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The Foundation for the Advancement of Economics (FREN)
Kamenička 6, Beograd
Tel/Fax: 011 3021 069
E-mail: office@fren.org.rs
http://*www.fren.org.rs*

AUTHORS
Milojko Arsić, Aleksandra Anić, Labour Market
Danko Brčerević, Economic Activity
Mirjana Gligorić, Balance of Payments and Foreign Trade
Slobodan Minić, Prices and the Exchange Rate
Saša Ranđelović, Fiscal Trends and Policy
Svetozar Tanasković, Monetary Trends and Policy

ASSOCIATE IN THIS ISSUE
Aleksandar Radivojević

TRANSLATION
Darko Popović
Marjeta Pevec
Vladica Đukić

PRINTING PREPARATION
Maja Tomić

COVER DESIGN
Nikola Drinčić

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

The results achieved by the Serbian economy this year are basically a continuation of trends from the previous two to three years. The economic growth is slower than in the previous year, but will be slightly above the average for the previous three years. Most indicators of macroeconomic stability are good, although there are imbalances that, if they persist in the coming years, could cause instability. Restructuring of public enterprises and the state sector is still slow, while reforms to improve the economic environment have remained absent this year. The international circumstances for the growth of the Serbian economy have been less favorable than in the past few years, which is manifested through the slowdown in the growth of European economies.

We estimate that the growth of Serbian economy in 2019 will be about 3.5%, which is slightly below the weighted average of the countries of Central and Eastern Europe. When observed by activity, the construction and services sectors (trade, transport, tourism, telecommunications and financial services) recorded a strong growth, while industry and agriculture were stagnant. Thus, strong growth was achieved by activities that generate most of their revenues in domestic market, while economic activity stagnated in sectors that are crucial for exports. Stagnation in sectors producing tradable goods is partly the result of a slowdown in demand growth in the main export markets, and partly the result of a strong dinar, which directs investors to non-tradable sectors. The poor performance in the industry is partly due to external constraints such as the introduction of prohibitive tariffs on exports to Kosovo and Metohija and restriction on steel exports to the EU. The most important driver of economic growth this year was domestic demand, and high investment growth was achieved within it. Strong investment growth, which is likely to be around 15%, is in principle a good result, but its impact on economic growth in the coming years will be modest, since most of the investments were made in construction (residential construction, "Turkish Stream"), while investments in equipment increased by only 4%. Private and government consumption grew at a similar rate as GDP, while net exports had a negative impact on growth as imports grew faster than exports.

Year-over-year growth of about 3.5% is an average of slow growth of 2.8% in the first half of the year and significantly faster growth of about 4.5% in the second half of the year. The acceleration of growth in the second half of the year is almost entirely the result of the growth of construction activity and to a much lesser extent the acceleration of industry growth, while other activities had relatively uniform growth throughout the year. According to statistics, value added in construction increased in the third quarter as a result of the construction of the Turkish Stream pipeline by as much as 34.7% y-o-y, which is an enormous acceleration compared to 9.8% growth in the first quarter and increase of 18,1% in the second quarter. The growth of value added in construction is far outstripping the growth of gross wage mass in this sector, which increased by about 22% in real terms over the same period. Given that gross wages account for 60% of construction value added, this implies that other parts of gross value added in construction (gross profit, depreciation, etc.) increased by over 50%! The big difference in the growth of wage mass and value added raises the question of whether the statistics overestimated the growth of value added in construction, and thus the growth of total GDP, in the third quarter of this year?

Based on current trends and adopted economic policies, we expect GDP growth to be 3.5% - 4% in 2020. A much lower construction growth rate and moderate industrial production growth are expected in the coming year, while other activities will have similar growth as in this year. Due to high wage growth in public and private sectors, rising pensions and strong growth in bank lending, we expect the private consumption to be a key driver of economic growth, while slowing construction activity will slow down the investments. Due to a strong growth in domestic demand and a further decline in price competitiveness of the Serbian economy, it is expected that imports will grow faster than exports in the coming year, meaning that net exports will negatively affect GDP growth. The previous forecast is based on the assumption that the next year's growth of European economies would be in line with current projections, and that the agricultural season in Serbia would be average.

Serbia has made significant progress over the past few years towards establishing macroeconomic stability - inflation is low and stable, the dinar exchange rate is stable, interest rates are low, while the country's balance sheets are roughly in balance. However, for the third year in a row, external deficits have been growing and the current account deficit will reach 6% of GDP this year, which is above the long-term sustainable level. The key driver of the foreign trade deficit growth, which then spilled over to the current account deficit growth, was an increase in the real value of the dinar by about 7%, which had no basis in the productivity growth of the Serbian economy. Another factor that influenced the growth of external deficits, and whose impact will be present in the next year, is faster wage growth than productivity growth, that is, unit labor costs growth. The fiscal surplus achieved by the state over the last two years has influenced the reduction of the foreign trade and current account deficit.

The high wage growth in the last year and this year also was generated by the high increase in public sector wages, which in 2019 was accompanied by high wage growth in private sector. The high wage growth in private sector is a part of a broader trend that has existed in Central and Eastern European countries for two to three years, and which has been generated by labor shortages due to the emigration of workers to developed European countries. The negative impact of rising unit labor costs on the competitiveness of the Serbian economy over the last three years has been largely mitigated by a decrease in the cost of lending interest to the economy, which was caused by a fall in interest rates. The fall in interest costs and rise in real value of the dinar are key factors that prevented the rise in unit labor costs to affect a rise of inflation. In the coming period, we cannot count on an additional significant fall in interest rates, and it is unlikely that the dinar will further strengthen. Therefore, the growth of unit labor costs in the coming years would affect the decrease in price competitiveness of the Serbian economy, the growth of external deficits, but also the growth of inflation. An increase in external deficits would worsen Serbia's net asset position, which would increase the outflow of interest and dividend income in the future. A high external deficit would make a country overly dependent on foreign capital and vulnerable in the event of a sudden halt in its inflow. Due to balance of payments risks, the growth of external deficits should not be ignored, and it would be good for economic policy measures to halt further deterioration of the price competitiveness of the economy.

A moderate increase in employment and a further reduction in unemployment are expected in the coming year. We expect that the registered employment will increase by about 2% in the coming year, that is, it will increase by about 40 thousand. Given that the redundancies in enterprises inherited from the 1990s have been eliminated, GDP growth will be accompanied by employment growth in the future but, due to productivity growth, employment growth will be slower than GDP growth. The growth of registered employment in the coming year will also be affected by termination of employment in the public sector. Unemployment is expected to decrease in the coming year, both as a result of rising employment and the departure of workers abroad.

Next year, a high average wage growth is expected, which will amount to 9.6% in public sector, while private sector wages will rise by about 10%. While public sector wage growth is the result of a political decision, wage growth in the private sector will continue to be under intense pressure of workers leaving abroad (labor migration) and shortage in certain categories of workforce. Real wage growth in the coming year is likely to be around 8%, which is significantly higher than the growth expected in production and productivity. As a consequence of a faster growth of real wages than productivity growth, unit labor costs will increase by about 6% in the next year, which will lead to additional growth in external deficits, but also to a certain acceleration of inflation.

Inflation is expected to accelerate in 2020, but it will remain in the lower half of the target corridor (below 3%). The main driver of inflation growth on the cost side is the rise in unit labor costs, which is unlikely to be amortized by the fall in some other costs. The rise in inflation will be influenced by the growth in demand due to the growth of citizens' incomes, but also due to the lending activity of banks.

