growth of imports of goods and services was recorded (from 59.1% to 63.1%). Trade deficit in Q2 was 977 million euros (10.7% of GDP), while foreign trade deficit was 811 million euros (8.9% of GDP, Table T4-1). That is a slightly higher share of foreign trade deficit and slightly lower share of trade deficit in GDP compared to the previous year – in Q2 2016, foreign trade deficit was 8.6% of GDP, and trade deficit was 10.8% of GDP, while both deficits are significantly lower than in Q1 2017, when they were 9.7% and 12.3% of GDP, respectively.

Exports and imports recorded a significant growth – both year-on-year and seasonally adjusted

In Q2 2017, exports continued to record a significant year-on-year growth of 11.9%, while at the same time, the growth of imports was 10.2%. Compared to the previous quarter, exports slightly accelerated, while imports decelerated their growth (recorded year-on-year growth rates in Q1 2017 for exports and imports were 10.7% and 15.8%, respectively). Seasonally adjusted data indicate that exports were 2.3% above the last quarterly value, while imports recorded a 2% growth (Graph T4-4). Year-on-year growth rates of exports and imports since the beginning of

1For more details, see *QM*48.

2NBS data on imports and exports of goods, as well as on trade balance are different than the SORS data (which we later use in *Exports and Imports*), becaue they don't include finishing goods (see Highlights 1 on the changes in methodology for calculating Balance of Payments in QM37). That is why there is a certain difference in the levels of exports and imports, as well as in growth rates, depending on whether the source of data was NBS or SORS.

the year, as has been the case since mid-2015, are under the considerable influence of the trade ratio – high index values in the second half of 2015 and during 2016, and then a decline and low levels since the beginning of 2017. In 2017, terms of trade ratio index was at a very low level in Q1 and a slightly higher level in Q2 – 93.4 and 99.6, respectively (see Graph T4-3). For the most part, it can be explained by the changes in the global energy prices. Expressed in dollars, in Q1 2017 they were by 56% higher, and in Q2 2017 by 13% higher than in the same quarters of the previous year.

Table T4-1. Serbia: Balance of Payments

	2014	2015	2016	2016				2017	
				Q1	Q2	Q3	Q4	Q1	Q2
					mil. euros				
CURRENT ACCOUNT	-1,985	-1,577	-1,370	-378	-309	-293	-390	-733	-287
Goods	-4,111	-3,993	-3,476	-745	-935	-808	-988	-1,013	-977
Credit	10,641	11,357	12,732	2,956	3,294	3,131	3,351	3,271	3,685
Debit	14,752	15,350	16,209	3,701	4,230	3,939	4,339	4,284	4,662
Services	465	725	895	182	188	273	253	219	166
Credit	3,810	4,273	4,581	992	1,068	1,267	1,254	1,106	1,241
Debit	3,344	3,548	3,686	810	880	994	1,001	887	1,075
Primary income	-1,343	-1,658	-1,950	-486	-456	-550	-458	-652	-423
Credit	642	682	630	142	185	140	164	101	149
Debit	1,985	2,340	2,581	628	641	690	623	753	572
Secondary income	3,003	3,349	3,161	670	895	793	804	713	947
Credit	3,400	3,795	3,637	772	1,010	922	933	849	1,086
Debit	397	446	476	102	115	130	129	135	139
Personal transfers, net [1]	2,442	2,671	2,510	521	735	624	630	564	765
Of which: Workers' remittances	1,863	2,077	1,874	379	577	458	460	414	595
CAPITAL ACCOUNT - NET	7	-18	-10	5	-4	-1	-9	1	-3
FINANCIAL ACCOUNT	-1,705	-1,205	-790	-184	-197	-127	-282	-512	-236
Direct investment - net	-1,236	-1,804	-1,861	-480	-404	-492	-485	-505	-487
Portfolio investment	-369	289	916	363	331	-10	232	219	-30
Financial derivatives	-6	2	9	0	1	5	3	-5	-2
Other investment	1,703	141	448	770	190	38	-550	232	62
Other equity	0	0	0	0	0	0	0	0	0
Currency and deposits	830	-218	220	318	20	-19	-99	-79	-23
Loans	757	230	326	320	273	-4	-263	314	54
Central banks	574	153	23	12	7	4	0	4	0
Deposit-taking corporations,	795	434	279	100	197	80	-97	271	-289
General government	-728	-464	-299	30	11	5	-345	34	298
Other sectors	115	107	322	179	57	-93	179	4	45
Insurance, pension, and standardized	0	0	0	0	0	0	0	0	0
Trade credit and advances	116	129	-98	131	-102	61	-188	-3	31
Other accounts receivable/payable	0	0	0	0	0	0	0	0	0
SDR (Net incurrence of liabilities)	0	0	0	0	0	0	0	0	0
Reserve assets	-1,797	166	-302	-836	-317	332	519	-455	222
ERRORS AND OMISSIONS, net	273	390	590	189	116	167	118	220	54
PRO MEMORIA					in % of GDP				
Current account	-5.9	-4.7	-4.0	-4.8	-3.6	-3.3	-4.5	-8.9	-3.2
Balance of goods	-12.3	-11.9	-10.2	-9.4	-10.8	-9.2	-11.3	-12.3	-10.7
Exports of goods	31.8	33.8	37.3	37.2	38.1	35.6	38.3	39.9	40.5
Imports of goods	44.1	45.7	47.5	46.6	48.9	44.8	49.6	52.2	51.3
Balance of goods and services	-10.9	-9.7	-7.6	-7.1	-8.6	-6.1	-8.4	-9.7	-8.9
Personal transfers, net	7.3	8.0	7.4	6.5	8.5	7.1	7.2	6.9	8.4
GDP in euros [2]	33,420	33,564	34,131	7,948	8,644	8,795	8,744	8,207	9,088

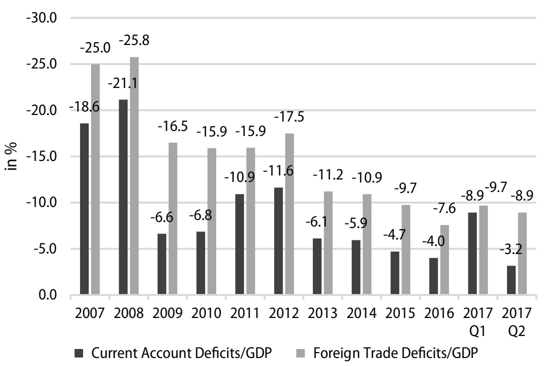
Note: Balance of Payments of the Republic of Serbia is aligned with international guidelines set out in the IMF's Balance of Payments Manual no. 6 (BPM6).
Source: NBS
1) Personal Transfers present current transfers between resident and non-resident households.
2) Quarterly values. Conversion of the annual GDP to euro was done according to the average annual exchange rate (average of official NBS daily middle exchange rates).

The value of trade and foreign trade deficit in Q2 2017, and by the same token, the value of current account deficit, was positively affected by the real depreciation of dinar at the end of the previous year, while year-on-year growth of global energy prices, as well as the continued recovery of domestic demand caused their increase.

Net inflow at the Secondary Income account was relatively high – primarily the result of seasonal factors

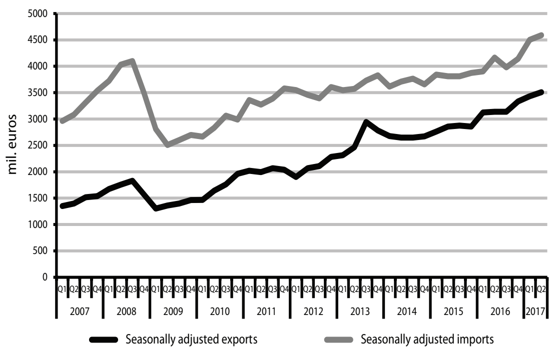
Net inflow at the Secondary Income account in Q2 was relatively high – 947 million euros, i.e. 10.4% of GDP, and was primarily the result of seasonal factors. The dominant part of this inflow were Personal Transfers, which were 765 million euro net in Q2, which was 8.4% of GDP. The outflow of net income was slightly above the value of Q2 2016, which is significantly below the value of the previous quarter due to lower spending (Table T4-1). In Q2, a relatively modest surplus of 166 million euros was recorded in the trade of services because of the higher level of spending.

Graph T4-2. Serbia: Current and Foreign Trade Deficit, 2007-2017



Source: SORS, *QM*

Graph T4-3. Year-on-Year Indices of Trade Ratio, 2014-2017



Source: SORS, *QM*

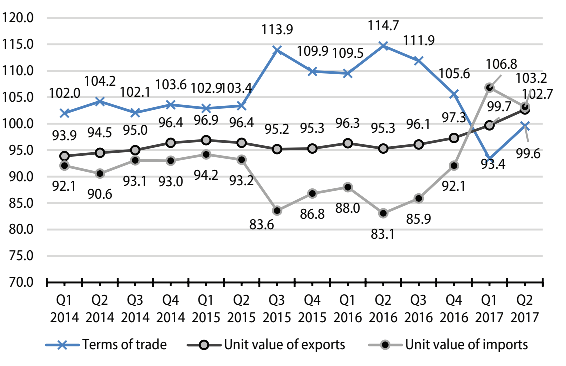
In 2017, the current deficit was around 5% of GDP

By the end of the year, the current account deficit will probably be around 5% of GDP. It will be determined by the positive outlook of economic growth of the Eurozone and surrounding countries, which will have a positive impact on domestic exports. On the other hand, the delayed effects of real appreciation of the local currency since the beginning of 2017 and especially in June will have a negative effect. Additionally, the factors that will influence the amount of the current account deficit in the coming period are the price of oil and agricultural products on the global market, as well as the impact of drought on this year's yield and exports. In addition, a possible increase of wages and pensions in the public sector would affect the accelerated growth of domestic demand and imports in the following year as well. We feel that even though the level of current account deficit is now significantly lower than before, it is still high. It is not good to keep the current account deficit on such a high level because the significant variability of capital inflow makes the coverage of deficit quite uncertain. In 2017, after 4-5 years of concurrent reduction, the current account deficit recorded its first increase. Therefore, we feel that economic policies should work on its reduction. Current trends, such as the fast growth of domestic demand and strengthening of the dinar jeopardise the results achieved so far.

In Q2 2017, net capital inflow was 509 million euros…

…because of the considerable net inflow of FDI

Graph T4-4. Serbia: Seasonally Adjusted Exports and Imports, Quarterly, 2007-2017



Source: NBS, SORS, *QM*

In Q2 2017, net capital inflow was 509 million euros[3], surpassing the current account deficit by 222 million euros, which was the growth amount of forex reserves. Net inflow of FDI was significant – 487 million euros (out of which 189 million euros net were from reinvested profits, 148 million euros from debt instruments, and 150 million euros from equity capital excluding reinvested profit). Therefore, capital inflow from the beginning of the year was 992 million euros. Unlike in Q1, when there was a significant outflow of portfolio investments, in Q2 a net inflow of 30 million euros was realised (Table T4-1). One of the factors that influenced the significant capital inflow was the expansionary fiscal policy of ECB, so the capital was mostly directed toward developing countries, including ours.

Net inflow from other investments in these three months of Q2 were 62 million euros. On the one hand, net deleveraging was recorded of financial (54 million euros) and trade loans (31 million euros), while a net inflow was realised on the Cash and Deposit account (23 million euros). The public sector deleveraged their financial loans by 298 million euros net, other sectors deleveraged 45 million euros, while other deposit institutions except the central bank increased their foreign debt by 289 million euros net.

[3] 455 million euros excluding the *Errors and Omissions* account.

Growth of forex reserves in Q2 and July

In Q2, inflow of capital with the lower value of current account deficit led to a 222 million euro increase in forex reserves. Reduction of forex reserves was actually recorded only in April (263 million euros), while they increased in May and June by 197 and 288 million euros, respectively.

The biggest part of foreign currency outflow in April is the result of a considerable deleveraging of the state in the amount of 333 million euros for loans, i.e. regular servicing of commitments to foreign creditors[4]. Increase of forex reserves in May and June occurred due to NBS activities on the interbank foreign exchange market (inflow from purchasing foreign currency of 145 million euros in May and 275 million euros in June). Outflow in the last two months of Q2 was mostly due to changes in inter-currency relations on the international financial market, and due to net deleveraging of loans by the state[5].

Further increase of forex reserves occurred in July. The biggest outflow was due to the reduction in the mandatory forex reserve of the banks, as well as servicing of old foreign currency savings, while forex reserves increased primarily due to purchasing of foreign currency on the interbank foreign currency market by NBS (220 million euros)[6]. Actually, from the beginning of April to the end of July, NBS intervened on the interbank foreign currency market by purchasing 670 million euros with the aim of mitigating excessive short-term fluctuations of the foreign exchange rate.

Exports

Since the beginning of the year, exports recorded a fast growth…

...even though they slightly decelerated in July

Exports recorded a high year-on-year growth of 13.2% in Q2 and reached 3,933 million euros. Therefore, exports continued their fast growth from the first quarter (year-on-year increase of 13.4% in Q1, Table T4-5), even though in July, they slightly decelerated their growth and were 10.3% above the level recorded in July of the previous year. Growth of exports in Q2 was realised thanks to the growth of all export groups except *Energy*. However, since energy exports make only 2.4% of the total exports, the realised decrease in value did not have any major effect on total exports. In July, exports of energy products also recorded a year-on-year growth, while only exports of Capital Goods were at a lower level compared to July 2016. As the value of exports of road vehicles in Q2 and July was below the last year's value (by 13.6% in Q2 and by 29.7% in July), exports excluding road vehicles recorded a year-on-year growth of 16.9% and 14.1%, respectively. Dominant contribution to the growth of exports came from the exports of basic metals as a result of increased investments, production and exports in the national steelworks[7].

Table T4-5. Serbia: Exports, Year-on-Year Growth Rates, 2014–2017

	Exports share in 2016	2014	2015	2016	2017			2016		2017		
					Q1	Q2	July	Q3	Q4	Q1	Q2	July
	in %	in mil. euros						in %				
Total	100.0	11,159	12,041	13,432	3,504	3,933	1,231	9.9	15.7	13.4	13.2	10.3
Total excluding road vehicles	89.8	9,621	10,630	12,057	3,143	3,562	1,162	10.8	18.7	16.7	16.9	14.1
Energy	2.4	414	342	329	67	81	32	-18.4	15.9	-15.2	-6.8	19.8
Intermediate products	34.8	3,687	4,084	4,669	1,297	1,496	479	12.1	19.5	23.3	24.4	22.3
Capital products	25.0	2,877	3,064	3,352	872	961	245	11.6	7.3	4.3	4.3	-1.3
Capital products excluding road vehicles	14.7	1,340	1,653	1,977	511	589	176	18.7	19.2	16.5	20.0	17.3
Durable consumer goods	5.5	586	664	739	186	214	62	6.6	11.6	19.1	14.3	4.9
Non-durable consumer goods	23.8	2,614	2,847	3,198	774	835	309	9.6	12.1	7.4	4.6	7.6
Other	8.5	981	1,040	1,145	307	347	105	10.6	41.5	24.4	23.7	0.4

Source: SORS

In H1 2017, exports recorded a significant growth thanks to the growth of all export groups except Energy. Still, Energy exports in July recorded a year-on-year growth. Exports of Intermediate Goods recorded a certain acceleration of growth – year-on-year growth of 23.3% in Q1 and 24.4% in Q2, only to slightly decelerate in July. Capital Goods recorded a constant growth

4 https://www.nbs.rs/internet/cirilica/scripts/showContent.html?id=11388&konverzija=no
5 https://www.nbs.rs/internet/cirilica/scripts/showContent.html?id=11513&konverzija=no, https://www.nbs.rs/internet/cirilica/scripts/showContent.html?id=11617&konverzija=no
6 https://www.nbs.rs/internet/cirilica/scripts/showContent.html?id=11749&konverzija=no
7 Growth of 15.3% seasonally adjusted in Q2, over 50% year-on-year, and „Hestil Srbija" company is the second largest individual exporter. *Inflation Report*, August 2017, p.37

In Q2 2017, exports recorded a significant growth thanks to the growth of all groups except Energy…

…in July, Energy exports recorded a year-on-year growth, while exports of Capital Goods were below last year's

of exports in the first half of 2017, at a rate of 4.3% year-on-year, only to decrease their exports in July to a value 1.3% below the last year's value. Capital Goods after excluding road vehicles had a considerable year-on-year growth of 20% in Q2 and 17.3% in July. Growth of Durable Consumer Goods export decelerated at the beginning of the year, while exports of Non-Durable Consumer Goods decelerated in Q2 and accelerated in July. Growth of non-classified exports was 23.7% in Q2, and in July, it increased by 0.4% compared to the same period of 2016 (Table T4-5).

Recorded fast growth of exports in several consecutive quarters is very important to the economy of Serbia. As we mentioned in previous issues, together with investments, it should be the major pillar of growth, and that is why we feel it should be supported with all economic policies. Therefore, the real appreciation of the foreign exchange rate since the beginning of 2017 will certainly have a positive effect on the level of exports in the second half of the year. In addition, this year's drought and cold could have a negative effect on the exports of agricultural products and by the same token on the total export result. On the other hand, further growth of exports of metal is expected. Additionally, as higher growth is expected in the EU and surrounding countries, it will certainly have a favourable impact on our exports in the coming period. In the coming period, the exports will also be influenced by the level of global prices, primarily of agricultural products and metal.

Imports

In Q2, imports decelerated their growth, only to record an acceleration in July

In Q2 2017, import of goods was five billion euros, which is a deceleration of growth (year-on-year increase in Q2 was 10.2% compared to 15.4% in Q1, Table T4-6). Imports in July accelerated their growth and were by 14.1% above the value of July 2016. This type of trend in domestic imports is partly the result of the fluctuations in the global price of energy, although imports excluding energy also had a similar dynamic (after 11.7% from Q1, the year-on-year growth rate was 9.4% in Q2 and 12.5% in July). While all other groups recorded a year-on-year increase, only the import of capital goods was at a lower level than last year (which has been the case for the last four quarters, as well as in July).

Growth of Energy imports was 55.2% in Q1, 19.2% in Q2, and 31.2% in July. At the same time, prices recorded a decrease since the beginning of the year – according to IMF data, price of energy in dollars was by 7.1% lower in Q2 compared to the previous quarter, but was above the value of Q2 2016. The global price of energy in dollars in Q2 2017 was by 12.8% above the price from the same period last year, i.e. by 15.8% if we observe prices in euros. Therefore, when we exclude the effects of the price on the changes in the value of energy exports, the imports in Q2 in real terms had a year-on-year growth of only 2.9%.

Except Capital Goods, all other groups realised a year-on-year increase

Import of Capital Goods was at a lower level observed year-on-year – by 3.8% in Q2 and by 15% in July. On the other hand, import of Intermediate Goods recorded a dynamic year-on-year growth of 15.9% in Q2 and 21.7% in July. This can be explained by the recorded growth of industrial production[8]. Therefore, the growth of imports is in big part determined by the recovery of the industry, which can be estimated as good. Year-on-year growth of imports was also recorded in Durable and Non-Durable Consumer Goods, as well as in Other Imports in both Q2 and July. These groups had a similar growth dynamic – deceleration in Q2 and acceleration in July (Table T4-6).

Considerable growth of imports since the beginning of 2017 is primarily owed to the year-on-year growth of energy prices due to last year's big decline of these prices and therefore a very low base. In the coming period, the imports will be affected by further trends of global energy prices and low last year's base could cause each higher level of this year to contribute to the year-on-year growth of total imports. Additionally, further growth of domestic demand in Serbia is expected, which will be additionally accelerated if there is the announced increase of pensions and public sector wages. Therefore, the growth of domestic demand that is faster than the growth of GDP will lead to the new growth of external imbalance. Also, the real appreciation of dinar could be one of the factors of the growth of imports in the coming period.

8See section „Economic Activity" in this issue of QM.

Table T4-6. Serbia: Imports, Year-on-Year Growth Rates, 2014-2017

	Imports share in 2016	2014	2015	2016	2017			2016		2017		
					Q1	Q2	April	Q3	Q4	Q1	Q2	April
	in %			in mil. euros						in %		
Total	100.0	15,490	16,387	17,382	4,587	5,004	1,583	5.0	7.2	15.4	10.2	14.1
Energy	8.9	2,180	1,873	1,552	526	462	155	-19.2	-3.6	55.2	19.2	31.2
Intermediate products	34.4	5,156	5,529	5,982	1,513	1,734	586	3.7	3.0	16.8	15.9	21.7
Capital products	24.4	3,757	4,021	4,241	821	1,086	299	-1.5	-4.9	-9.3	-3.8	-15.0
Durable consumer goods	2.3	328	416	394	93	104	32	-5.0	-8.4	14.9	4.2	8.7
Non-durable consumer goods	15.3	2,360	2,512	2,660	648	686	228	1.8	-1.1	17.7	6.5	11.0
Other	14.7	1,709	2,037	2,553	987	932	282	51.4	61.4	22.7	19.1	40.6
Imports excluding energy	91.1	13,311	14,514	15,830	4,061	4,542	1,427	8.1	8.5	11.7	9.4	12.5

Source: SORS

Foreign Debt

Serbia's foreign debt at the end of March 2017 was 26,174 million euros, i.e. 76.1% of GDP

Serbia's foreign debt at the end of March 2017 was 26,174 million euros (Table T4-7). In Q1 2017, the reduction of foreign debt was 374 million euros. Foreign debt expressed as a percentage of GDP was 76.1%, and by 1.7 pp of GDP below the value recorded three months earlier. Out of that increase in share, the 0.6 pp reduction of share of GDP was due to the somewhat higher value of GDP that is used as a denominator. Reduction of foreign debt since the beginning of 2017 is partly owed to the appreciation of the euro against the dollar.

The total reduction of foreign debt by 374 million euros in the first three months of 2017 was the result of the reduction of public sector's debt by 176 million euros (by 0.9 pp of GDP), as well as the reduction of private sector's debt by 199 million euros (0.8 pp of GDP). The effects of fiscal consolidation can be seen to a certain extent in the recorded decline of public sector's debt. Reduction of private sector's foreign debt in Q1 was the result of deleveraging long-term debt of 59 million euros on the one hand, and on the other of the lower level of short-term debt by 139 million euros. The banking sector deleveraged 61 million euros in long-term loans, while the business sector's long-term debt at the end of Q1 was at the same level as three months earlier. The banks reduced their short-term debt by 208 million euros, while businesses had a higher level of short-term debt by 68 million euros than in the previous quarter.

Compared to the situation of one year ago, the total foreign debt is higher by 466 million euros…

Compared to March 2016, total foreign debt is higher by 466 million euros (Table T4-7). Still, we should keep in mind that the amounts of foreign debt and its components, as well their changes, are mostly determined by the changes in the value of currencies.

…which is the net result of public sector's borrowing and private sector's deleveraging

Public sector's foreign debt was by 570 million euros higher than last year's. On the other hand, a reduction of private sector's foreign debt was recorded compared to the end of March 2016 of 104 million euros – exclusively the result of the banking sector's deleveraging of long-term debt by 570 million euros. On the other hand, banks' short-term debt was by 147 million euros higher in Q1 2017 than in the same quarter of the previous year. At the same time, businesses increased their long-term debt by 235 million euros, and their short-term debt by 80 million euros.

Table T4-7. Serbia: Foreign Debt Trend Dynamic, 2013–2017

	2013	2014	2015	2016				2017
				Mar.	Jun	Sep.	Dec.	Mar.
	stocks, in EUR millions, end of the period							
Total foreign debt	25,644	25,679	26,234	25,709	25,667	25,648	26,549	26,174
(in % of GDP) [4]	*74.8*	*76.8*	*78.2*	*75.8*	*75.7*	*75.4*	*77.8*	*76.1*
Public debt[1]	13,120	14,145	15,295	14,934	15,031	14,923	15,679	15,504
(in % of GDP)[4]	*38.3*	*42.3*	*45.6*	*44.1*	*44.3*	*43.9*	*45.9*	*45.1*
Long term	13,120	14,140	15,295	14,934	15,031	14,923	15,679	15,504
o/w: to IMF	697	152	15	7	0	0	0	0
o/w: Government obligation under IMF SDR allocation	434	463	493	483	488	484	494	495
Short term	0	5	0	0	0	0	0	0
Private debt[2]	12,525	11,534	10,939	10,775	10,636	10,725	10,869	10,671
(in % of GDP) [4]	*36.5*	*34.5*	*32.6*	*31.8*	*31.4*	*31.5*	*31.8*	*31.0*
Long term	12,328	11,441	10,636	10,463	10,358	10,272	10,190	10,131
o/w: Banks debt	3,219	2,503	2,057	1,912	1,730	1,514	1,403	1,342
o/w: Enterprises debt	9,108	8,935	8,575	8,547	8,624	8,752	8,781	8,782
o/w: Others	1	3	4	4	4	6	6	7
Short term	196	94	303	312	277	453	679	540
o/w: Banks debt	171	57	186	237	222	406	592	384
o/w: Enterprises debt	25	37	117	75	55	48	87	156
Foreign debt, net 3), (in% of GDP)[4]	42.2	47.2	47.2	47.8	48.3	47.3	47.9	47.8

Note: Foreign debt of the Republic of Serbia is calculated according to the "matured debt" principle, which includes amounts of debt from capital and amounts of calculated interest not paid in the moment of agreed maturity.
Source: NBS, QM
1) Foreign debt of the Republic of Serbia's public sector includes the debt of the state (not including the debt of Kosovo and Metohija, for loans concluded before the arrival of KFOR, unregulated debt toward Libya and the clearing debt toward former Czechoslovakia), National Bank of Serbia, local self-governments, funds and agencies formed by the state, and the debt for which state guarantee was issued.
2) Foreign debt of Republic of Serbia's private sector includes the debt of banks, companies and other sectors for which no state guarantee has been issued. Foreign debt of the private sector does not include loans concluded before December 20, 2000 for which no payments are done (1,022.0 million euro, out of which 445.6 million euro is from domestic banks, and 576.4 million euro is from domestic companies).
3) Total foreign debt reduced by NBS forex reserves.
4) Sum value of GDP of the observed quarter and previous three quarterly values of GDP.

5. Prices and the Exchange Rate

Inflation in Q2 stabilized at the level slightly above the target value of the National Bank of Serbia and at the end of the quarter amounted to 3.6%. After deflation in July (- 0.4%) and slight inflation in August (0.2%), year-on-year inflation dropped to 2.5%. A slowdown in inflation during Q2 was contributed by a new drop in world energy prices, while most significant disinflation factors in July and August were a seasonal fall in the prices of food and expressed dinar appreciation. Underlying inflation (measured by the consumer price index, excluding the prices of food, energy, alcohol and tobacco) was low and stable as well at the level of about 2%, while in August it dropped to a lower limit of the NBS target band and amounted to 1.5%. Low inflation in last several months, and especially strong appreciation pressures to dinar exchange rate, enabled in early September a first decrease in a key policy rate in 2017- from 4% to 3,75% - which is estimated as an adequate response by monetary policy. In the coming months, we expect a strengthening of at moment relatively low inflationary pressures due to a moderate relaxation of monetary policy, further growth of domestic demand and expected seasonal depreciation of the dinar - but the inflation will continue to move within the NBS target band by the end of the year. In Q2, the dinar nominally appreciated against the euro by 2.5%, a trend that continued even during the summer months - despite the fact that the NBS in the observed period bought 960 million Euros on the interbank foreign exchange market. From the beginning of the year, the dinar nominally strengthened against the euro by 3.5%, whereby the nominal appreciation against the dollar was even more pronounced (14.3% in the first eight months of 2017). Since inflation in Serbia during 2017 was higher than in the eurozone countries, in Q2, the dinar strengthened in real terms against the euro by 1.7% and in the first eight months by as much as 5.3%. Such a strong real appreciation of the dinar accompanied by slower productivity growth when compared to EU countries, the most important trade partners of Serbia, seriously aggravates the international competitiveness of the domestic economy.

Prices

Inflation in Q2 relatively low, and similar trend continued in July and August

At the end of the second quarter of 2017, year-on-year inflation was 3.6% and remained almost unchanged when compared to the end of the first quarter of this year (Table T5-1). The average inflation in the first half of this year amounted to 3.4% and was slightly above the target value of the National Bank of Serbia. On a quarterly basis, Q2 recorded a relatively low inflation of 0.5% due to the prevailing disinflationary pressures. After a rise in oil prices at the end of 2016 and stabilization in the first months of this year, Q2 recorded another drop (a similar thing occurred in the basic metal markets). The prices of oil futures suggest that by the end of 2017 there will be no major fluctuations in oil price movements, which is why the impact of their last decrease to domestic inflation has been temporary and already largely exhausted. Domestic factors that mostly contributed in stabilizing inflation in Q2 were dinar appreciation and seasonal drop in the prices of food. On a monthly level, after a relatively high inflation of 0.8% in April, a deflation of -0.5% was recorded in May and a slight inflation in June of 0.2%. Monthly price growth in April (mainly due to the increase in prices of fruits, vegetables and meat) contributed to the increase in year-on-year inflation to 4% (which is the highest level since October 2013). May's inflation and mild inflation in June enabled the stabilization of year-on-year inflation close to the average in the current part of the year of about 3.5%, so in Q2 inflation remained within the limits of the new target band of the National Bank of Serbia (NBS). Similar trends continued in the summer, so in July recorded a deflation of -0, 4% and August a slight increase in prices of 0.2%.