In addition to the standard analyzes of economic trends and economic policy, this issue of the Quarterly Monitor contains the Spotlight On text "Real Estate Market in Serbia Price Analysis", by Aleksandar Radivojevic and the Highlights text "Wages, Productivity and International Price Competitiveness", by Milojko Arsić.

TRENDS

1. Review

The high GDP growth of 4.8% in Q3 prompted state officials to make immoderate estimates in public about Serbia's great economic progress and the success of Serbia's economic policies. However, an objective analysis of the published macroeconomic data shows a slightly different picture. While it is true that with a 4.8% GDP growth, Serbia was the second fastest growing economy in Central and Eastern Europe (after Hungary) in Q3 - it should not be forgotten that in the first half of the year Serbia was (with Albania and BiH) the slowest growing CEE economy. In addition, GDP growth in Q3 accelerated primarily due to the construction of the Turkish Stream and the consequent increase in construction activity growth of as much as 35%, while all other sectors of the economy continued with roughly similar trends as in the first half of the year. This means that relatively high economic growth is likely to be limited in time by the end of this year, when most of the pipeline construction works will be completed. We singled out this example at the beginning of the Review because it is a good illustration of the importance of conducting objective macroeconomic analyzes, as we have done since the first edition of QM in 2005. Namely, it is important for the public, and for the Government itself, to point out objectively not only the successes of economic policy (such as successfully implemented fiscal consolidation and the achieved macroeconomic stability), but also the problems and poor results in order to correct them by appropriate policies. And the biggest failure of economic policies pursued in Serbia in the last decade is precisely insufficient economic growth - and that estimate cannot be changed based on one, temporarily better result, as it was the case in Q3.

The analysis of macroeconomic trends from Q3 points to three most important conclusions that didn't change much compared to the previous quarters: 1) macroeconomic stability is maintained; 2) moderate (insufficient) economic progress continues; and 3) the government's efforts to address the greatest weaknesses present in the domestic economy are largely absent. The achieved macroeconomic stability is primarily a result of the roughly balanced government budget with declining public debt, and the most obvious manifestation of this stability is the extremely low inflation, which dropped to just 1% y-o-y in October. Moderate economic progress is indicated by GDP growth of just over 3.5% as it was in Q3 (excluding the construction of the "Turkish Stream") and as we expect it to be during the whole year. Similarly, in Q3 we continue to see a slight increase in employment (by 0.3% compared to the same period of the previous year according to LFS), with a reduction in the unemployment rate to below 10%, the first time since it has been measured by a comparable methodology. This decrease in unemployment, however, is largely a result of adverse demographic change rather than a modest increase in employment. Finally, the Government still does not face the problems of unreformed public enterprises (primarily EPS), poor economic environment, unregulated system of wages and employment in public administration, and more. Due to the long absence of structural reforms, Serbia's economic growth in 2019 is not satisfactory, both in terms of size and structure. Namely, with the economic growth rate in 2019 of just over 3.5% Serbia will be only on average or slightly below the average of comparable CEE countries, and should grow noticeably faster than them because it is economically underdeveloped. Also, Serbia's economic growth relies too much on domestic demand, rather than the growth of net exports and industrial production, which in 2019 are performing poorly. The result is an increase in the current account deficit, which will be noticeably higher in 2019 than in 2018.

As we have pointed out, the results of economic activity in Q3 are not fully satisfactory, although a relatively high GDP growth rate of 4.8% has been achieved (see Section 2 "Economic activity"). Namely, most of the acceleration of economic activity in Q3 is due to only one major project (construction of the "Turkish Stream") and is therefore not sustainable in the long term, and it is possible that the added value of that project has not been measured reliably enough, i.e. that the economic growth in Q3 was slightly lower than shown. When the construction of the pipeline is excluded from the results of economic activity in Q3, GDP growth in Q3 was slightly above 3.5%, which is at the level of the average of the CEE countries. Because the acceleration of GDP growth came as a result of temporary factors, we expect that in 2020, when most of the pipeline construction work will be completed, GDP growth will again slow down and return to its usual level of around 3.5 %. For now, therefore, we forecast that the GDP growth rate in 2020 is likely to be slightly lower than the official forecasts of 4%, since there is no indication of an acceleration of the core trend of economic activity in 2019 to 4%. If some of the major investments announced (such as investments in new copper mines in Bor) are realized in 2020, economic growth could be slightly above our current forecasts. However, if the slowdown in economic activity in EU countries and the region in 2020 prove to be stronger than current expectations, it would undoubtedly have a negative impact on Serbia's GDP growth, so growth could easily be slightly lower.

Gradual improvements in the labor market continued in Q3, although we need to be cautious in interpreting these trends (see Section 3 "Labor Market"). The unemployment rate as measured by the Labor Force Survey (LFS) in Q3 fell to its lowest level since this survey is in use (2003), and it was 9.5%. It is interesting to note, however, that the relatively strong decrease in the unemployment rate in Q3 was not a result of a large increase in employment, which was modest 0.3% y-o-y according to LFS, but primarily due to demographic changes. These changes present decreases in the number of working age population due to the negative natural increase, but certainly also due to increased emigration of the working age population - although there is still no reliable data on emigration. In Q3, the good trend of formalizing the labor market continues, as the number of informally employed persons was reduced by about 7.8% y-o-y, while the number of formally employed persons by LFS increased by 2.4%. The data on the growth of formally employed of about 2% is confirmed by the movement of registered employment, which is independently and reliably monitored by the SORS on the basis of administrative data (CROCSI). In terms of wage developments in Q3, a rather high real average wage growth is further accelerated, and exceeded 9% y-o-y in the quarter. This increase in wages is much higher than the growth of economic activity as well as the growth of productivity. Higher real wage growth than productivity growth has negative effects on the competitiveness of the Serbian economy, that is, contributes to the deterioration of trade and cannot be sustained over a longer period. Unlike in previous years, when similar trends were the result of non-market mechanisms (excessive wage increases in the public sector, high minimum wage growth), in Q3, as well as throughout 2019, private sector wages also grew faster than productivity. Although it is too early to conclude, it is possible that this is one of the consequences of a large emigration of the working population, that is, the appearance of a deficit of skilled and productive workforce in the country.

Due to a slightly faster rise in imports than exports, the current account deficit continued to worsen in Q3, with a slightly less visible worsening compared to the first half of the year (see Section 4, "Balance of Payments and Foreign Trade"). The current account deficit in Q3 amounted to 5.4% of GDP (EUR 640 million), which is around EUR 80 million higher than the deficit achieved in the same period last year. The main reasons for further exacerbation of the foreign trade deficit, that is, the current account deficit, were the faster growth of domestic demand than the growth of production, followed with an exaggerate strengthening of the dinar exchange rate. Although the latest available data for October show some improvements in Serbia's foreign trade, the current account deficit in 2019 will undoubtedly be significantly higher than in 2018, i.e. it could amount to around 2.8 billion euros compared to 2.2 billion euros in 2018. On the capital inflows side, it is important to point out that the current account deficit in Q3 was fully covered by large foreign direct investments (FDI) inflows, which exceeded 7.5% of GDP in this quarter (EUR 912 million) - a marked increase compared to the same period of the previous year when they were EUR 600 million. Although the current account deficit will certainly be covered by the net FDI inflows in 2019, the growth of external imbalances could pose a future risk, especially in the event of a more pronounced slowdown in European countries, and should be addressed by appropriate economic policies to reduce it - primarily by a policy of gradual weakening of the dinar, but also the growth of public sector wages and minimum wages in line with the productivity growth.

Inflation continued to slow down and declined to just 1% year-on-year at the end of October (see Section 5 “Prices and the Exchange Rate”). For some time now inflation has been below the NBS target level (3 ± 1.5%) and was lower than in the Eurozone from July to October (the latest available data), which is an unusual occurrence for Serbia. Consumer prices in Serbia decreased by 0.6% between July and October, while prices in the Eurozone remained unchanged in the same period. Due to such trend in inflation, there was a certain curiosity, i.e. the dinar in these four months in real terms even slightly weakened against the euro, although in July the average exchange rate was 117.8 dinars per one euro, and in October 117.5 dinars per one euro. This unusual trend of real weakening of the dinar without its nominal depreciation, however, cannot last for a long period and cannot have major effects on improving the price competitiveness of the domestic economy, which has been deteriorating over a longer period. We expect average annual inflation to be around 1.8% in 2019, and we expect a similar, low inflation of about 2% in 2020.

The relatively strong slowdown in inflation, as well as international circumstances (notably the easing of the monetary policy of the ECB and the Fed), encouraged the NBS to reduce its key policy rate by 25 basis points three times from July - from 3% to 2.25% (see Section 7 “Monetary Flows and Policy”). In addition, the NBS responded to strong foreign exchange inflows during Q3 (and October) by buying around 1.4 billion euros in the interbank foreign exchange market, thus preventing a stronger strengthening of the dinar. We consider such a policy of the NBS justified, because excessive strengthening of the dinar would be bad for Serbian economy. On the other hand, we have less understanding of NBS interventions that stopped the dinar from weakening, and which (to a lesser extent) happen at the end of November and the beginning of December. A slight weakening of the dinar would have a positive impact on the price competitiveness of the Serbian economy, and inflation is below the NBS target corridor, so there is no economic reason not to use the rare depressive pressures for a controlled weakening of the dinar.

Lending activity continues to intensify. The total net placements of commercial banks in Q3 increased significantly due to the combined effect of increased placements on all grounds. Net placements to both the corporate and household sectors recorded an increase compared to the previous quarters, while the overall growth in lending activity was further enhanced by an increase in net cross-border placements taken by the economy abroad in Q3. Along with the growth in lending activity, a record increase was also noted in sources for new placements. The growth of credit potential in Q3 was driven by growth in domestic deposits by the economy and households, but also by borrowing from domestic banks abroad, as well as by an increase in capital and reserves accounts. The share of non-performing loans in total placements decreased by the end of November to a relatively low level of about 6.5%. Write-offs of bad loans and sales to individuals outside the banking sector directly from the bank’s balance sheet continued in Q3, but further decline in the share of bad loans was more affected by the growth of total lending activity. Increased supply of capital in the domestic market, accompanied by a fall in inflation, led to a decrease in interest rates on indexed loans and loans in dinars, which are likely to remain at a similar level in the coming period.

Public revenues were slightly higher than public expenditures in Q3 and October, and a fiscal surplus of about 20 billion dinars was achieved during this period (see Section 6 “Fiscal Flows and Policy”). By the end of October, the fiscal surplus reached nearly 50 billion dinars. Although there is a relatively strong deficit at the end of the year, such trends in public revenues and public expenditures suggest that fiscal 2019 will still end with a roughly balanced government budget (although a rebalance from October planned a deficit of about 25 billion dinars, i.e. 0.5% of GDP).

The most important news regarding fiscal policy, however, is that, at the end of November, the budget for 2020 was adopted, which forecasts a slight fiscal deficit of 0.5% of GDP, which we consider to be a good target. Such a low deficit will allow further reduction of public debt relative to GDP in 2020, so we expect that public debt could drop to below 50% of GDP at the end of that year. Budget has made some positive developments in the structure of public revenues and public expenditures, as gradual fiscal relief of labor continued and investments in infrastructure increased. Total government spending on investments in 2020 is planned at around 4.5% of GDP, which is actually similar to the expected 2019 realization. However, the structure of these expenditures is economically more favorable as more funds are planned for the construction of infrastructure and slightly less for military and police equipment. The improvement in the budget structure could have been even greater if the Government had not opted for an oversized and economically unfounded increase in the wages of general government employees, which averages about 9.5% and is faster than expected nominal GDP growth in the next year. Excessive wage increase has reduced funds available for greater corporate tax reductions and stronger public investment increases. The downside of the planned fiscal policy in 2020 is that the adoption of the pay system for general government employees is postponed for another year, but there is also an extension of the ban on employment in public sector, which has been going on for too long (originally planned to be abolished by the end of 2015) and is economically damaging, because it leads to staff shortages in important public administration jobs (large deficiencies already exist in healthcare, inspection services and more).