Underlying inflation (measured by the consumer price index excluding prices of food, alcohol, tobacco and energy) was stable in Q2 and amounted to 2% in June, so since the beginning of 2017 it has been below the middle of target interval of the NBS (Graph T5-2). There was a slight decrease in underlying inflation to 1.5% in July and August, which is a lower limit of the NBS tar-

NBS Underlying inflation was also stable in Q2 at the level of 2%, which is still closer to a lower limit of the target interval of the NBS

Table T5-1. Serbia: Consumer Price Index, 2011-2017

	Consumer price index				
	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
2011					
dec	154.3	7.0	7.0	-0.7	2.5
2012					
dec	173.1	12.2	12.2	-0.4	9.9
2013					
dec	176.9	2.2	2.2	0.2	-0.9
2014					
dec	180.0	1.8	1.8	-0.4	-2.4
2015					
mar	182.4	1.8	1.3	0.7	5.5
jun	183.8	1.9	2.1	0.5	3.1
sep	183.7	1.4	2.1	0.0	-0.3
dec	182.8	1.6	1.6	-0.2	-1.9
2016					
mar	183.5	0.6	0.4	-0.1	1.5
apr	184.2	0.4	0.8	0.4	0.9
may	184.3	0.8	0.8	0.1	1.3
jun	184.4	0.3	0.9	0.1	2.0
jul	184.3	1.2	0.8	-0.1	0.2
aug	185.9	1.2	1.7	0.9	3.5
sep	184.8	0.6	1.1	-0.6	0.9
oct	186.1	1.5	1.8	0.7	4.0
nov	185.9	1.5	1.7	-0.1	0.0
dec	185.6	1.5	1.5	-0.2	1.8
2017					
jan	188.3	2.4	1.5	1.5	4.8
feb	189.6	3.2	2.2	0.7	8.2
mar	190.0	3.5	2.4	0.2	9.8
apr	191.5	4.0	3.2	0.8	7.0
may	190.6	3.4	2.7	-0.5	2.1
jun	191.0	3.6	2.9	0.2	2.1
jul	190.2	3.2	2.5	-0.4	-2.7
aug	190.6	2.5	2.7	0.2	0.0

Source: SORS.

get band. The main factors affecting the inflation to be stable in the previous period (moving in a narrow range from 1.4% to 2.3% since August 2014) are a stable and almost fixed dinar exchange rate and moderate growth in domestic demand. Such trends were recorded in Q2 of 2017 as well: the dinar actually strengthened against the euro, while real year-on-year growth in domestic demand remained relatively modest, amounting to 1.9%. In a following period we expect a domestic demand and its impact to the inflation movement to be decisively dependent on monetary policy, which should be slightly restrictive. However, bearing in mind the current announcements about a large increase in pensions and wages in public sector, it is still not possible to accurately assess the character of fiscal policy in the next year, after the arrangement with the IMF expires. Past experiences with fiscal expansion in Serbia point to the conclusion that the fiscal multiplier is very low, so a possible strong growth in government consumption would more probably reflect the increase in imports and inflation, rather than it would contribute to the acceleration of economic growth.

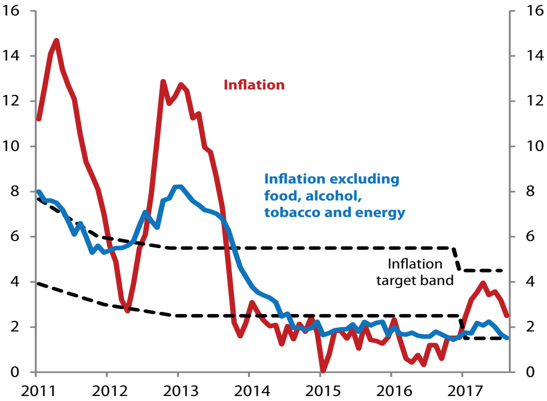
Underlying inflation and strong appreciation pressures on the dinar in previous months made room to reduce the key policy rate to 3.75%

During Q2, National Bank of Serbia did not change the restrictiveness of monetary policy and key policy rate remained at the level of 4% until the end of August (Graph T5-3). However, low inflation and particularly strong appreciation pressures on the dinar in the last five months (NBS bought 960 million euros in the interbank foreign exchange market in the observed period) affected the decision to reduce the key policy rate in early September to 3.75%. Increase in the expansiveness of monetary policy at this moment is somewhat surprising bearing in mind the indicators that show a gradual increase in domestic inflationary pressures, primarily labor market improvements (employment growth and stable y-o-y growth in real wages of around 3%), solid growth in credit activity of banks and in the expected seasonal depreciation pressure on the dinar by the end of the year. In addition, although disappointing economic growth was achieved in the first half of 2017, this is largely a consequence of one-off factors (a drop in agricultural production due to a drought and problems in the energy sector at the beginning of the year), and not a result of substantial worsening of trends in the real sector of the economy.

Stabilized inflation in Q2, which supports the previous estimate that emphasized acceleration of inflation in Q1 was temporary

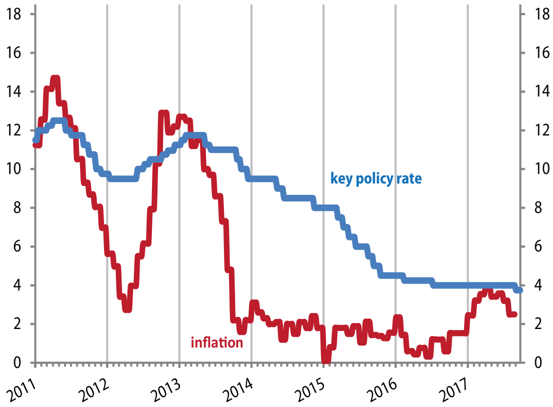
There was a modest growth in the price level of 0.5% in the second quarter of 2017 (Table T5-4) and mostly due to a relatively high inflation in April (0.8%), while May recorded a deflation (-0.5%) and June recorded a low inflation. The main inflation driver in Q2 was the increase in food prices by 1.4% (contribution of 0.4 pp), led by seasonal increase in fruit prices (28.3%, contribution of 0.6 pp) and meat (4.5% contribution of 0.3 pp). The largest disinflation impact came from a seasonal fall in the price of vegetables (a decrease of 8.4%, contribution of -0.4 pp) and

Chart T5-2. Serbia: Y-o-y Inflation Rate and Underlying Inflation and the NBS Target Band 2011-2017



Source: NBS and *QM* estimates

Chart T5-3. Serbia: NBS Reference Interest Rate and y-o-y Inflation Rate, in %, 2011-2017



Source: NBS

a reduction in solid fuel prices after their rise in winter months (a decrease of 5%, contribution -0.1 pp). The prices in the remaining groups of products and services in Q2 did not significantly change, and the impact of these changes on inflation is mainly mutually beneficial.

July recorded a deflation of -0.4%, and August a slight price growth of 0.2%

There was a drop in the price level of 0.4% in July 2017, mostly due to a fall in the prices of food (a decline of 2.2%, contribution of -0.6 pp), clothing and footwear (a decline of 1.2%, contribution -0.1 pp) and oil derivatives (a decline of 1.3%, contribution -0.1 pp). The increase in the price level in July was contributed by the increase in the prices of tobacco products due to the adjustment of the excise amount (a growth of 4.3%, contribution of 0.2 pp) and price increase in the group of recreation and culture (by 3.5%, contribution 0.2 pp). The decline in food prices is of seasonal character and comes from the decline in the prices of vegetables (by 12.1%, contribution -0.6 pp) and fruits (by 3.3%, contribution slightly below 0.1 pp). Given that the seasonal effect of changes in the prices of certain products (fruits, vegetables, meat, clothing and footwear, tourist arrangements) usually occurs in the same months of the year, this generally does not have a significant impact on the calculation of the y-o-y inflation rate, but is largely responsible for oscillations in the movement of monthly inflation rates. Deflation in July contributed to the reduction of y-o-y inflation to 3.2%.

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

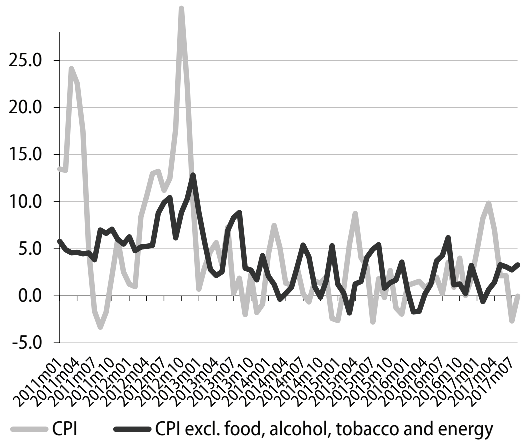
	Share in CPI (in %)	price increase in Q2 2017	Contribution to overall CPI increase (in p.p.)	Price increase in July 2017	Contribution to overall CPI increase (in p.p.)	Price increase in August 2017	Contribution to overall CPI increase (in p.p.)
Total	100.0	0.5	0.5	-0.4	-0.4	0.2	0.2
Food and non-alcoholic beverages	32.0	1.2	0.4	-2.0	-0.6	0.2	0.0
Food	28.4	1.4	0.4	-2.2	-0.6	0.2	0.1
Alcoholic beverages and tobacco	7.3	0.0	0.0	2.7	0.2	0.0	0.0
Tobacco	4.6	0.0	0.0	4.3	0.2	0.0	0.0
Clothing and footwear	4.5	1.3	0.1	-1.2	-0.1	-1.3	-0.1
Housing, water, electricity and other fuels	13.7	-1.1	-0.2	-0.1	0.0	0.5	0.1
Electricity	5.0	-1.4	-0.1	0.1	0.0	0.5	0.0
Furniture, household equipment, routine maintenance	4.6	0.0	0.0	0.0	0.0	-0.4	0.0
Health	5.0	0.4	0.0	-0.1	0.0	-0.1	0.0
Transport	12.8	-0.7	-0.1	-0.9	-0.1	-0.2	0.0
Oil products	5.9	-1.1	-0.1	-1.3	-0.1	-0.5	0.0
Communications	5.0	0.7	0.0	-0.1	0.0	0.6	0.0
Other items	15.1		0.3		0.2		0.1

Source: SORS and *QM* estimates

There was a slight increase in the price level of 0.2% during August, due to the increase in prices of goods and services in the groups: Recreation and culture (2.7%), Communication (0.6%), Apartment, water, electricity, gas and other fuels (0.5%) and Food and non-alcoholic beverages and Restaurants and hotels each by 0.2%. A fall in the prices in following groups had a disinflationary effect: Clothing and footwear (-1.3%), Furniture, household equipment and routine household maintenance (-0.4%), Transport (-0.3%) and Education (-0.2%). Since August 2016 achieved a significantly higher inflation rate of 0.9% due to a one-off increase in meat prices (which has not happened this year), year-on-year inflation was reduced to 2.5%.

Overall inflation recorded a drop in Q2, while the underlying inflation recorded a significant increase compared to Q1

Chart T5-5. Serbia: CPI and Underlying Inflation Trend, Annualized Rates, in %, 2011-2017



Source: SORS and *QM* estimates

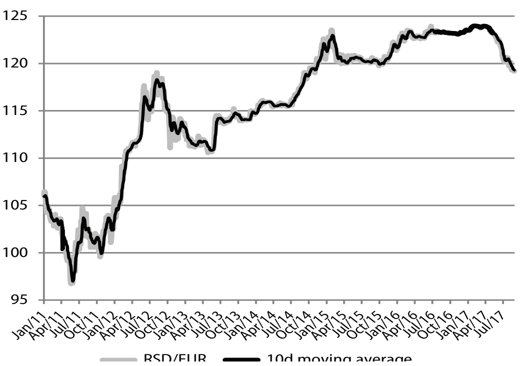
Overall inflation (3m annual average) at the end of Q2 was 2.1%, which is a significant decrease when compared to late Q1 (Graph T5-5). In July, the decline in overall inflation continued, so that the quarterly annualized average ended in the negative zone (-2.7%), while August 3-month annual average indicated stagnation in the price level (inflation of 0%). A sharp decline in overall inflation in the last few months (from April to July by about 10 pp) is a result of a gradual exclusion of relatively high monthly inflation by April from the calculation of the average and the inclusion of low and negative inflation rates since May. On the contrary, underlying inflation (3m annualized average of inflation excluding food, alcohol, tobacco and energy) recorded a significant increase in Q2, from 0.7% in March to 3.1% in June. A high volatility of an annualized 3m average of overall inflation suggests that price movements in Serbia are strongly influenced by one-off and seasonal factors (for example, a sharp drop in overall inflation in Q2 in July was driven by a decline in fruit and vegetable prices). In such circumstances, an annual averaged over a longer period (such as a six-month) or year-on-year inflation which almost completely excludes abovementioned seasonal effects would be a better indicator of price movements.

The Exchange Rate

During Q2 and summer months the dinar has strengthened, so at the end of August the exchange rate almost reached the value of 119 dinars per euro

During Q2, dinar noticeably strengthened against the euro- by 2.5% when compared to March, i.e. by 0.8% when observed at a quarterly average (Graph T5-6). The trend of dinar appreciation continued during summer months, thus making dinar stronger by 0.4% in July (1.3% if the monthly average is observed) and by additional 1% in August (0.7% at the monthly average).Since the beginning of 2017, the dinar has strengthened against the euro by 3.5% in total, so the rate at the end of August amounted slightly over 119 dinars per euro, which is a highest dinar value since October 2014. Given that at the same time, the strengthening of the euro against the US dollar and Swiss franc was noted, dinar appreciation in Q2 was even more pronounced in comparison to these currencies. Dinar strengthened against the dollar in Q2 by 9% (by 3.8% at the quarterly average) and by additional 5% in July and August (6.9% at the monthly average). Similarly, during Q2, the dinar strengthened against the franc by 4.8% (2% at the monthly average) and by additional 5.6% in July and August (6.6% at the monthly average).

Chart T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2011-2017

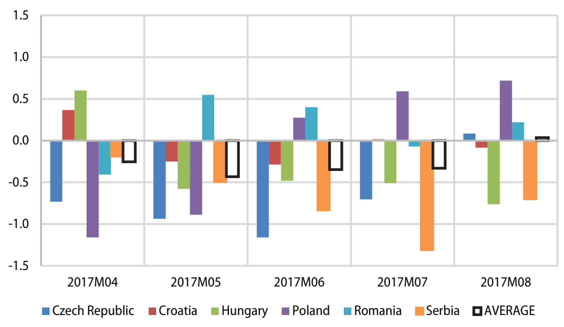


Source: NBS

Dinar appreciation in Q2, especially in the period from June to August, significantly higher when compared to the foreign exchange rates of the countries in the region

Moderate dinar appreciation against the euro in April and May was in accordance with the movement of currencies in countries of the region with a similar exchange rate regime (Graph T5-7). However, the trend of dinar strengthening since June was significantly more pronounced when compared to the average of the selected currencies, despite the significantly large interventions of the National Bank of Serbia in the interbank foreign exchange market (IFEM). In order to prevent an excessive short-term appreciation of the dinar, the National Bank of Serbia bought a total of 505 million EUR at IMEF in Q2 (out of which, the amount of 345 million EUR only in June), and an additional 455 million EUR in July and August. Such strong appreciation pressures are common for this period of the year due to a seasonally high inflow of remittances and consequently increased purchase of foreign currencies from natural persons. In addition, the ECB's expansive monetary policy (and the growth in export demand) and the restrictive domestic fiscal policy (a surplus of over 70 billion dinars in the first seven months) contributed to the growth in the supply of the euro and the strengthening of the dinar, and there was also an increase in the investments of foreign investors in government securities, which, despite a falling trend of the risk premium for Serbia, continue to bring relatively high yields when compared to the countries in the region (4% annually on the July issue of ten-year government bonds denominated in euros).