Serbia: Selected Macroeconomic Indicators, 2010 - 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018				2019		
										Q1	Q2	Q3	Q4	Q1	Q2	Q3
Economic Growth																
GDP (in billions of dinars)	3,250.6	3,612.3	3,810.1	4,121.2	4,160.5	4,312.0	4,521.3	4,754.4	5,068.6	…	…	…	…	…	…	
GDP	0.7	2.0	-0.7	2.9	-1.6	1.8	3.3	2	4.4	5.0	5.0	4.2	3.5	2.7	2.9	4.8
Non-agricultural GVA	1.1	2.2	0.8	2.5	-2.2	2.3	3.4	3.3	3.7	4.8	4.6	3.2	2.5	2.8	3.1	5.6
Industrial production	1.2	2.5	-2.6	6.1	-7.4	7.3	4.9	4.2	1.4	6.9	1.7	-1.4	-1.1	-2.1	-2.3	1.6
Manufacturing	2.5	-0.2	-1.3	5.5	-4.9	5.7	5.6	6.6	2	5.9	1.6	1.0	0.3	-2.3	-3	1.6
Average net wage (per month, in dinars)[2)]	34,159	37,976	41,377	43,932	44,530	44,437	46,087	47,888	49,643	49,089	49,573	48,965	50,943	53,739	54,553	54,285
Registered Employment (in millions)	1.805	1,866	1,865	1,864	1,845	1,990	1989	2,112	2,131	2092	2127	2147	2159	2148	2162	2180
Fiscal data																
Public Revenues	-1.5	-4.6	0.6	-3.0	3.2	3.1	7.5	4.0	4.6	3.6	2.7	5.4	6.5	8.4	2.5	4.4
Public Expenditures	-1.7	3.3	3.6	-5.7	5.2	-3.2	1.9	-1.7	5.8	5.6	3.7	9.5	4.9	6.8	7.3	5.7
Overall fiscal balance (GFS definition)[3)]	-136.4	-158.2	-217.4	-178.7	-258.1	-149.1	-57.1	52.3	32.2	3.7	30.1	21.4	-23.0	11.9	7.0	16.2
Balance of Payments																
Imports of goods[4)]	-11,575	-13,614	-14,011	-14,674	-14,752	-15,099	-15,933	-18,064	-20,483	-4,714	-5,084	-5,090	-5,596	-5,205	-5,599	-5,523
Exports of goods[4)]	6,856	8,118	8,376	10,515	10,641	11,454	12,814	14,066	15,238	3,576	3,927	3,850	3,885	3,866	4,277	4,174
Current account5[)]	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,223	-724	-354	-556	-589	-893	-744	-639
in % GDP[5)]	*-6.5*	*-10.3*	*-10.9*	*-5.8*	*-6*	*-3*	*-3*	*-5*	*-5.2*	*-7*	*-3*	*-5*	*-5*	*-8.8*	*-6.6*	*-5.4*
Capital account[5)]	1,553	3,340	3,351	1,630	1,705	920	535	1,648	1,683	568	268	384	463	772	607	276
Foreign direct investments	1,133	3,320	753	1,298	1,236	1,804	1,899	2,418	3,188	723	682	598	1,184	801	995	912
NBS gross reserves																
(increase +)	-929	1,801	-1,137	697	-1,797	166	-302	228	1,123	398	674	105	-55	79	685	921
Monetary data																
NBS net own reserves[6)]	489,847	606,834	656,347	757,689	788,293	931,320	923,966	891,349		866,515	961,084	949,638	957832.96	963,944	1,081,169	1,188,918
NBS net own reserves[6)], in mn of euros	4,609	5,895	5,781	6,605	6,486	7,649	7,486	7,482		7,327	8,135	8,029	8098.204557	8,166	9,167	10,110
Credit to the non-government sector	1,660,870	1,784,237	1,958,084	1,870,916	1,927,668	1,982,974	2,031,825	2,067,826		2,081,211	2,132,166	2,179,194	2261981.23	2,282,988	2,325,531	2,392,787
FX deposits of households	730,846	775,600	909912	933,839	998,277	1,014,260	1,070,944	1,074,424		1,095,018	1,106,253	1,120,870	1139750.01	1,167,846	1,186,319	1,207,760
M2 (y-o-y, real growth, in %)	1.3	2.7	-2.2	2.3	6.7	5.5	8	0.6		2	5.6	6.1	12.3	11.8	9.7	12.0
Credit to the non-government sector	13.9	0.5	-2.1	-8.3	1.2	1.4	0.9						7.8			8.6
(y-o-y, real growth, in %)								4.0		4.6	4.7	5.2		8.0	7.5	
Credit to the non-government sector, in % GDP	54.0	52.4	54.7	48.3	49.5	48.4	47.2	45.4		44.9	45.4	43.1	44.2	44.4	44.4	45.0
Prices and the Exchange Rate																
Consumer Prices Index[7)]	10.2	7.0	12.2	2.2	1.8	1.6	1.5	3.0	2.0	1.4	2.3	2.1	2.0	2.8	2.2	1.5
Real exchange rate dinar/euro (average 2005=100)[8)]	95.8	87.7	92.9	87.4	89.2	90.6	91.6	88.9	86.6	86.3	86.5	86.6	86.8	85.3	85.7	85.9
Nominal exchange rate dinar/euro[8)]	102.90	101.88	113.03	113.09	117.25	120.8	123.26	121.4	118.27	118.43	118.17	118.14	118.35	118.23	117.97	117.7

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

According to SORS data, GDP growth in Q3 was relatively high 4.8%. With this rate of economic growth, Serbia in Q3 was at the top among Central and Eastern European (CEE) countries, which achieved an average economic growth of 3.6% (only Hungary had a higher rate of economic growth than Serbia in Q3). Although government officials present this result as a success of economic policy, some important information that relativize the Q3 GDP growth is not being mentioned to the public. First, that Serbia was before this quarter, i.e. in the first half of 2019, along with Albania and Bosnia and Herzegovina, at the very bottom in CEE when comparing the rate of economic growth achieved. Therefore, on y-o-y level, despite strong Q3 acceleration, Serbia's economic growth is likely to remain below the average of comparable CEE countries. Second, the acceleration of economic growth in Q3 is a result, for the most part, of temporary factors and is therefore of short duration, and it is possible that it has not been fully reliably measured, that is, the economic growth in Q3 was actually slightly lower than presented. The rapid acceleration of economic growth was a result of the enormous growth of construction by as much as 35% (which is a consequence of the construction of the Turkish Stream pipeline), and not a result of the acceleration of a large number of economic activities. Excluding this one-off factor from the economic activity results, GDP growth in Q3 is approximately 3.7% and does not show such strong acceleration compared to the first half of the year, nor does it deviate from the results of other CEE countries. As most of the Q3 acceleration came from temporary factors, we expect the economic growth rate to slow down after the completion of this major project, that is, GDP growth will return to its usual trend of around 3.5% y-o-y in 2020 and probably be slightly lower than the forecasted 4%. Among other important trends in Q3, the most notable is that the results of economic activity in CEE countries and throughout the EU were generally slightly better than expected, although there are still some economic problems that are particularly reflected in the poor industrial output. Taking all in consideration, the GDP results in the CEE and the EU as a whole confirm in principle our assessment from previous QM issues that the slowdown in EU economic activity, that began in the second half of 2018, is not, however, an announcement of the beginning of a new recession.

Gross domestic product

Year-on-year GDP growth in Q3 accelerated to 4.8% primarily due to "Turkish Stream" construction

According to the latest SORS data, year-on-year GDP growth in Q3 was 4.8% and was significantly higher than that achieved in the first half of the year (2.8%). Such a large change in the level of economic growth is not economically common and was not indicated by anything in the first half of the year - indicating that the acceleration of economic growth in Q3 was most likely a result of some extraordinary result. That event (which is not difficult to isolate) is the construction of the Turkish Stream pipeline. Namely, the only sector of the economy that made a huge change in Q3 compared to the previous quarters is construction (Table T2-1), which had a year-on-year growth of about 35%, and within the construction, the growth of more than 50% was recorded by "other structures", which include the pipelines. Due to a significantly faster economic growth in Q3 than the one we expected in previous QM issues (at that moment, we expected GDP growth of about 3.5% in the second half of the year), we are correcting the estimate of GDP growth for the whole of 2019 upward from the previous 3.1-3.2% to a bit over 3.5%.

All sectors except construction in Q3 recorded similar growth rates as in the first half of the year

In Table T2-1, we presented data on y-o-y GDP growth by production principle, i.e. by individual sectors of the economy. As mentioned, by far the fastest year-on-year growth in Q3 in all sectors was recorded by construction 34.7%, which is an increase of over 15 p.p. compared to Q2. There was also a change compared to the first half of the year in the industry sector, which after a decline in the first half of the year, which was between 1.5 and 2%, in Q3 recorded a modest growth of 2%. All other sectors achieved approximately similar growth rates in Q3 as in the first half of the year - agriculture was at a similar level as in 2018, and service sector had an average growth of about 5%, which is systematically significantly stronger than industry growth. In general, in Q3, as in the whole year, activities selling services in domestic market are growing relatively fast, which is the case with construction and most services, while activities that export a large part of their products, such as industry, are virtually stagnant. This growth pattern was influenced by faster growth in domestic demand than the GDP growth, but also by an excessively strong dinar.