Chart T5-7. Nominal Exchange Rate Change (in %) in Selected Countries

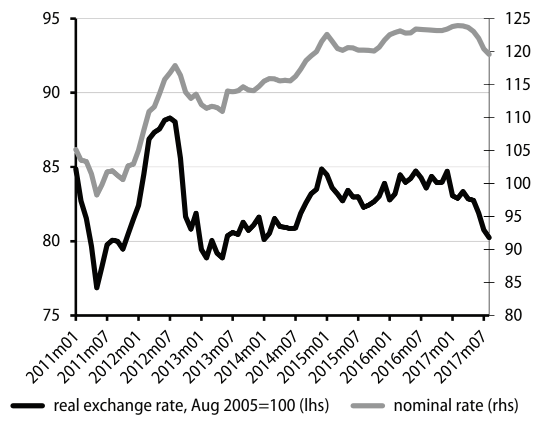


Source: Eurostat, NBS, *QM* estimates
Note: an increase represents depreciation

Relatively strong real appreciation in Q2 and in July and August in contrast with the movement of macroeconomic fundamentals

In Q2, the dinar appreciated in real terms against the euro by 1.7%, in July by 1.4% and in August by an additional 0.6%. Given that the dinar in Q1 realistically appreciated against the euro by 1.6%, the total real appreciation in the first eight months of 2017 was 5.3%. Although the dinar nominally strengthened to a lesser extent in the observed period, a stronger real appreciation resulted from a significantly higher inflation in Serbia than in the eurozone countries. This trend of the dinar exchange rate in the present part of the year has had some positive effects (for example, the strengthening of the dinar against the euro and dollar significantly contributed to the reduction of Serbia's public debt), but negative part is that the modest rise in price competitiveness of the economy Serbia in 2016, which was realized thanks to a real depreciation of the dinar of about 1%, was thus more than annulled. The trend of real appreciation of the dinar against the euro in 2017 is in contrast with the movement of macroeconomic fundamentals, bearing in mind the worsening of the current account deficit in this year and relative decline in productivity of the domestic economy when compared to productivity in EU countries – Serbia's most important trade partners. A strong dinar strengthening, accompanied by a decline in productivity, seriously worsens the competitiveness of the Serbian economy. Historically observed, the real exchange rate of the dinar in August was approximately at the same level as in January 2014 (Graph T5-8).

Chart T5-8. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly Averages, 2011-2017



Source: NBS, SORS, Eurostat and *QM* estimates
Note: an increase represents depreciation

6. Fiscal Trends and Policy

In Q2, the strong growth of tax and non-tax revenue continued, so the collection of total public revenue was significantly higher than planned, while public spending recorded a moderate decline, mostly within the planned scope, and a similar dynamic continued in July as well. In the period January-July 2017, the consolidated fiscal surplus was 73.5 billion dinars (2.9% of GDP). Growth of tax revenue is still widespread since all forms of tax revenue are growing, except for the excise tax, and the biggest impact on the growth of total revenue came from higher collection of tax on profit, as well as on social contributions and personal income. Non-tax revenue continued its growth, even though it was planned to reduce it by a quarter compared to the previous year. Total public spending was as planned, but capital spending in the first seven months of 2017 recorded a year-on-year decline of 18.4% and was only 2.2% of GDP, which was by around 7 billion dinars less than planned. Poor realisation of capital spending is considered negative from the perspective of stimulating economic growth. Fiscal result of the first seven months of 2017 was better by around 80 billion dinars compared to the plan, thanks to the three groups of factors – improved trade ratio and decreased cost of capital on the international market, which affected the increase of profitability of the economy. Second, increased collection of non-tax revenue, and finally, lower realisation of capital spending. If the trends from the previous part of the year continue, we could have a fiscal surplus of around 0.5% of GDP in 2017. Having a fiscal surplus in the period when the economy is growing at a rate that is significantly lower than expected, is considered unfavourable. The recommendation is to significantly increase capital spending in the coming period and thus decrease the restrictiveness of fiscal policy, so that the fiscal deficit can stabilise at a level of 0.5-1% of GDP. Public debt at the end of 2017 was 67.8% of GDP, which is by around 6.6% of GDP less than at the end of 2016, primarily because of the real appreciation of the dinar against the dollar and euro, as well as because of the positive current fiscal trends.

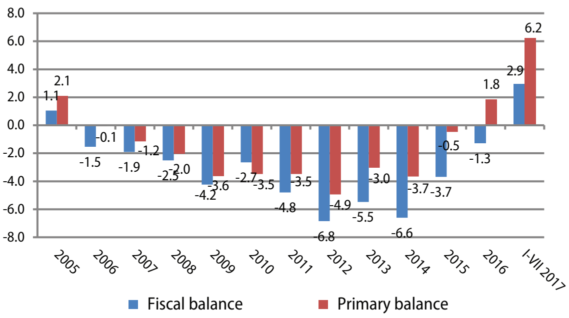
Fiscal Tendencies and Macroeconomic Implications

In the first seven months of 2017, a consolidated surplus of 73.5 billion dinars was realised (2.9% of GDP)

In Q2, strong real growth of public revenues continued and a moderate growth of public spending, compared both to the previous quarter and to the same period of the previous year. Growth of almost all revenue categories (except excise tax) continued in July as well, while public spending continued its decline, so the consolidated fiscal surplus in the first seven months of 2017 was 73.5 billion dinars (around 2.9% of the seven-month GDP). If we exclude revenue from interests, we get a primary surplus in this period of around 155 billion dinars (around 6.2% of GDP). Having a fiscal surplus in the period when the economy is growing at a rate that is significantly lower than expected, is considered unfavourable. The recommendation is to significantly increase capital spending in the coming period and thus decrease the restrictiveness of fiscal policy.

Strong growth of tax revenue continued

Graph T6-1. Serbia: Consolidated Fiscal Balance and Primary Balance (% of GDP)



Source: *QM* calculations

A significant real year-on-year increase of tax revenue (by 6%) was realised in Q2 2017, which is a continued trend from the previous quarters. Seasonally adjusted tax revenue increased considerably in real terms and compared to the previous quarter (by 2.4%).

All types of revenue are growing, except from excise tax

The growth of tax revenue was widespread, since the real increase was recorded in almost all types of tax revenue, except in excise tax.

Observed in real terms, the biggest year-on-year growth in Q2 was recorded in revenue from company profit tax (51.9%), which is

Especially strong growth was realised from profit tax, while tax on labour had quite an increase as well

the result of a strong growth in profitability of the economy in 2016, which in turn was the result of improved trade ratio (decreased energy costs) and decreased cost of financing on international financial market. A big impact on the growth of total tax revenue came from the strong increase in revenue from social contributions, which were higher in Q2 2017 in real terms by 5.1% compared to Q2 2016. The strong real growth of revenue from social contributions and profit tax in this period was the result of a moderate increase in wages and employment, and probably actions combatting informal employment. In Q2, there was a decelerated growth of revenue from VAT, since this type of revenue was higher by only 0.3% in this quarter compared to the same period of the previous year. After a mild decline in Q1, non-tax revenue in Q2 had a real year-on-year growth again (by 3.1%), which indicates a continued policy of aggressive collection of dividends from public enterprises.

In July 2017, there was a mild real year-on-year decline in tax revenue (by 0.6%) due to a considerable decline in revenue from excise tax (by 15.5%), while in other tax categories the dynamic of the previous months continued, and non-tax revenue recorded a strong increase (30.1%). Therefore, tax revenue in the first seven months of 2017 was higher in real terms by 5% compared to the same period in 2016, primarily because of the strong relative growth of revenue from profit tax (45.9%), as well as a considerable relative and absolute growth of revenue from social contributions and personal income tax (by 4.5% and 5.1%, respectively), while revenue from VAT recorded a mild real decline (by 1.6%), primarily due to a significant decline in revenue from excise tax on cigarettes, which could indicate a renewed rise in grey economy when it comes to the trade of these excise products.

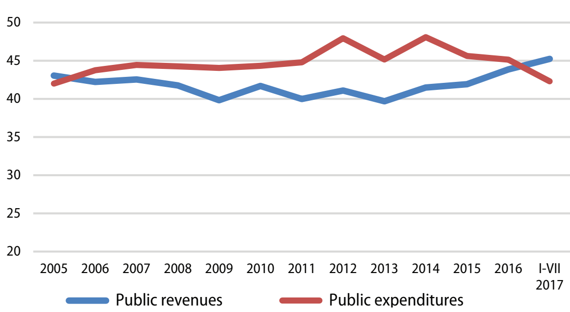
Therefore, it is estimated that the significant growth of tax revenue realised in the period January-July 2017 is the result of the increase in profitability of the economy (brought about by the improved trade ratio and favourable conditions of financing), and moderate growth of formal employment and wages. The relatively slow real growth of revenue from VAT is consistent with the data on low growth of economic activity in the first seven months of 2017.

Non-tax revenue is also growing significantly, even though the plan called for its reduction by a quarter

Non-tax revenue in the period January-July 2017 recorded a significant year-on-year real growth (by 5.2%), even though it was planned that non-tax revenue in 2017 should be reduced by almost a quarter compared to 2016. This was affected by the continued policy of aggressive collection of dividends from public enterprises in 2017, which had negative effects on investments and long-term business performance of these enterprises, as well as by the collection of nearly 9 billion dinars in dividends from NBS.

Public spending continued a mild decline, primarily due to reduced spending on wages, pensions and interest

Graph T6-2. Serbia: Consolidated Public Revenue and Public Spending (% of GDP)[1]



Source: *QM* calculations based on MF data

In Q2 2017, public spending continued its mild real decline compared to the same period of the previous year (by 1.7%), while it nearly stagnated in the previous quarter (-0.2%). The decrease of total public spending in Q2 was the result of reduced spending on interests (due to unbalanced payment dynamic), and continued mild decline of revenue on wages and pensions, while spending of goods and services, subsidies and capital spending recorded a growth in Q2. There was a considerable real year-on-year decline in spending in July (by 4.4%), primarily due to the decline in capital spending and subsidies.

In the period January-July 2017, consolidated public spending was by 1.9% lower in real terms compared to the same period of the previous year. Year-on-year decline was recorded in all spending categories except in procurement of goods and services. The highest relative year-on-year decline in this period was recorded in capital spending (by almost one fifth), while a moderate decline

1 Public spending* is adjusted for once-off spending on subsidies and pensions in December 2014 and 2015.

was realised in spending on interests (by 4.2%), primarily due to more favourable conditions of borrowing, which were the result of general decrease in interest rates on the international financial market, as well as of the reduced country risk thanks to fiscal stabilisation. Low indexation of pensions and moderate indexation of wages in the public sector at the beginning of 2017, as well as the continued policy of employment freeze, have all led to continued year-on-year real decline of wages and pensions, which significantly contributed to the mild reduction of total spending in this period.

Capital spending from January to July 2017 was lower by one fifth compared to 2016

Even though capital spending planned for 2017 was supposed to be by around 6% higher than in the previous year, in the first seven months of 2017, it recorded a real year-on-year decline by 18.4% and was only 2.2% of the seven-month GDP. In absolute terms, capital spending in the first seven months of 2017 was by around 7 billion dinars lower than planned. Since the decrease in capital spending was recorded in summer months as well (e.g. in July 2017, it was lower in real terms by 54% compared to the same month of 2016), the poor realisation of capital spending cannot only be attributed to bad weather conditions at the beginning of the year, but is probably also the result of poor planning and inefficient implementation of infrastructure projects. As was stated several times in previous issues of QM, increase of capital spending to 4-5% of GDP, which would bring it to the average level of Central and Eastern Europe, would have positive effects on economic growth, not just in the period of its realisation, but also in the period of exploitation of finished infrastructure objects.

The fiscal result in January-July 2017 was by around 80 billion dinars better than planned...

Starting from the internal dynamic of public revenue and public spending in the previous years, it is estimated that the fiscal result realised in the first seven months of 2017 was better than planned by around 80 billion dinars, more than half of which (around 50 billion dinars) was thanks to the higher collection of taxes, about one third (around 30 billion dinars) was thanks to the higher collection of non-tax revenue, while public spending (except capital spending) was realised according to plan.

…because of the growth in profitability of the economy, more aggressive collection of non-tax revenue, and poor realisation of capital spending

The biggest contribution to the higher collection of taxes than planned was made by the strong increase in revenue from profit tax (the plan was surpassed by almost 25 billion dinars), and higher collection of taxes than planned was realised in all other types of revenues as well. It is our conclusion that the positive deviation of tax revenue from the plan can mostly be explained by three groups of factors - *i)* improved trade ratio and decrease in cost of capital on the international market, which affected the growth in profitability of the economy, *ii)* collection of a large amount of dividends (9 billion dinars) from NBS, and *iii)* poorer realisation of capital spending. The factors that influenced the growth in profitability of the economy are exogenous and probably temporary, while aggressive collection of non-tax revenue and poorer realisation of capital spending were also unfavourable mechanisms for reducing the deficit, because they had a negative effect on the overall level of investments in the country, on the performance of public enterprises, and on future economic growth.

Fiscal balance or a minor surplus could be realised in 2017

If the trends in the dynamic of public revenue and public spending realised in January-July 2017 continue for the rest of the year as well, and if the state does not again take on obligations without guarantees of public and state enterprises, the consolidated state sector could realise a surplus of around 0.5% of GDP (around 20 billion dinars) in 2017. Favourable fiscal trends lead to increased pressure and promises regarding the reduction of taxes and increase of spending (e.g. big increase of wages and pensions). Realisation of these ideas and promises would probably not have a considerable effect on the fiscal balance in the current year, but the effects of it would show in 2018 when they start being implemented.

For faster economic growth, fiscal deficit should be kept at a level of 0.5-1% of GDP...

Considerable reduction of fiscal deficit and stopping of the growth of public debt in the previous three years are estimated as positive from the perspective of securing long-term sustainability of public finances. However, realising considerable fiscal surplus, which was 2.9% of GDP in the first seven months of 2017 (and primary surplus was as high as 6.2% of GDP), in conditions of a very low GDP growth rate (see *Economic Activity*), indicates that the fiscal policy is too restrictive. Therefore, the fiscal policy in the coming period should be designed to ensure further decrease of public debt, and to stimulate economic growth. In the coming period, a consolidated fiscal deficit of 0.5% and 1% of GDP would ensure further decrease of public debt.

and therefore, capital spending should be increased by 1-1.5% of GDP

Since the state will probably realise fiscal balance or minor surplus in 2017, the fiscal room of 1-1.5% of GDP should be used primarily to significantly increase capital spending, while current spending on wages and pensions should increase at a rate that would not be higher than the nominal growth rate of GDP (3-5%). Possible higher growth of wages and pensions in the public sector would mean a reduction of fiscal room for increasing capital spending or deficit, which would in both cases have negative effects on the dynamic of future economic growth.

Public Debt Trend Analysis

Serbia's public debt at the end of July 2017 was 66.8% of GDP...

At the end of July 2017, Serbia's public debt was 23.8 billion euros (66.8% of GDP). When we include the debt without guarantees of local self-government units, it amounts to 67.8% of GDP, which is by around 1 billion euros less than at the end of 2016.

...and when we include the debt of local self-government units – 67.8% of GDP

In relative terms, the debt at the end of July 2017 was by around 6.6% of GDP lower than at the end of 2016, because there was no need for net borrowing in this period due to the realised fiscal surplus, as well as the mild growth of GDP. Observed by debt structure, there was a reduction in the direct debt in the period January-July (by around 750 million euros), as well as the indirect debt (by around 250 million euros).

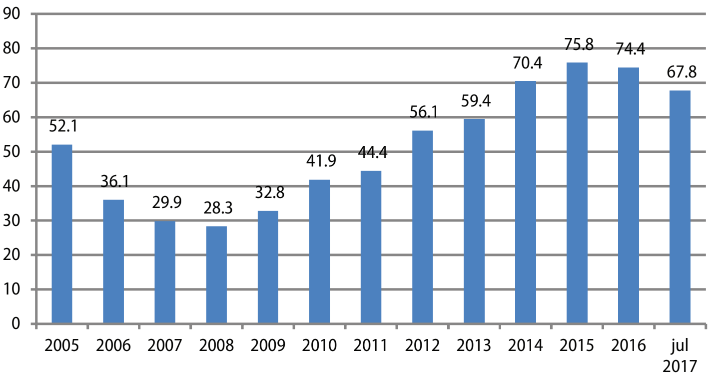
The reduction of debt was almost entirely the result of appreciation of dinar against the euro and dollar

The significant reduction of public debt in the period January-July was the result of the appreciation of the dinar exchange rate against the euro and dollar, as well as of the favourable fiscal trends, which is why there was no need for additional net borrowing in order to finance the fiscal deficit in the current period. The exchange rate of the dinar against the dollar in this period appreciated by around 15%, and considerable real appreciation was also realised against the euro (by around 5%). Considering the currency structure of Serbia's public debt, the appreciation of the dinar against the euro and dollar affected the nominal decrease of public debt by over a billion euros, which neutralised most of the negative effects of the changes in the exchange rate on the level of public debt at the end of 2016. Part of the reduction of the public debt in the period January-July could be considered temporary, since it is realistic to expect in the mid-term a mild real depreciation of the dinar against the euro, while the change in the exchange rate against the dollar could be even more significant due to the strong volatility of the euro exchange rate against the dollar.

Effective interest rate on Serbia's public debt is around 4.3%, which is estimated as negative

Appreciation of the dinar against the euro and dollar also affects the mild decline in the cost of interest, since around 80% of Serbia's public debt is denominated in foreign currency. In 2016, the implicit average interest rate, which is a ratio of cost of interest and the amount of public debt, was around 4.3% in Serbia, which is estimated as negative, compared to other comparable countries. Maturity of expensive loans from the previous period and their refinancing under currently more favourable conditions will affect the moderate decrease of implicit average interest rate in the coming period. Factors affecting Serbia's more favourable conditions of borrowing are the overall decrease of interest rates on the international capital market due to the expansionary monetary policy of ECB and the Fed, as well as the realised stabilisation of public finances. We should therefore use the current favourable conditions on the financial market and refinance some of the existing expensive loans, as well as to ensure funds for financing payments of matured debts in the coming period.

Graph T6-3. Serbia's Public Debt Trends (% of GDP)



Source: *QM* calculations

Good fiscal results realised in the first seven months of 2017 were the reason why there was no need for additional net borrowing by the state, while the strong appreciation of dinar affected the more considerable reduction in the absolute amount of the debt. Since the movement of the exchange rate in the coming period is unpredictable, in order to have a stabilisation and further reduction of the debt, it is necessary to stabilise the consolidated deficit at around 0.5-1% of GDP, and to make a significant progress in restructuring public enterprises (primarily EPS and Srbijagas), as well as privatising state-owned companies (petrochemical complex, RTB Bor, Galenika, Prva Petoletka, etc.), in order to avoid creating new losses and their spill-over to the consolidated state balance.

Annex

Annex 1. Serbia: Consolidated General Government Fiscal Operations, 2010-2017 (bn RSD)

	2010	2011	2012	2013	2014	2015	2016					2017			
							Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q1-Q2	I-VII
I PUBLIC REVENUES	**1,278.4**	**1,362.6**	**1,472.1**	**1,538.1**	**1,620.8**	**1,694.8**	**414.7**	**460.8**	**476.9**	**490.3**	**1,842.7**	**449.9**	**503.8**	**953.7**	**1,133.7**
1. Current revenues	1,215.7	1,297.9	1,393.8	1,461.3	1,540.8	1687.6	413.3	458.8	472.5	488.7	1833.3	448.0	502.3	950.4	1130.1
Tax revenue	1,056.5	1,131.0	1,225.9	1,296.4	1,369.9	1463.6	353.2	405.0	405.3	422.2	1585.8	386.4	444.9	831.3	986.7
Personal income taxes	139.1	150.8	35.3	156.1	146.5	146.8	34.5	37.7	40.5	42.4	155.1	37.5	40.7	78.2	93.6
Corporate income taxes	32.6	37.8	54.8	60.7	72.7	62.7	13.3	31.1	18.1	17.8	80.4	18.9	49.0	67.9	76.6
VAT and retail sales tax	319.4	342.4	367.5	380.6	409.6	416.1	103.8	114.9	112.7	122.0	453.5	109.6	119.5	229.1	276.3
Excises	152.4	170.9	181.1	204.8	212.5	235.8	57.4	65.5	75.2	67.5	265.6	64.9	65.2	130.0	159.9
Custom duties	44.3	38.8	35.8	32.5	31.2	33.3	8.6	8.7	9.2	9.9	36.4	9.3	9.7	19.0	22.2
Social contributions	323.0	346.6	378.9	418.3	440.3	505.7	120.5	130.8	132.6	143.6	527.5	129.6	142.4	272.0	318.7
Other taxes	46.0	43.5	42.6	43.5	57.3	63.3	15.1	16.3	16.9	19.0	67.3	16.6	18.4	35.1	39.4
Non-tax revenue	159.2	36.9	37.9	34.9	170.9	224.0	60.1	53.8	67.1	66.5	247.5	61.6	57.5	119.1	143.5
II TOTAL EXPENDITURE	**-1,419.5**	**-1,526.1**	**-1,717.3**	**-1,750.2**	**-1,878.9**	**-1,844.0**	**-430.7**	**-462.9**	**-463.1**	**-543.0**	**-1,899.7**	**438.2**	**471.5**	**909.6**	**1,060.2**
1. Current expenditures	-1,224.8	-1,324.8	-1,479.9	-1,549.8	-1,628.0	-1696.6	-403.9	-419.5	-416.4	-478.2	-1,717.9	415.7	425.1	840.7	978.8
Wages and salaries	-308.1	-342.5	-374.7	-392.7	-388.6	-419.2	-99.8	-104.6	-103.7	-109.5	-417.7	102.5	108.2	210.7	245.1
Expenditure on goods and services	-202.5	-23.3	-235.7	-236.9	-256.8	-257.6	-57.5	-67.2	-68.4	-90.6	-283.6	60.5	72.8	133.2	157.6
Interest payment	-34.2	-44.8	-68.2	-94.5	-115.2	-129.9	-45.9	-32.0	-31.6	-22.0	-131.6	47.4	25.4	72.8	82.2
Subsidies	-77.9	-80.5	-111.5	-101.2	-117.0	-134.7	-18.0	-24.1	-20.4	-50.2	-112.7	18.9	26.6	45.5	51.1
Social transfers	-579.2	-609.0	-652.5	-687.6	-696.8	-710.0	-171.9	-176.3	-178.3	-190.3	-716.8	174.5	178.4	352.9	410.8
o/w: pensions5)	*-394.0*	*-422.8*	-473.7	-498.0	-508.1	-490.2	-122.1	-123.8	-123.2	-125.2	-494.2	123.1	124.6	247.7	288.8
Other current expenditures	-22.9	-31.7	-37.4	-36.9	-53.7	-45.3	-10.7	-15.3	-13.9	-15.7	-55.6	11.9	13.7	25.6	32.0
2. Capital expenditures	-105.1	-111.1	-126.3	-84.0	-96.7	-114.5	-17.4	-31.2	-37.5	-53.1	-139.3	12.0	35.5	47.5	55.8
3. Called guarantees	-2.7	-3.3	-3.7	-7.9	-29.7	-30.1	-8.7	-11.2	-8.2	-11.0	-39.1	8.3	5.8	14.1	15.3
4. Buget lendng	-30.0	-25.0	-38.2	-35.6	-55.4	-2.7	-0.6	-1.0	-1.0	-0.7	-3.3	2.2	5.1	7.3	10.3
CONSOLIDATED BALANCE	**-141.0**	**-163.5**	**-245.2**	**-212.1**	**-258.1**	**-149.1**	**-16.0**	**-2.1**	**13.8**	**-52.8**	**-57.1**	**11.7**	**32.3**	**44.1**	**73.5**

Source: *QM* calculations based on MF data

Annex 2. Serbia: Consolidated General Government Fiscal Operations, 2010-2017 (real growth rates, %)

	2010	2011	2012	2013	2014	2015	2016					2017			
							Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q1-Q2	I-VII
I PUBLIC REVENUES	**-1.5**	**-4.6**	**0.6**	**-2.2**	**3.2**	***3.1***	**7.4**	**7.8**	**9.2**	**5.6**	***7.5***	***5.3***	***5.5***	***5.4***	***4.9***
1. Current revenues	-1.5	-4.4	0.1	-2.6	3.3	*3.3*	7.3	7.9	8.6	5.8	*7.4*	*5.2*	*5.6*	*5.4*	*5.0*
Tax revenue	-2.5	-4.1	1.0	-1.7	3.5	*0.3*	7.1	9.2	7.5	4.8	*7.2*	*6.1*	*6.0*	*6.1*	*5.0*
Personal income taxes	-3.9	-2.9	2.1	-12.2	-8.1	*-1.2*	4.5	5.2	6.8	1.6	*4.5*	*5.6*	*4.1*	*4.8*	*5.1*
Corporate income taxes	-3.6	3.9	35.1	2.9	17.4	*-15.0*	1.2	19.3	55.8	43.4	*26.9*	*37.6*	*51.9*	*47.8*	*45.9*
VAT and retail sales tax	-0.7	-4.0	0.0	-3.8	5.4	*0.2*	6.4	14.1	3.2	7.7	*7.8*	*2.4*	*0.3*	*1.3*	*1.1*
Excises	4.2	0.6	-1.2	5.1	1.6	*9.4*	22.2	13.8	16.6	-2.9	*11.4*	*9.6*	*-4.0*	*2.3*	*-1.6*
Custom duties	-14.9	-21.5	-14.0	-15.6	-6.5	*5.9*	7.4	9.6	10.2	5.4	*8.1*	*5.2*	*6.6*	*5.9*	*6.6*
Social contributions	-6.5	-3.9	1.9	2.6	3.1	*-2.1*	2.7	3.2	3.7	2.9	*3.2*	*4.4*	*5.1*	*4.7*	*4.5*
Other taxes	14.5	-15.2	-8.8	-5.2	29.2	*8.9*	10.9	0.7	-2.8	12.7	*5.1*	*7.0*	*9.5*	*8.3*	*6.9*
Non-tax revenue	5.8	-6.1	-6.2	-8.7	1.5	*27.9*	8.5	-1.1	15.9	12.8	*9.3*	*-0.5*	*3.1*	*1.2*	*5.2*
II TOTAL EXPENDITURE	**-1.7**	**3.3**	**4.3**	**-0.3**	**5.2**	***-3.2***	**5.7**	**4.9**	**2.3**	**-3.7**	***1.9***	***-1.3***	***-1.7***	***-1.5***	***-1.9***
1. Current expenditures	-2.2	3.1	4.1	-2.7	2.9	*-1.4*	3.7	2.7	0.4	-5.1	*0.2*	*-0.1*	*-2.2*	*-1.2*	*-1.0*
Wages and salaries	-5.9	0.4	2.0	-2.6	-3.1	*-9.7*	-0.4	-0.4	-0.4	-4.5	*-1.4*	*-0.4*	*-0.2*	*-0.3*	*-0.7*
Expenditure on goods and services	-0.3	4.3	1.5	-6.6	6.2	*-1.1*	11.3	13.5	4.2	7.7	*8.9*	*2.1*	*4.5*	*3.4*	*3.6*
Interest payment	-0.3	17.4	41.9	28.8	19.3	*11.2*	11.6	-2.6	-3.4	-10.4	*0.2*	*0.2*	*-23.5*	*-9.6*	*-4.2*
Subsidies	40.6	7.4	29.1	-15.6	13.2	*13.6*	-5.3	0.5	-20.0	-26.2	*-17.3*	*1.8*	*6.9*	*4.7*	*-0.8*
Social transfers	13.9	5.8	-0.1	-2.1	-0.7	*0.5*	1.6	0.8	1.0	-3.7	*-0.1*	*-1.5*	*-2.4*	*-2.0*	*-2.3*
o/w: pensions5)	-3.9	3.9	*4.4*	*-2.3*	*-0.1*	*-4.8*	-0.5	0.2	-0.2	-0.8	*-0.3*	*-2.2*	*-2.9*	*-2.6*	*-2.6*
Other current expenditures	-6.1	23.9	9.9	-8.4	42.6	*-16.7*	30.0	21.8	39.9	4.0	*21.4*	*7.8*	*-14.1*	*-5.1*	*-0.1*
2. Capital expenditures	-11.8	5.3	6.0	-38.2	12.7	*16.8*	64.1	30.7	25.3	3.6	*20.3*	*-33.2*	*9.7*	*-5.5*	*-18.4*
3. Called guarantees	-2.7	-3.3	-3.7	248.7	267.8	*0.1*	25.3	36.0	8.2	43.4	*28.5*	*-7.9*	*-50.2*	*-31.7*	*-30.1*
4. Buget lendng	-30.0	-25.0	-38.2	44.2	52.2	*-95.1*	27.7	19.9	43.7	-3.3	*20.8*	*243.9*	*372.8*	*325.1*	*402.5*

Source: *QM* calculations based on MF data

Trends

7. Monetary Trends and Policy

The stabilization of inflations at about the target level with a pronounced strengthening of appreciation pressure marked Q2 but had no effect on Serbian National Bank (NBS) monetary policy. After the y.o.y. inflation rate dropped in August below the target level to 2.5%, the NBS decided in September to lower the key policy rate to 3.75% which was its first correction after a period of 14 months. Appreciation pressure, which grew stronger in Q2, caused the NBS to intervene by buying a total of 505 million Euro in foreign currency to ease the Dinar strengthening trend which then continued in July and August. The pressure to strengthen the Dinar in the previous period was generated by a combination of effects from international capital trends which caused an increased inflow of foreign currency and a lower offer of the Dinar because of a growing budget surplus and increased investments by domestic banks into REPO bonds. The y.o.y. growth of the M2 money mass slowed down to 7.4% nominally while the growth in real terms was almost halved from the 3.8% y.o.y. compared to the previous quarter. Positive changes are evident in the real growth rate of loans to the non-state sector which was increased to 3.1% y.o.y. but still only on the basis of a rise in loans to private individuals. Business banks recorded a significant growth in net placements in Q2 which was done by increases in the segment of net credit to the enterprises and households and the growth of placements in REPO with an added increase in banks' own capital and reserves. The trend of the enterprises repaying loans stopped in Q2 when a rise in net loans was recorded in this segment of 83 million Euro with another 135 million Euro in July. The increase in credit activity among the households continued in the same period with a growth in net loans recorded of 330 million Euro. The participation of NPLs was reduced by the end of Q2 by an additional 0.8 percentage points as the consequence of the growth of credit activity and a combination of write-offs and sales of NPLs to persons outside the banking sector. Data from July and August show that the participation of NPLs showed a slight increase despite the growth in credit activity which suggests that the state and the NBS would have to step up their efforts to speed up the cutting down of NPL participation as has been done by other neighboring countries.