Table T2-1. Serbia: Gross Domestic Product by Activity, 2009- 2019[1]

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018				2019			Share
											Q1	Q2	Q3	Q4	Q1	Q2	Q3	2018
Total	97.3	100.7	102.0	99.3	102.9	98.4	101.8	103.3	102.0	104.4	105.0	105.0	104.2	103.5	102.7	102.9	104.8	100.0
Taxes minus subsidies	94.7	99.6	101.8	99.0	98.7	100.2	99.1	101.0	101.7	103.6	103.5	103.8	103.5	103.4	103.5	103.5	103.6	15.0
Value Added at basic prices	97.8	101.0	102.1	99.4	103.7	98.1	102.3	103.8	102.1	104.6	105.3	105.2	104.3	103.5	102.5	102.8	105.0	85.0
Non agricultural Value Added	97.5	101.1	102.2	100.8	102.5	97.8	102.3	103.4	103.3	103.7	104.8	104.6	103.2	102.5	102.7	103.1	105.6	92.1[2)]
Agriculture	100.8	99.6	100.9	83.0	121.0	102.0	102.0	108.3	88.8	115.2	112.3	115.6	116.8	115.2	100.3	99.7	99.9	7.9[2)]
Industry	90.7	100.3	103.8	100.6	106.6	92.1	104.2	103.5	102.8	101.0	105.5	102.4	99.0	97.5	98.6	98.0	102.0	25,7[2)]
Construction	87.2	92.6	114.8	101.2	82.5	101.4	116.8	107.9	105.7	112.8	126.8	120.5	110.0	102.8	109.8	118.1	134.7	5,1[2)]
Trade, transport and tourism	99.8	102.5	98.2	98.4	99.3	98.9	103.0	104.6	105.5	107.0	106.4	106.8	107.2	107.5	106.0	105.0	105.4	18.8[2)]
Informations and communications	106.5	102.9	108.2	113.7	104.3	102.8	102.6	103.7	103.8	105.5	105.0	105.9	105.6	105.6	105.5	108.0	107.7	6.0[2)]
Financial sector and insurance	106.2	106.6	100.9	104.6	101.1	99.6	101.2	105.4	100.9	107.5	105.8	108.5	106.1	109.9	103.5	104.3	104.2	3,7[2)]
Other	101.6	101.1	101.0	100.5	102.8	100.5	98.9	101.6	102.2	101.8	101.2	102.1	101.9	102.0	102.3	102.1	102.8	32,4[2)]

Source: SORS
1) In prices from the previous year
2) Share in GVA

There is a high investment growth, in Q3, but only because of construction

The structure of GDP growth in Q3 by *use* is presented in Table T2-2. The table shows that investment stood out by the growth rate, of about 17%, which is actually driven by strong construction growth. Although relatively high growth in investment is in principle an economically favorable trend, we nevertheless note that these investments were largely not directed to the production capacities of the economy. Namely, the high growth of investments in Q3 is almost entirely based on the growth of construction (construction accounts for over 40% of total investments in fixed assets in Serbia), that is, the high growth in construction is not even closely accompanied by a similar increase in the economy's investment in production equipment. Excluding investments in construction works, the domestic economy's investments in equipment and other investments grew by about 4% in Q3, and such growth was relatively stable in the first three quarters of 2019. So, although the growth of total investment in the first three quarters (which is over 10%) indicates an investment boom in 2019 and at first glance suggests a strong acceleration of economic activity in the future, it should be taken into account that the private sector actually invests relatively little in new immediate production capacity (machinery, equipment). High construction growth certainly has a positive impact on the supply side of economic activity in the future (construction of infrastructure will help future economic growth, "Turkish Stream" will increase profitability of Srbijagas and increase energy security of the country), not just on the demand side (while works are in progress). However, without a strong increase in the economy's investment in immediate production capacity, i.e. in machinery and equipment, it is difficult to expect a strong and sustainable acceleration of economic growth in the coming years.

Table T2-2. GDP by expenditure method, 2009-2019

	Y-o-y indices																	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018				2019			Share
											Q1	Q2	Q3	Q4	Q1	Q2	Q3	2018
GDP	97.3	100.7	102.0	99.3	102.9	98.4	101.8	103.3	102.0	104.4	105.0	105.0	104.2	103.5	102.7	102.9	104.8	100.0
Private consumption	96.7	99.4	101.4	98.3	98.3	99.9	99.7	101.3	101.9	103.1	102.9	103.3	103.1	103.0	103.3	103.3	103.1	69.3
State consumption	98.3	100.0	101.6	100.4	97.9	100.9	96.3	101.2	103.3	103.7	102.3	104.9	104.1	103.2	102.4	102.2	104.6	16.6
Investment	77.5	93.5	104.7	113.9	88.0	96.6	104.9	105.4	107.3	117.8	126.0	120.6	116.7	111.1	107.4	108.8	117.3	20.1
Export	88.5	116.9	105.6	102.9	118.0	104.3	109.4	111.9	108.2	108.3	108.6	106.0	108.7	110.0	109.3	109.4	110.2	50.8
Import	78.1	99.9	107.2	99.4	106.5	105.1	104.0	106.7	111.1	111.6	113.7	109.9	111.8	111.3	109.7	111.0	111.4	59.3

Source: SORS

Real net exports continue to deteriorate

Another trend that continued in Q3, and we have been pointing to for some time now in QM, is the deterioration of net exports, since imports growth was again faster than exports growth (Table T2-2). This trend of deterioration in net exports has been going on for three years now and cannot be explained only by temporary factors (for example bad agricultural seasons) or economically desirable trends (in the case of strong growth in imports of investment equipment and raw materials). The downward trend in net exports is actually longer-lasting, widespread across all product types, and is consistent with the slowdown in industrial production (which produces most of the tradable products) and the deterioration in the price competitiveness of the domestic economy. The government and the NBS should therefore pay particular attention to this. The government should take into account whether its policies over-stimulate private consumption instead of production and exports, and whether the competitiveness of a part of domestic economy producing exchangeable goods is undermined by a strong increase in the minimum wage and earnings in the public sector (above productivity growth). The NBS, for its part, should implement stronger measures to prevent the dinar from strengthening too much.

The economic growth trend remains around 3.5%, and quarterly results fluctuate around this value under the influence of one-off and cyclical factors

One of the specifics of Serbian economy is that its results are greatly influenced by temporary factors (agricultural seasons, ups and downs in EPS production, and more). For example, GDP growth in 2017 was 2% because a bad agricultural season (drought) temporarily reduced GDP growth rate by about 1 pp, and consequently, GDP growth in the following year, 2018, temporarily accelerated to 4.3% due to the recovery of agriculture from drought. However, when this temporary movement of agriculture is excluded from the results of 2017 and 2018, it turns out that the growth trend of economic activity in both years was almost unchanged, despite the fact that the growth rate in 2018 of 4.4% was more than twice as high than the 2017 one. A similar analysis revealing the real trend of the economy in Q3 2019 without one-off factors (construction of the "Turkish Stream") is somewhat more complicated, but when implemented it shows that the trend growth of the economy in Q3 was approximately 3.7%, i.e. that economic activity was not nearly as accelerating as the data on the movement of total GDP show (Table T2-3).

Box 1: Calculating the trend growth of GDP

Since this QM release, we have improved the methodology for calculating a trend, carrying, GDP growth (excluding temporary factors). The purpose of calculating trend GDP growth is to reduce temporary fluctuations in GDP growth which obscure trends by eliminating one-off factors, in order to give a more objective picture of deeper and more permanent economic developments. Thanks to this indicator, we can evaluate when a slowdown is temporary and does not require an economic policy response, and when it is needed. Similarly, on the basis of this indicator, we can estimate the sustainability of GDP accelerations that have occasionally occurred in previous years (including Q3 in 2019). Up to now, we have calculated the trend of GDP growth by excluding obvious temporary changes in agricultural production and fluctuations in the production of EPS (coal and electricity production) from GDP results. Since in Q3 the major one-off factor that influenced the temporary acceleration of GDP came from the construction sector, the calculation of trend GDP growth had to be modified.

The problem we encountered in this analysis was that not all the growth / acceleration of construction activity should be excluded from the GDP results, but only that part of it that came about due to temporary and insufficiently reliably measured factors. Therefore, the aim of this correction is to exclude only part of the construction activity that is not sustainable for any reason and maintain the market trend of growth of this activity. One of the major problems in construction statistics (which we have repeatedly written in previous issues of QM) is that official data is systematically biased towards the operations of large and state-owned enterprises that are statistically easier to track, while the activities of small private enterprises and construction in the gray zone mostly remain unregistered. So, it has often happened that the abruptly increased / reduced activity of the state or public companies on the infrastructure construction was registered as an exaggerated change in the growth of construction activity, since a good part of the construction activity that would mitigate these fluctuations is not statistically included. The proof that the preliminary, quarterly, results of construction activity are not reliable is that these data are always most audited when the financial statements of companies are included in the calculation of national accounts, which happens nine to ten months after the end of the calendar year. Because of these systematic problems, we have decided to correct our established methodology for estimating trend GDP growth by recognizing and removing temporary factors from the whole series of quarterly construction activity data in previous years, not just Q3.

The following happened in Q3. The construction of the "Turkish Stream" pipeline temporarily strongly increased the construction activity in the area of construction of "other structures" by over 50%

and the total construction activity by about 35%. While there are more debatable details concerning this assessment (is the project's added value well estimated and is its contribution to the growth of the entire sector perhaps overstated), the essence of our analysis is to evaluate what the real construction growth is without this one-off project, that is, to evaluate the more permanent market trend of this sector's growth in Q3, as well as over a longer period, and then to include only that data in the trend of GDP growth.

Analyzes of construction statistics in EU countries conducted by Eurostat[1] show that this sector has a relatively stable and large share of gross wage in GVA of the activity of around 2/3. This indicates to us that the first good indicator describing the market trend of this activity would be the movement of wage mass (employment growth multiplied by real wage growth) of construction workers. This indicator in Serbia is reliably measured in the registered economy (without the gray zone) because the SORS receives data from administrative sources (registered employment - CROCSI and wages - tax returns). In addition, we included a cement production index in the assessment of the market activity of construction in order to include at least part of the gray area movement information in the assessment (cement is used in virtually all construction works, whether registered or not).

The result of this modification of the methodology is shown in Table T2-3 in the row "Serbia - Trend Economic Growth" and it shows that the trend of GDP growth of Serbia without one-off factors during 2019 is very similar to that in 2018 and amounts to about 3.5%, with the usual, smaller, oscillations per quarter. It is also interesting to note that the calculated GDP growth trend from 2016 to 2019 actually indicates a slight and stable acceleration of Serbia's economic activity from 2.9% to 3.5% (before modifying the methodology of calculating the trend GDP economic growth it seemed that economic growth fluctuated in the entire period from 2016 to 2019 in the range of 3-3.5%, with no visible hint of acceleration).

1 Statistics Explained (http://epp.eurostat.ec.europa.eu/statisticsexplained/) - 18/10/2016

Table T2-3. Serbia and the CEE countries: GDP growth, 2016-2019

	2016	2017	2018	2018				2019		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3
Serbia	3.3	2.0	4.4	5.0	5.0	4.2	3.5	2.7	2.9	4.8
Serbia – underlying growth 1)	2.9	3.3	3.5	3.5	3.7	3.6	3.4	3.6	3.1	3.7
CEE (weighted average)	3.2	4.8	4.3	4.2	4.4	4.5	4.1	4.3	3.7	3.6
Albania	3.3	3.8	4.1	4.3	4.3	4.7	3.3	2.4	2.3	-
Bosnia and Herzegovina	3.1	3.2	3.6	3.5	3.9	3.1	3.9	2.8	2.6	-
Bulgaria	3.8	3.5	3.1	3.5	3.2	2.7	3.0	4.5	3.8	3.7
Montenegro	2.9	4.7	5.1	4.5	4.9	5.0	4.8	3.0	3.2	-
Czech Republic	2.5	4.4	3.0	3.6	2.7	2.5	3.1	2.8	2.4	3.4
Estonia	2.6	5.7	4.8	4.7	4.5	4.7	5.1	5.0	3.8	4.2
Croatia	3.5	3.1	2.6	2.5	2.9	2.8	2.3	3.9	2.4	2.9
Latvia	1.8	3.8	4.6	3.4	5.2	4.6	5.1	3.0	1.8	2.9
Lithuania	2.6	4.2	3.6	3.6	4.0	3.1	3.9	4.2	3.8	3.7
Hungary	2.2	4.3	5.1	4.7	5.0	5.3	5.3	5.3	4.9	5.0
Macedonia	2.8	0.2	2.7	0.9	3.0	3.0	3.7	4.1	3.1	-
Poland	3.1	4.9	5.1	5.1	5.4	5.8	4.4	4.7	4.1	4.2
Romania	4.8	7.1	4.0	3.6	3.8	4.0	4.2	5.0	4.4	3.0
Slovakia	2.1	3.0	4.0	3.6	4.5	4.6	3.5	3.8	2.2	1.3
Slovenia	3.1	4.8	4.1	4.3	3.7	4.6	3.8	3.3	2.5	2.3

1) One-off factors excluded (droughts, floods, temporary EPS problems, etc.)
Note: Q1 2019 data for three countries are not yet published: Albania, BiH and Montenegro
Source: Eurostat, QM estimate based on SORS data and national bureaus of statistics of BiH and Montenegro

Serbia's GDP growth is structurally lower than in CEE countries

In Table T2-3 we have presented, in addition to data on the overall and trend economic growth of Serbia, the data on GDP growth of other CEE countries and the region. The table shows that for a long time the economic growth of Serbia (without temporary factors) was systematically lower than the average of comparable countries. Nothing dramatically changed in Q3, when Serbia's GDP growth (excluding one-off factors) was only at the level of the CEE average (although by a total GDP growth rate of 4.8%, Serbia was among the leading CEE countries). This means that Serbia undoubtedly has a structural problem of insufficient economic growth. Namely, Serbia is less economically developed than the average of CEE countries, which is why it should systematically have faster economic growth than them, which is not happening. That is why we believe that insufficient economic growth is still probably the biggest economic problem for Serbia. An important additional information given by Table T2-3 is that the slowdown in economic activity in the CEE has not continued. This is encouraging, given that there has been a fear of a slowdown in GDP in 2019, and perhaps even a recession in some countries. In fact, most CEE countries positively surprised with the rate of economic growth and experienced faster economic growth in Q3 than in Q2.[1]

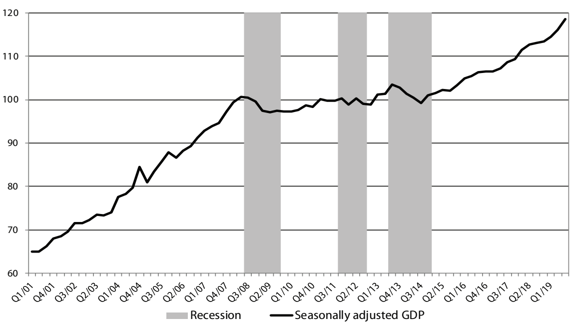
The SORS has revised its GDP data series since 1995

Over the last two years, the SORS has been gradually improving its national accounts statistics and revising old data. In this process last year, the series of GDP data from 2005 to 2017 was revised, and now the remaining data from 1995 to 2005 have been revised as well. New available series include comparable data on nominal, real and seasonally adjusted GDP, calculated by consumption and production, on y-o-y and quarterly basis since 1995. These data will allow much better analysis of long-term trends in economic activity in Serbia and economic policies that have been pursued over certain periods. In Graph T2-4 we show a series of seasonally adjusted GDP index since 2001, which we have made based on new SORS data.