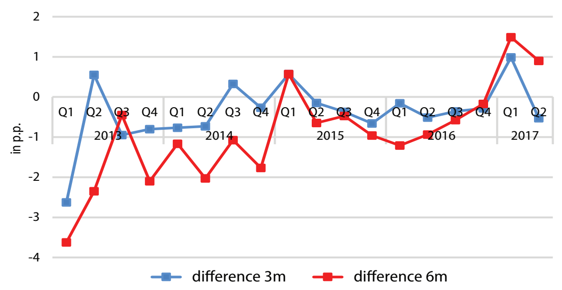
Central Bank: Balances and monetary policy

Stabilization of inflation makes room to relax monetary policy …

… which only came in September

The y.o.y. inflation rate drew back to the target framework from 3.6% by the end of Q2 following a fast growth in April and in August it dropped to 2.5% y.o.y. which is below the target level (3±1.5%). In the same period, deflation was recorded at monthly level in May of –0.5% and then again in July from –0.4% which was one of the elements that caused an increased interest by business banks for placements of surplus liquidity into REPO bonds. Another favorable element which made placement in REPO significantly more interesting was the nominal and real appreciation of the Dinar which was recorded in the same period (Table T7-2). Even though the NBS reacted on the Inter-banking foreign exchange (FX) market to prevent greater daily oscillations in the Dinar exchange rate, the achieved appreciation of the Dinar can hardly be justified with real trends in the domestic enterprises bearing in mind the level of the foreign trade deficit and the difference in inflation and economic growth in Serbia compared to the region and the Euro zone. The NBS did not change its monetary policy in Q2 in terms of the key policy rate which remained at the level of 4% up to the first half of September when it was adjusted to

Graph T7-1. Deviations from the predicted inflation 3 and 6 months in advance from the real rate 2013-2017



Source: NBS

3.75%. Given the current situation in which the offer of hard currency on the FX market and the stabilization of inflation at about the target level, room was created for the NBS to conduct a more determined exchange rate policy in the coming period. A further strengthening of the Dinar exchange rate which is not the consequence of real improvements in the domestic enterprises will very quickly have a negative effect on the international competitiveness of exports and labor costs expressed in Euro.

Table T7-2. NBS interventions and foreign currency reserves 2015-2017

	2015				2016				2017	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
Repo stock (in milions of euros)	2.85	168.72	508.19	253.24	246.50	239.12	325.82	279.23	480.53	572.42
NBS interest rate	7.50	6.00	5.00	4.50	4.25	4.25	4.00	4.00	4.00	4.00
NBS interest rate	-1.13	3.08	5.00	6.66	2.60	1.78	3.17	1.94	-5.11	1.94
NBS interest rate	11.33	5.70	6.29	-0.76	-0.34	3.35	4.57	3.37	4.48	15.71
NBS interventions on FX market (in milions of euros)	170.00	290.00	730.00	520.00	-555.00	-820.00	-345.00	-160.00	-345.00	160.00
INCREASE	**in millions of euros, cumulative from the beginning of the year**									
NBS own resreves[2)]	607.7	638.6	1022.9	1163.0	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22
NDA	-515.6	-460.4	-956.2	-783.4	45.62	395.60	-99.67	94.92	-171.42	-248.75
Government, dinar deposits[3)]	-151.9	-13.7	-308.7	-217.4	41.52	275.36	35.00	195.73	-41.59	-358.48
Repo transactions[4)]	68.0	-97.4	-413.3	-166.4	5.09	19.53	-279.20	-25.66	-207.38	-285.41
Other items , net[5)]	-431.8	-349.3	-234.1	-399.5	-0.99	100.71	144.53	-75.15	77.56	395.14
H	92.1	178.3	66.7	379.6	-423.81	-390.27	-446.13	-68.11	-441.15	-513.96
o/w: currency in circulation	-133.7	-95.5	-39.9	76.8	-68.06	-20.21	40.74	157.26	-104.02	-114.39
o/w: excess liquidity	210.3	229.5	104.1	408.0	-284.91	-319.01	-465.39	-241.74	-351.17	-422.08
	in millions of euros, cumulative from the beginning of the year									
NBS, net	676.36	561.44	762.45	667.97	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87
Gross foreign reserves	638.67	440.86	613.29	508.46	-880.04	-1080.32	-807.49	-153.76	-469.25	-632.21
Foreign liabilities	37.69	120.58	149.16	159.52	14.21	18.69	22.97	16.14	4.66	13.34
IMF	39.37	106.55	129.87	141.97	8.10	15.09	16.00	14.12	-0.04	5.81
Other liabilities	-1.67	14.04	19.29	17.54	6.10	3.59	6.98	2.02	4.69	7.53
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	676.36	561.44	762.45	667.97	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87
1.1 Commercial banks deposits	-20.68	-29.93	65.59	100.98	331.11	302.75	339.40	90.80	144.67	156.34
1.2 Government deposits	-47.99	107.13	194.81	393.89	65.30	-26.98	98.65	-116.22	50.18	197.32
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	607.70	638.64	1022.85	1162.84	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22

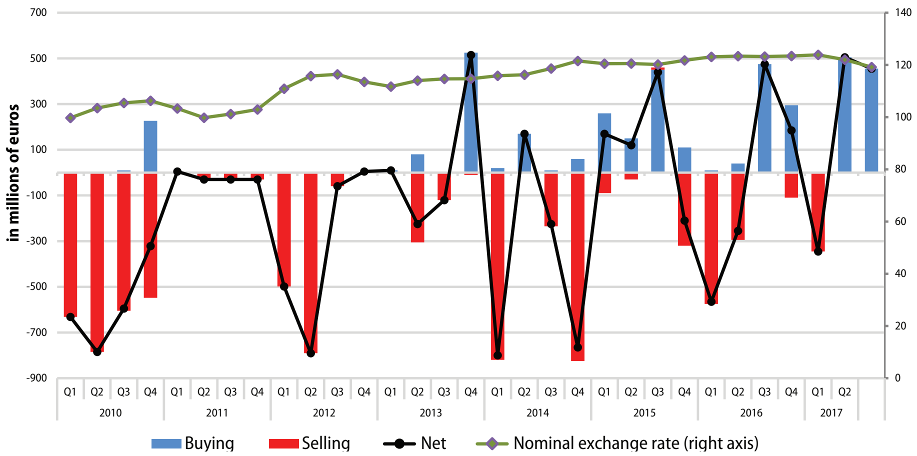
Source: NBS.
1) "Initial M2" designated the state of primary money at the start of the current and end of previous year.
2) The definition of NBS net own reserves is given in section 8 „Monetary trends and policy", Frame 4, *QM* no. 5.
3) State includes all levels of government: republic and local administration level.
4) This category includes NBS Treasury Bonds and repo operations.
5) Other domestic assets includes: domestic loans (net bank debts, not including treasury bonds and repo transactions; net enterprises debts) along with other assets (capital and reserves; and items in the balance: other assets) and corrected by changes to the exchange rate.

NBS intervened in Q2 to buy foreign currency …

… in order to ease the appreciation trend in the Dinar exchange rate

Q2 saw a change in the direction of pressure on the FX market and the NBS had to intervene by buying foreign currency in order to ease the trend to strengthen the Dinar. That brought the NBS into the position of becoming a net buyer of foreign currency to the amount of 505 million Euro with another 455 million realized in July and August (Graph T7-3). The greatest pressure on the strengthening of the exchange rate was in June when the NBS intervened with 345 million Euro but despite that the highest nominal exchange rate appreciation was recorded in that

Graph T7-3. NBS interventions on Inter-banking foreign exchange (FX) market 2010-2017



Source: NBS

month. The strengthening of the Dinar exchange rate is typical for that period when remittances from outside the country are higher and the duration and intensity is stepped up by capital offer in Europe and domestic fiscal policy. The expansive nature of European Central Bank (ECB) monetary policy, which is still in place, caused a higher inflow of foreign currency into Serbia on the basis of the purchase of state bonds while the budget surplus generated in H1/Q1 was reflected in a decrease of the amount of Dinars in circulation. The purchase of foreign currency by the NBS did not have an effect on the level of net own reserves which grew in Q2 by just 4 million Euro while a more pronounced growth of 217 million Euro was recorded in July (in Q1, the net own reserves dropped by 270 million Euro, Table T7-2). The primary money was reduced additionally in Q2 by 72 million Euro following a reduction of 441 million Euro in the previous quarter. Net domestic assets (NDA) viewed in comparison to the previous quarter were also reduced by 77 million Euro which is the consequence of the combined effect of increases in state Dinar deposits of 317 million Euro and increased placements by banks in REPO bonds of 78 million Euro. Those effects were partly neutralized by an increase in other net assets of 318 million Euro which stopped a greater drop in NDA at quarterly level.

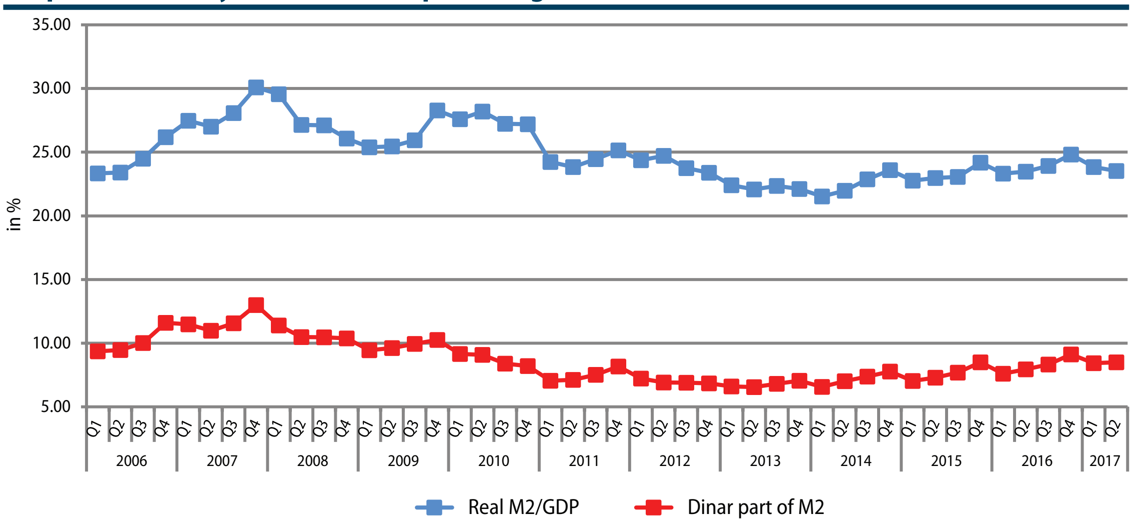
Monetary system: money mass structure and trends

The y.o.y. real growth of M2 slowed in Q2 …

… but the real growth of credit to the non-state sector speeded up

Following a high growth in the previous quareter, the money mass M2[1] slowed down its growth in Q1 to 7.4% y.o.y. (in Q1 the money mass was increased by 10.3% y.o.y., Table T7-5). Compared to the value at the end of March, the money mass was reduced by 0.4% as the consequence of the combined effect of the increase of net foreign assets (NFA) and a drop in the NDA. The contribution of the NFA to the growth of the M2 compared to the previous quarter stood at 0.6 percentage points but at the same time there was a drop in the NDA of 1 percentage point which caused a drop in M2 compared to the values at the end of March. When viewing the y.o.y. growth rates corrected by inflation, we also see a slowing down of the M2 growth to 3.8% (in Q1 the real y.o.y. growth rate stood at 6.4%). A somewhat better situation was recorded with loans to the non-state sector whose growth in Q2 speeded up to 2.7% y.o.y. This is completely thanks to a real growth in loans to households which stood at 9.7% y.o.y. Despite a significant quarterly increase in net placements in the enterprises because of repayments over the previous three quarters, the enterprises continues to recorded a negative real y.o.y. growth rate which stood at –2% in Q2.

Graph T7-4. Money mass trends as percentage of GDP, 2005-2017



Source: *QM* calculation

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

Table T7-5. Growth of money and contributing aggregates, 2015–2017

	2015				2016				2017	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
					y-o-y, in %					
M2[1)]	8.5	7.8	4.1	7.2	7.9	7.8	10.2	9.9	10.3	7.4
Credit to the non-government sector[2)]	5.8	4.2	2.2	2.8	2.2	4.7	5.9	2.6	4.1	2.0
Credit to the non-government sector[2)], adjusted[3)]	2.8	1.2	1.7	2.5	0.6	3.1	3.9	1.5	3.5	3.5
Households	5.5	4.9	3.8	4.3	3.8	5.8	8.4	9.4	11.0	11.8
Enterprises	1.2	-1.0	0.3	1.3	-1.4	1.4	1.0	-3.3	-1.3	-2.1
					real y-o-y, in %					
M2[1)]	6.4	5.8	2.6	5.5	7.2	7.3	9.4	8.0	6.4	3.8
Credit to the non-government sector[2)], adjusted[3)]	1.6	0.3	1.1	1.8	0.2	2.3	2.8	0.9	2.1	2.7
Households	3.9	3.4	2.9	3.4	2.9	4.6	6.6	7.5	8.6	9.7
Enterprises	0.3	-1.5	0.0	0.8	-1.5	0.9	0.4	-3.2	-1.7	-2.0
					in bilions of dinars, end of period					
M2[1)]	1,835.4	1,876.1	1,893.8	1,999.7	1,979.6	2,023.2	2,087.0	2,196.8	2,182.7	2,173.3
M2[1)] dinars	567.8	595.3	632.4	702.6	645.5	685.0	727.1	808.0	772.7	785.2
Fx deposits (enterprise and housholds)	1,267.7	1,280.8	1,261.4	1,297.0	1,334.1	1,338.2	1,359.9	1,388.7	1,410.0	1,388.1
					quarterly growth M2[4)] and shares					
M2[1)]	-1.6	2.2	0.9	5.6	-1.0	2.2	3.2	5.3	-0.6	-0.4
NFA, dinar increase	-2.5	1.5	2.0	3.7	-2.9	2.0	2.1	3.9	-1.6	0.6
NDA	0.9	0.7	-1.0	1.9	1.9	0.2	1.1	1.4	1.0	-1.0

Source: NBS
1) Money mass: components – see Analytical and Notation Conventions *QM*.
2) Loans to non-state sector – loans to the enterprises (including local administration) and households.
3) Trends are corrected by exchange rate changes. Corrections are done with the assumption that 70% of loans to the non-state sector (both households and the enterprises) are indexed against the Euro.
4) Trends are corrected by changes to the exchange rate and inflation. Corrections are done with the assumption that 70% of loans to the non-state sector (both households and the enterprises) are indexed against the Euro.

Structure of contribution to the nominal growth of M2 unchanged compared to previous quarters

An analysis of individual contributions to the nominal y.o.y. growth of M2 shows a similar structure to that of the previous quarter. The greatest contribution to the nominal growth of 7.4% y.o.y. came from the lesser monetary aggregate M1 with 3.4 percentage points which is a continuing of the trend from mid-2015 up to which time foreign currency deposits were the main generator of growth. Their contribution now stands at 2.5 percentage points while savings and timed deposits recorded a positive contribution of 1.5 percentage points (in 2016, savings and timed deposits made negative contributions to the growth of M2 almost every month)

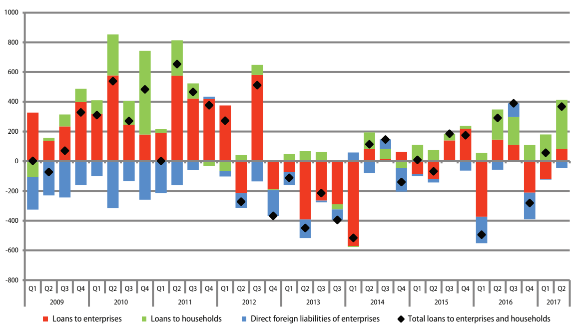
Banking sector: Placements and sources of financing

Business banks record pronounced growth of placements in Q2…

… in which net loans to economy record rise again

The net placements of banks which represent the difference between the values of new placements and repayments falling due on the basis of funds placed earlier in Q2 rose by 601 million Euro (Table T7-7). Business banks increased the value of placements in all three segments with the growth in net new loans to the enterprises and the households taking the lead. Net loans to the enterprises and households were increased in q2 by 413 million Euro with almost the entire growth recorded in June. Bearing in mind that the entire growth of net loans to the enterprises and the households in 2016 stood at 227 million Euro, that figure suggests that the domestic credit market is slowly seeing a revival of demand. That is shown by figure from July when an added increase in net loans to the enterprises and the households of 212 million Euro was recorded. As in previous quarters, net loans to the households recorded the highest increase which in Q2 stood at 330 million Euro and an additional 76 million Euro in July. We saw positive changes in the segment of net loans to the enterprises which, following negative values in the two previous quarters, once again registered an increase of 83 million Euro at the level of Q2 and additionally 135 million Euro in July.

Graph T7-6. Growth of new loans to enterprises and households, 2009-2017



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

The rest of the growth of the net placements by domestic banks was distributed to the growth of placement in REPO bonds and net loans to the state. In Q2 REPO placements stood at 87 million Euro but in July the REPO stock dropped by 363 million Euro while net loans to the state in Q2 stood at 100 million Euro.

Enterprises continues to repay foreign debts

Unlike the partial recovery of credit activity in the enterprises in terms of domestic banks, Q2 figures showed that repayment of debts to foreign banks is continuing. The enterprises has continued its trend of negative cross-border loans which in Q2 stood at –45 million Euro. On the basis of repayment of foreign loans and a growth in credit activity in the domestic banking system to the enterprises and the households a growth was recorded in net placements totaling 329 million Euro which is one of the biggest quarterly growth of placements in the past five years (Graph T7-6). Unlike the period prior to the financial crisis when new placements to the enterprises from domestic banks and on the basis of cross-border loans were the main mover of credit activity, now the households is the main element in increasing the net placements by banks. The largest part of newly-approved loans to the enterprises in this quarter was also in loans for current assets (60%), while the participation of investment loans stood at 22% and was slightly lower than in Q1. The demand by the households was directed, as in the previous period, towards Dinar cash loans and re-financing loans (59%), while the participation of newly-approved housing loans was at a similar level (18.2%) as in the previous quarter.

Table T7-7. Bank operations – sources and structure of placements, corrected[1)] trends, 2015-2017

	2015				2016				2017	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of euros, cumulative from the beginning of the year									
Funding(-, increase in liabilities)	241	33	-368	-513	377	168	-363	-1,130	354	-252
Domestic deposits	47	-118	-324	-918	223	-235	-708	-1,425	107	-104
Households deposits	-11	-104	-114	-282	-16	-235	-362	-625	-69	-164
dinar deposits	96	19	-57	-196	3	-75	-154	-290	27	-7
fx deposits	-107	-123	-57	-86	-19	-161	-208	-334	-96	-157
Enterprise deposits	58	-14	-211	-635	239	0	-346	-800	175	60
dinar deposits	168	112	-75	-455	385	222	5	-352	207	142
fx deposits	-110	-126	-136	-181	-146	-222	-351	-448	-31	-82
Foreign liabilities	36	150	58	225	181	397	427	335	218	49
Capital and reserves	158	1	-101	179	-27	6	-82	-40	29	-198
Gross foreign reserves(-,decline in assets)	-150	-115	-262	-497	214	337	284	244	-35	-153
Credits and Investment[1)]	-20	149	928	1,252	128	426	1,129	997	255	856
Credit to the non-government sector, total	24	-21	165	407	-316	32	329	186	61	474
Enterprises	-86	-207	-67	158	-374	-228	-118	-372	-119	-36
Households	111	186	231	248	57	260	447	559	180	510
Placements with NBS (Repo transactions and treasury bills)	-66	100	439	192	-7	-14	276	27	202	289
Government, net[2)]	22	69	324	653	452	408	525	784	-8	93
MEMORANDUM ITEMS										
Required reserves and deposits	444	605	288	311	-598	-864	-859	-565	-161	-94
Other net claims on NBS[3)]	-182	-309	-209	-100	-107	160	6	201	-324	-401
o/w: Excess reserves	-204	-317	-225	-134	-102	160	3	187	-326	-415
Other items[4)]	-352	-379	-404	-343	0	-204	-175	253	-79	18
Effective required reserves (in %)[5)]	22	23	20	20	17	16	15	16	16	15

Source: NBS

1) Calculating growth is done with the assumption that 70% of overall placements are indexed against the Euro. Growth for originally Dinar values of deposits is calculated under the average exchange rate for the period. For foreign currency deposits – as the difference in state calculated by the exchange rate at the ends of the period. Capital and reserves are calculated by the Euro exchange rate at the ends of the period and do not include the effects of changes to the exchange rate from the calculation of the remainder of the balance.
2) NBS bonds include state and NBS treasury bonds which are sold at repo rate and at rates set on the market for permanent auction sales with a due date greater than 14 days.
3) Net loans to the state: loans approved to the state are decreased by the state deposits in business banks; the negative prefix designates a higher growth of deposits than of loans. State includes all levels of government: republic and local administration.
4) Other NBS debts (net): the difference between what the NBS owes banks on the basis of cash and free reserves and debts to the NBS.
5) Items in bank balance: other assets, deposits by companies in receivership, inter-banking relations (net) and other assets not including capital and reserves.
6) Mandatory money reserves is the mandatory reserve and deposits in the sum total of overall deposits (households and enterprises) and bank debts abroad. The basis to calculate the mandatory reserve does not include subordinate debts because that data is not available

Besides the growth in credit placements in Q2, business banks also saw an increase in sources for new placements of 606 million Euro (in Q1 sources for new placements dropped by 354 million Euro, Table T7-7). The increase was almost equally distributed between all three channels of the growth of credit potential in the banking sector with an especially interesting increase in foreigh

Significant increase in bank credit potential registered in Q2 …

… similarly distributed in all three segments

debts by domestic banks. Domestic banks repaid debts to their head offices for funds taken earlier which means that the net increase of foreign debts by 199 million Euro could suggest that banks expect a further recovery of domestic credit activity. Domestic deposits recorded a rise in Q2 of 211 million Euro with 115 million being growth in deposits by the enterprises while the rest is in increases of deposits by the households. The foreign currency structure of the deposits shows a somewhat higher participation of foreign currency deposits by 111 million Euro against 99 million Euro in Dinar deposits which is owed to the higher growth of foreign currency deposits by the households against Dinar deposits. The increase in the credit potential was also thanks to a growth in capital and reserves in domestic banks of 227 million Euro which is the highest quarterly increase in the past few years. According to date from July it continued with an additional 58 million Euro.

Table T7-8. Participation of NPLs by type of debtor, 2008-2017

	2009	2010	2011	2012	2013	2014	2015				2016				2017		
	Dec	Dec	Dec	Dec	Dec	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Avg.
							balance at the end of period										
Corporate	12.14	14.02	17.07	19.06	27.76	25.5	25.85	28.63	25.52	24.40	26.89	26.26	23.56	19.48	19.92	19.24	19.70
Entrepreneurs	11.21	15.8	17.07	15.92	20.82	43.29	45.19	34.91	32.03	29.92	33.03	30.12	28.44	27.42	26.49	25.02	26.71
Individuals	6.69	6.71	7.24	8.32	8.59	9.97	10.16	11.60	10.68	10.53	10.95	10.63	10.36	9.66	9.21	8.35	8.68
Ammount of dept by NPL (in bilions of euros)	1.58	1.94	2.63	3.19	4.09	3.70	3.72	3.96	3.61	3.52	3.76	3.75	3.45	2.83	2.83	2.77	3.04

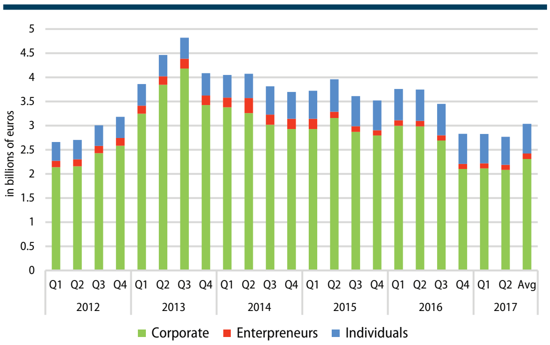
Source: *QM* calculation

The participation of NPLs dropped additionally in Q2 …

… but the level continues to be high compared to the region

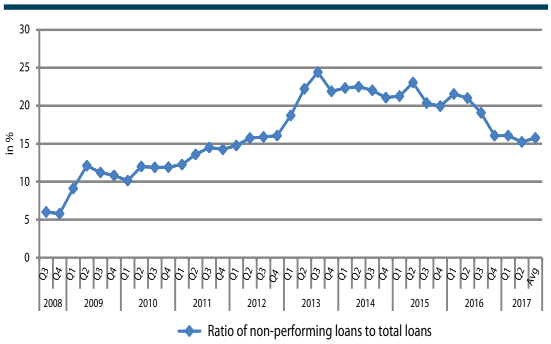
As in previous quarter, the end of Q2 saw a drop in the participation of NPLs in the overall placement both in the overall and in all individual categories of debtor. At the end of Q2, the participation of NPLs was lowered by 0.83 percentage points to 15.2% (Graph T7-10) with the greatest drop in the segment of private individuals by 0.86 percentage points (Table T7-8). Although a relatively somewhat lower drop was recorded with corporate sector by 0.68 percentage points, this had the greatest effect in the absolute amount because the NPLs to corporate segment account for 76% of the total sum of NPLs in the domestic banking sector. Placements to entrepreneurs in the NPL segment also registered a drop of 0.47 percentage points but since they represent just about 4% of the total of NPLs, these changes had no great effect on their overall participation. The drop in the participation of NPLs is the consequence of increased credit activity in Q2 and also the increased write-off and sale of NPLs to persons outside the banking system which is shown by figures on the absolute amount of NPLs at the end of June. The overall value of the remaining debt from loans whose repayments are falling late by more than 90 days dropped in Q2 by 58 million Euro compared to the previous quarter with a part owed to the changes in the exchange rate which were significant between quarters. What could be a cause for concern are the figures from July which show another increase in NPLs despite the recorded increase in credit activities which, along with other unchanged elements, should cause a drop in the participation of NPLs. That is confirmed by figures on an absolute increase in the value of the remaining debt on loans whose repayments are more than 90 days late which showed a growth of 270 million Euro.

Graph T7-9. Amount of remaining debt on loans whose repayment is late, 2012-2017



Source: *QM* calculation

Graph T7-10. Participation of NPLs in overall placement, 2008-2017



Source: *QM* calculation

Also, we should note that the pace at which the participation of NPLs is dropping has also slowed down significantly following a pronounced drop in Q4 2016 and that from the start of the year to August they remained at the level of 15-16%, which is among the highest participation levels compared to neighboring countries.