From the beginning of the 2000s, three stages in Serbia's economic growth have been singled out

Graph T2-4 clearly shows three periods in Serbia's economic development since 2001. The first phase began after the democratic changes of October 2000 and saw the liberalization of the economy, privatization and market reforms (in cooperation with international institutions - the IMF, the World Bank, the EBRD), as well as the start of institution-building modeled by the ones in the EU. This phase lasted from 2001 until the outbreak of the global economic crisis at the end of 2008. At this stage, the country had the highest average economic growth of over 6% y-o-y, which was noticeably faster than the economic growth of other CEE countries and the region. The second phase lasted from 2008 until the start of the fiscal consolidation in 2015, and it recorded economic stagnation with an average y-o-y GDP growth of only 0.1%. We could further divide this phase into two subperiods - the first that lasted from mid-2008 to the end of 2010, in which Serbia dealt with the immediate aftermath of the outbreak of the global economic crisis, where our country had even better results than most other CEE countries; and the second from 2011 to the end of 2014, when economic policy makers avoided the implementation of unpopular measures to stabilize public finances and Serbia began to significantly lag behind economic growth of CEE countries. Finally, in the third phase, which began after the implementation of fiscal consolidation and where Serbia currently stands, stable economic growth is restored, but it averages only 3% and is lower than the economic growth of other CEE countries, that is, it is only halfway of the average economic growth achieved from 2001 to 2008.

Graph T2-4. Serbia: Seasonally adjusted GDP growth, 2001-2019 (2008 = 100)



Source: *QM* estimates based on SORS data

Although a detailed analysis of economic policies and their results in such separate periods would require much more space, we note that SORS data very clearly deny the increasing public opinion on the disastrous economic policies carried out after the 2000 democratic changes. Certain economic policy mistakes that were taking place at the time were certainly there, and QM has regularly and thoroughly written about them since its first issue in 2005. These mistakes were reflected in the unsustainable growth of the current account deficit, problems in fiscal policy (especially at the end of this period), and, with these errors, there were also negative consequences of transition that could hardly be avoided (loss of large number of jobs in failed companies and social problems of transition losers). However, all things considered, the period 2001 to 2008 cannot be economically assessed as unsuccessful, which is very convincingly documented by the relatively high economic growth rate, which was above the growth of comparable CEE countries during that period.

1 The exceptions are Slovakia, where there has been a relatively strong decline in industrial production and Romania, in which the slowdown in economic growth is likely due to problems caused by internal economic policies.

So far in 2020, we expect Serbia's economic growth of about 3.5%

The major part of the acceleration of construction activity due to the construction of the Turkish Stream is expected to be exhausted by the end of the year, so economic activity should approximately return to its trend growth of about 3.5% in early 2020. It is likely that in the first half of the year, the growth rate will be slightly higher than 3.5%, as the results of economic activity will be compared to a slightly lower base from 2019, but after that, GDP growth should slow down due to a comparison with a higher base from the second half of 2019. We have slightly increased this forecast of GDP growth of 3.5% in 2020 compared to the previous QM release when we forecasted the economic growth rate for 2020 in the range of 3 to 3.5%. At the time, we were more cautious about economic developments in the CEE countries, and worse economic trends in the region would certainly have a noticeable negative impact on Serbia. Data from Q3, however, suggest that a great slowdown in economic activity in the region is unlikely to occur, so we have slightly increased our forecast for Serbia accordingly. We finally note that this forecast is still preliminary as there are initiated investments that could lead to an increase in production in the next year (e.g. it is possible that production will start in Linglong in Zrenjanin in 2020) as well as announcements of some other large investments that could accelerate economic growth. Thus, it was announced that during 2020, Ziding Bor company could make large investments in new copper mines, which would then have a significant impact on the acceleration of economic activity throughout the country in that year and greater economic growth than we currently expect.

Industrial Production

There was a slight improvement in industrial production in Q3

Industrial production recorded a modest year-on-year growth of 1.6% in Q3 (Table T2-5), which after a year of negative results, this sector of the economy finally moved into a zone of positive y-o-y growth. Despite this improvement, trends in industrial production cannot be assessed favorably, as the industry has been lagging behind other sectors of the economy for a long time, and the results are poor when compared to the growth that the industry experienced from 2015 to 2017. Within industrial production in Q3, mining recorded the largest y-o-y growth of 5%. This mining result is primarily a result of a comparison with the incident decline in coal production in August 2018, which is why coal production achieved an y-o-y growth of 34% in that month. The manufacturing industry recorded a slight y-o-y growth of 1.6% in Q3, and the only industrial production sector that recorded a y-o-y decline in Q3 was electricity production. Continued year-on-year decline in electricity production in Q3 is an unpleasant surprise as production in that quarter was compared to an extremely low base from the same period in 2018 (the sector then had a year-on-year decline of about 7%), so it was expected that in Q3 2019 electricity production will grow solidly. The surprisingly poor performance in electricity production confirms that the problems in the business of the largest company in this field, EPS, are deep and lasting, i.e. not a result of temporary circumstances (floods, cold winters, etc.), which is the most common justification of EPS for fails in the production of this company.

Table T2-5. Serbia: Industrial Production Indices, 2009-2019

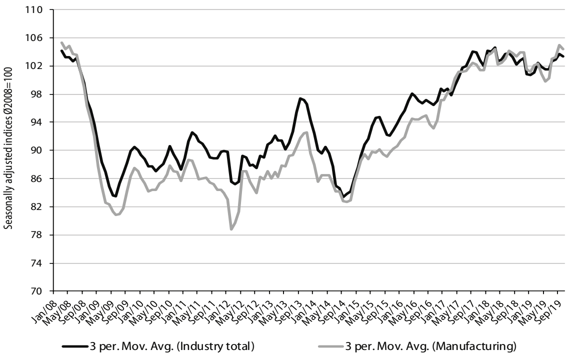
	Y-o-y indices																	Share
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018				2019			2018
											Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Total	87.4	101.2	102.5	97.4	106.1	92.6	107.3	104.9	104.2	101.4	106.9	101.7	98.6	98.9	97.9	97.7	101.6	100.0
Mining and quarrying	96.2	103.9	109.8	99.9	105.5	84.1	112.2	103.2	102.2	95.2	103.1	97.8	87.1	94.5	97.0	101.2	105.3	9.6
Manufacturing	84.1	102.5	99.8	98.7	105.5	95.1	105.7	105.6	106.6	102.0	105.9	101.6	101.0	100.3	97.7	97.0	101.6	75.0
Electricity, gas, and water supply	101.1	95.6	109.7	92.6	108.4	85.2	112.5	102.3	94.1	101.2	110.9	105.8	93.2	94.7	98.6	99.4	99.0	15.4

Source: SORS and Eurostat

Seasonally adjusted data confirm a slight recovery in industrial production in Q3

We can also estimate industrial production trends from another angle based on seasonally adjusted indices that we have shown in Graph T2-6. The graph shows the trends of seasonally adjusted manufacturing industry and total industrial production separately. As can be seen in the graph, from the beginning of 2015 until the first half of 2018, industrial production (with usual fluctuations) achieved relatively strong growth. Since 2018, however, there has been a systematic stalemate and stagnation, followed by a decline in overall industrial production (as well as manufacturing).