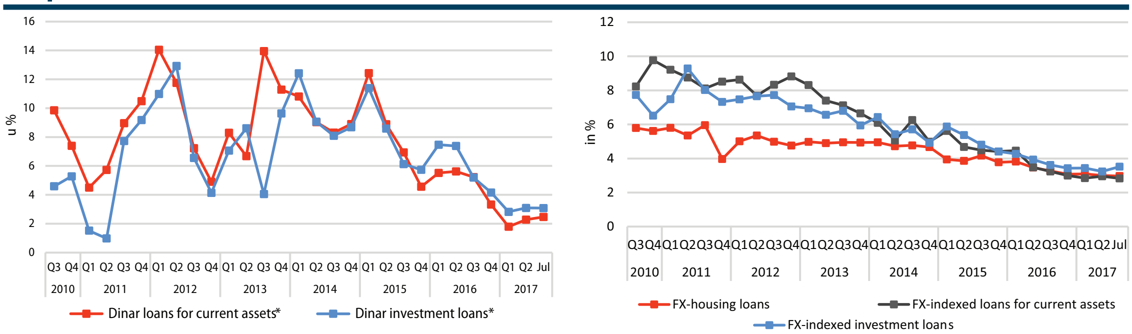
Interest rates: state and trends

Trend of lower interest rates stopped in Q2 …

… which suggests that most rates are close to potential minimum

Despite the fact that the y.o.y. inflation rate remained unchanged in Q2 interest rates on Dinar loans recorded an increase compared to the starting quarter of 2017. Interest rates on Dinar loans for current assets increased by 0.5 percentage points nominally and in real terms while Dinar loans for investment credit recorded a rise of 0.27 percentage points compared to Q1 (Graph T7-11b). In terms of interest rates on indexed loans a deterioration was recorded in some credit categories. At the end of Q2, interest rates on indexed loans for current assets saw a rise of 0.11 percentage points compared to the previous quarter, but according to data from July there was a drop to the level from the end of Q1 (Graph T7-11a). In the segment of interest rates on indexed loans for investments, a different trend was noted. First, at the end of Q2 a drop was registered of 0.2 percentage points and then in July an increase was recorded of 0.3 percentage points which means that the interest rate level for those loans was above that at the end of Q1. The drop in interest rates both and the end of Q2 and at the end of July was recorded in indexed housing loans. The interest rate on those loans was lowered first by 0.09 percentage points at quarterly level and then in July by another 0.03 percentage points which brought the interest rate on indexed housing loans to below 3% for the first time.

Graph T7-11. Interest rates on Dinar and indexed rates, 2010–2017



Source: QM calculation
Real interest rates

HIGHLIGHTS

What do we know about income inequality in Serbia so far?

Gorana Krstić[1], Jelena Žarković Rakić[2]

Introduction

Serbia records the highest level of inequality in income distribution, measured by the Gini coefficient, among European countries, according to data from the Survey on Income and Living Conditions. The Gini coefficient of 38.2 points in 2015 was significantly higher than the average Gini for the EU-28 countries (31.0), and also higher than in any other former Yugoslav Republic, such as Macedonia (35.2), Croatia (30.6), and particularly Slovenia (24.5).

Nevertheless, the interest of decision-makers in Serbia for the problem of inequality has so far been rather limited. The main concern of the government over the past several years has not been to address the problem of inequality and poverty, but above all, fiscal consolidation, preservation of macroeconomic stability and promotion of growth and investment. Considering the low interest of decision-makers in the topic of inequality, it is not surprising that no formal procedure for assessing the distributive effects of public policies before their adoption has been developed.

At the same time, academic research on inequality in Serbia is limited. Milanovic (2003) examines the inequality of consumption and income, and contribution of each component of income to inequality. Krstic et al. (2007) and Krstic and Sanfey (2011) analyse the scope and the dynamics of wage inequality, as well as factors explaining it, using the Labour Force Survey (LFS) 1996-2003 data and Living Standards Measurement Study (LSMS) 2002-2007 data. Randjelovic and Zarkovic-Rakic (2011) show that the income tax system in Serbia has significantly less redistributive effect, i.e. the capacity to reduce inequality, in relation to the income tax system in (mostly older) EU member states. Similarly, in the older EU member states the most important social assistance benefits have considerably stronger impact on reduction of inequality compared to the social benefits in Serbia. So, although fragmented and limited, the current research suggest possible causes of high inequality in Serbia - low redistributive capacity of taxes and social benefits, on the one hand, and low employment rates and pronounced duality of the labour market on the other.

In this Highlight we will show what we know about income inequality so far, that is, we will discuss the current state of inequality and inequality trend over the last decade in Serbia compared to the neighbouring countries and countries of the European Union (EU), as well as the results of recent research that may be relevant to decision makers in our country.

In the analysis we will use data from the Survey on Income and Living Conditions (SILC) conducted by the Statistical Office of the Republic of Serbia (SORS) since 2013, according to a methodology that is comparable to EU standards. This survey provides detailed information on total household and personal income and its components, and is therefore the best source of data for measuring inequality according to the official methodology of the SORS (and the Eurostat). The starting aggregate for inequality analysis is the household net disposable income. It is a cash income that is, after paying taxes and contributions, available to the household for consumption and savings. The household disposable income is further divided with the modified OECD equivalence scale (to take account of the household composition and the economy of scale) resulting in equivalent available income, which is the basis for calculating inequality.

Serbia has a high income distribution inequality

By monitoring the income inequality, measured by the Gini coefficient, in the last four years, and by comparing the data available for the previous period, we can draw several conclusions:

(1) According to the SILC data, the value of the Gini coefficient that ranged from 38.0 to 38.6 in the period 2013-2016 indicates a relatively stable and high income inequality in Serbia, significantly higher than the EU-28 average;

Table 1: Gini coefficient (*100) for equivalent disposable income, Serbia and EU, SILC, 2013-2016.

	2013.	2014.	2015.	2016.
Serbia	38,0	38,6	38,2	38,6
EU	30,5	30,9	31,0	...

Source: Survey on Income and Living Conditions (SILC). For Serbia, Press Release no. number 087, Statistic Office of the Republic of Serbia; For EU Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12&lang=en

1 Ekonomski fakultet u Beogradu i FREN
2 Ekonomski fakultet u Beogradu i FREN

2) there has been an increase in inequality over the previous decade, but a part of this growth is definitely a result of the different data sources used: Household Budget Survey (HBS) and SILC which became available only after 2013 (Kristc, 2016);

(3) inequality of income over the period 2006-2013 was probably higher than the inequality that could have been monitored on the basis of the Household Budget Survey, but until the emergence of SILC there were no adequate survey data designed for the coverage of income that would have shown this (other than LSMS data);

To provide an answer to the question of how to reduce income inequality in Serbia, we considered potential causes of high inequality. One of the causes of high inequality in Serbia is the high percentage of persons living in households with very low work intensity (Krstic, 2016), and these are persons which work less than 2.5 months during one year. SILC data from 2013 show that the work intensity of household members in Serbia is very low, with a significantly larger share of these persons aged 60 years (21.2%) than the European average (10.5%) and individual EU countries (with the exception of Ireland 21.1%). This is a result of the high inactivity of the working age population, as well as the fact that a low percentage of such persons live with other adults who work. Serbia has the largest share of people who do not work, especially the unemployed, in the working age population compared to the EU countries.

Analysis of inequality by work intensity of household members indicates that income inequality is the highest for households with very low work intensity and it decreases with an increase in work intensity of household members (Krstic i Zarkovic Rakic, 2017a). The greatest reduction in inequality is the transition from very low to low labour intensity, which is expected because persons who do not work also belong to households with very low intensity work. This suggests that a significant reduction in income inequality could be achieved by employing persons in these households.

Decomposition of the total inequality into inequality between households with different levels of work intensity and the remaining inequality within these households shows that the differences in average income among households with different levels of work intensity explain 19% of the total income inequality. This means that most of the income inequality (81%) can be attributed to inequalities within households with different levels of work intensity, which is a conclusion that can be relevant from the aspect of creating public policies that could contribute to reducing inequality. Hence, the reduction in income inequality within these households would result in a significant reduction in total inequality, and potential factors that could affect inequality of income/wages within these households are characteristics of the persons (sex, age, education, marital status, activity, etc.) and households, which will be additionally analysed in the following paragraphs.

Decomposition of income inequality by income sources via classical method (measured by the Gini coefficient) indicates several important findings (Krstic i Zarkovic Rakic, 2017a).

(1) wages which constitute the largest source of income (three quarters of the overall disposable income) have high inequality (0.615) and they are unequally distributed towards better of households. This all influenced that wages contributed the most to total inequality (93%) and increased it. All other income sources, other than income from capital (which influenced very little) decreased inequality;

(2) taxes have the largest impact on reducing inequality, followed by social transfers, pensions, and finally income from self-employment and private transfers. However, the impact of these components of income on reducing inequality is very small because, other things being equal, a one percent increase in taxes reduces income inequality by 0.062 while for social transfers this effect is somewhat lower, amounting to 0.055.

Decomposition of total inequality by sequential approach is another method of decomposing the total income inequality which was used to compare the direction and magnitude of the impact of each income source on inequality with the average value for the EU countries (Krstic i Zarkovic Rakic, 2017a).It implies that the impact of each income source is calculated by comparing income inequality without and with that income source.[3]

All income sources (except for wages, whose impact was not tested because the distribution of wages was the initial, benchmarking, distribution with which the influence ofthe self-employment income is compared) reduce the inequality. Impact direction is the same for all sources as in the EU countries; the only difference is in a self-employment income, because in most EU countries this income increases inequality (ILO 2015), while in Serbia it decreases it. This is because most of the self-employment income is associated with vulnerable employment, since the distribution of this income is primarily directed towards the poorer population.

3 This decomposition method is not suitable if we want to determine which component has the greatest impact on decrease/ increase of inequality since the reference distribution changes with inclusion of each new component of income (ILO, 2015). However, it is useful for international comparisons.

Although the Gini coefficient of disposable income in Serbia is significantly higher than the average for the EU-28, it is interesting to note that the Gini coefficient for market income is at the EU average (55.1 vs 55.2). This indicates that the main reason for such a high inequality of disposable income in Serbia is the low redistributive role of social transfers and taxes.

The largest difference in the impact of income sources on income inequality in relation to the EU is recorded for pensions. Due to the effect of pensions, the difference between the Gini coefficient for market and the Gini coefficient for disposable income amounts to an average of 17.2 percentage points for EU countries and only 10.9 percentage points for Serbia. One possible explanation could be found in smaller coverage of the population by pensions in Serbia than in the EU, since 93% of men and only 79% of women in Serbia receive pensions according to the 2012 Census data, and the fact that in most EU countries persons over 65 receive social pensions, which also affect reduction in inequality. Other social transfers reduce inequality in Serbia to a somewhat less extent than the EU average shows (3.5 vs. 3.7 percentage points, respectively) which is explained by the low coverage of households with monetary social assistance and child benefits and the low amounts of these benefits in Serbia. Taxes have a significantly lower impact on reducing income inequality than in the EU (2.7 vs. 4 percentage points), which is a result of a very low level of progressivity of the Serbian income tax system.

Finally, given that the wages make the most of the total inequality of income (according to the presented results of the decomposition of income inequality by income sources), we analysed the factors affecting the wage inequality (Krstic and Zarkovic-Rakic, 2017b). By applying a regression method, we decomposed the wage inequality by different characteristics of persons which we expect to influence the wages, such as age, level of education, gender, etc. Although a significant portion of the wage variation remains unexplained by variables in regression, the results indicate a significant role of education in explaining the wage inequality in Serbia. The level of education makes up to 63% of the estimated share of income inequality in 2012. The role of education as a factor influencing income inequality was dominant during the 2000s on the basis of the data of the Living Standards Survey (Krstic and Sanfey, 2011). Data from PISA surveys that show that our education system fails to cancel the effects of socio-economic inequalities are indicative in this sense. Moreover, in some segments it deepens them as the data show[4] that there is twice as many functionally illiterate children in the families that are among 20% of the population with the lowest socio-economic status, than in 20% of wealthiest families. The children in the first group lag behind their peers whose parents belong to higher social classes by two school years.

4 http://www1.worldbank.org/poverty/visualizeinequality/PISA/cov_gaps.html

How to reduce income distribution inequality in Serbia?

An increasing number of research points to the growth of income inequalities in developed economies over the past three decades (OECD 2011, IMF 2014). Some of the policy proposals aimed at reducing income inequality include introduction of the guaranteed minimum income, universal child allowance, and increase in capital ownership for larger number of people.Active management of the process of technological progress, which would increase the employability of workers, especially those with low qualifications is also emphasized. It is also recommended to monitor the distributional consequences of inclusion in international trade flows (Atkinson, 2015).

Serbia, on the other hand, even without going through current austerity measures, could not financially afford the introduction of a guaranteed minimum income or universal child allowance. Expenditures on two basic social benefits, social welfare and child allowance account for 0.6% of GDP, far below the average 1.1% of GDP for similar expenditures in EU countries (Clavet et al., 2017). Low amounts of these two social benefits and the limited coverage of the population cannot significantly contribute to the reduction of inequality. Nevertheless, although in the situation when the austerity measures are being implemented it is unrealistic to expect an increase in social spending, it is possible to work on better targeting of benefits, especially child allowance, by ensuring less leakage of resources to not-so-poor individuals (e.g. those who earn income in the shadow economy) and diverting the funds to those who need them most.

Globalization and technological changes also affected the situation in the Serbian labour market, but the biggest changes were a result of the restructuring of the economy, extinction of existing and creation of new enterprises, as was the case in other former socialist countries. Despite a certain recovery in the period after the last economic crisis, the situation in Serbian labour market is still worrying as the number of people with very low work intensity increases. Only in the last two years, their number increased by 130,000. Majority of them are unemployed or inactive (group dominated by pensioners), and most have low levels of education.

The results of the total income inequality decomposition by work intensity of household members, shows that the biggest impact on reducing income inequality is achieved by a reduction of income inequality within households with different work intensity. This means that the increase in the employment of persons in these households would reduce income inequality, because the number of those without pay or those who receive unemployment benefits will be reduced. However, this would not be enough, if these new jobs are not full time jobs, permanent, in the formal sector, or in other words higher quality jobs with higher wages, better social protection, and better working conditions.

In order to increase their employability, it is necessary to increase the level of their skills and qualifications through counselling, additional training and other active labour market measures implemented by the National Employment Service. In this regard, spending on an active labour market policy measures should be increased, as envisaged by the National Employment Strategy, according to which spending for these purposes should increase to 0.5% of GDP by 2020. However, this currently seams difficult to reach as spending on active measures declined from year to year and now amount to less than 0.1% of GDP.

It is, however, important to act even before individuals enter labour market, and that means providing access to high quality education to the largest possible number of people.In this regard, data show that the rate of enrolment in high schools is significantly lower than the average (by almost 30%) for children from lower socioeconomic classes and 16% higher for children from wealthier families. These inequalities continue in the course of further education because high school students, although they account for only one third of all graduates, participate in almost 50% of the total number of students in the first year of academic studies (Baucal and Pavlović Babić, 2009).

Increasing the progressivity of citizens' income tax in Serbia could be achieved through introduction of tax deductions for supported family members (at present this option is available only to the citizens who pay annual income tax, i.e. those with high income) and by increasing the tax-exempt threshold from the current 25% of the average wage to 50% (Arandarenko and Vukojevic, 2008). Crucially, however, the existing so-called schedular tax system, which is becoming increasingly rare in modern tax systems, should be replaced with a system that integrates income from labour and capital and applies progressive tax rates, which should range from 15% to 30%.

Finally, further research should address the impact of pensions on reducing inequality in order to precisely identify the causes of the lower redistributive capacity of this source of income. For now, it seems that the smaller coverage of pensions, especially of the female population in rural areas, is one of the causes of such effect. Namely, agricultural households, when deciding that some of the members are to be registered for social insurance, choose a household carrier or male family member. In this regard, in order to reduce inequality, and especially poverty in old age, it is necessary to work on increasing the coverage of the rural population with social security.

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