Graph T2-6. Serbia: Seasonally Adjusted Industrial Production Indices, 2008-2018



Source: SORS

The decline in industrial production was particularly pronounced in the first half of 2019 and was partly due to the overhaul of the plant at NIS. Therefore, the slight recovery that occurred at the beginning of Q3 can be partly attributed to the completion of the overhaul of the facilities in the oil industry, so our best estimate of the trends in industrial production during 2019 made by analyzing seasonally adjusted data is the stagnation.

Comparative analysis indicates that in other CEE countries industrial production slowdown continues in Q3

In Table T2-7, we show the annual growth indices of industrial production in comparable CEE countries. The table shows that industrial production in CEE countries continued to slow down in Q3 - the average year-on-year growth in industrial production in these countries was only 0.5%. This data on the further slowdown in industrial production in CEE countries is particularly interesting when one considers that the overall economic growth in these countries did not have a noticeable slowdown in Q3 compared to Q2. This indicates that relatively domestic demand in these countries has so far been able to offset the fall in industrial output due to a slowdown in exports (most CEE countries have strong exports of industrial products, and a slowdown in industrial production is primarily associated with a decrease in exports demand).

Table T2-7. Serbia and the CEE countries: the y-o-y growth of industrial production, 2018-2019

	2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Serbia	6.9	1.7	-1.4	-1.1	-2.1	-2.3	1.6
CEE (weighted average)	4.9	4.9	4.4	2.9	4.3	2.3	0.5
Bosnia and Herzegovina	5.2	1.5	0.8	-0.4	-5.1	-3.9	-6.0
Bulgaria	1.8	1.4	1.1	0.1	4.0	-0.1	-0.8
Czech Republic	4.2	2.4	3.7	2.0	0.3	1.0	-0.6
Estonia	4.6	3.1	3.8	5.1	4.2	-0.3	-3.9
Croatia	0.5	0.5	-1.5	-3.3	2.7	-0.9	1.2
Latvia	4.4	0.2	2.9	0.9	-0.8	1.4	2.6
Lithuania	7.1	5.2	2.8	5.7	4.7	5.5	4.2
Hungary	4.8	3.0	3.3	4.0	6.6	5.6	6.9
Macedonia	5.2	4.9	5.1	6.4	8.7	1.2	7.1
Poland	5.8	7.1	5.9	4.3	7.0	4.5	2.3
Romania	5.9	5.3	4.6	1.6	1.1	-2.1	-5.1
Slovakia	1.3	5.7	6.1	4.6	6.8	3.0	-2.8
Slovenia	8.8	6.9	3.5	0.8	4.4	3.0	2.3

Source: Eurostat and SORS

Recovery of energy production in Q3

Observed by the purpose of industrial products (Table T2-8), the only major change in Q3 was in energy production, which recorded a year-on-year growth of 2.2% in Q3 after falling over 5% in the first half of the year - while all other purpose groups maintained approximately similar trends from previous quarters. This data confirms the assessment we made based on seasonally adjusted trends that overall industrial production in 2019 is stagnant. Specifically, the decline in energy production in the first half of the year was related to the overhaul of the NIS plant and was therefore temporary. That is why the slightly better results of energy production in Q3 are related to the completion of these overhauls (as well as to a high growth of coal production which was compared with the low base from the previous year). When we cross this data with the trend of seasonally adjusted industrial production (Table T2-6), we get a pretty good explanation of the fall in seasonally adjusted industrial production index in the first half of the year and its regrowth in Q3.

Table T2-8. Serbia: Industrial Production by Purpose, 2009-2019

	Y-o-y indices																
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018				2019		
											Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total	87.4	101.2	102.5	97.4	106.1	92.6	107.3	104.9	104.2	101.4	106.9	101.7	98.6	98.9	97.9	97.7	101.6
Energy	99.0	97.1	105.6	93.3	113.5	86.8	113.1	101.4	98.6	101.1	108.3	103.7	95.5	97.6	95.8	92.6	102.2
Investment goods	78.5	91.6	106.9	105.8	128.2	73.1	107.9	102.3	106.5	102.4	101.3	103.3	104.4	100.6	103.0	102.8	99.4
Intermediate goods	78.5	107.5	103.7	93.9	99.5	98.5	105.3	110.7	110.1	103.6	111.2	100.9	101.5	101.9	98.5	102.5	103.0
Consumer goods	86.7	101.3	95.1	103.4	101.5	98.4	103.2	104.6	102.8	99.5	104.8	100.2	97.3	97.1	97.0	96.3	100.4

Source: SORS

Slight decline in investment goods production

Another important information provided by the analysis of industrial production by purpose is a slight decrease in the production of investment goods by about 0.5%. This decrease was certainly a result of a decrease in motor vehicle production of about 3% as a part of this purpose product group. However, even when excluding motor vehicle production, the industrial production of capital goods has unconvincing results, which is not even close to the high growth of investments in national accounts statistics of over 17%. The data on poor production of investment products confirms our previous assessment that the high growth of investments during 2019, and especially in Q3, is almost exclusively a result of the growth in construction activity ("Turkish Stream", residential construction), and not the economy's investment in equipment and machinery.

Economic policies have a negative impact on the growth of industrial production in Serbia

The fact we pointed to in several previous issues of QM is that economic policies that have been implemented in the country for a long time are not simulative for the growth of industrial production. The combination of excessive growth of the minimum wage, which has been increasing significantly faster than the productivity growth of the economy for several years, with a real strengthening of the dinar, results in a strong decrease in the price competitiveness of the domestic economy. Industrial production, which produces by far the largest share of tradable products, is affected the most by these poor economic policies. We believe that this is why the Government and the NBS should acknowledge and take the unfavorable trends in industrial production seriously and consider adjustments to the current populist economic policies - which are politically popular in the short term but hinder the country's high and sustainable economic growth in the long run. Finally, we point out that the poor performance of industrial production in 2019 was certainly partly influenced by some adverse external factors, such as the introduction of taxes on the export of goods from Central Serbia to Kosovo and Metohija. While it is difficult to assess the undeniable negative impact of such factors on industrial production, available data indicate that they can only be responsible for a small part of the industry slowdown and cannot be an excuse of the Government for poor industrial production results - especially since the relatively strong slowdown in industrial production has begun as early as spring 2018, half a year before the introduction of Kosovo taxes (Table T2-5 and Chart T2-6).

Construction activity

According to the SORS estimate, construction in Q3 recorded a real growth of 35%, primarily due to the construction of the Turkish Stream

Construction activity in Q3 was by far the fastest growing sector of the economy, which according to SORS data achieved GVA growth of as much as 34.7% (Table T2-2). This growth is estimated by the SORS, relying primarily on the Index of Construction Works in the country, which recorded a real y-o-y growth of 39.9% in Q3, an acceleration of over 20 p.p. compared to the previous quarter. The unusually strong acceleration of construction activity in Q3 is primarily due to the construction of the Turkish Stream pipeline. This is confirmed by a detailed data on the value of construction works, since in Q3 the construction of other structures (including gas pipelines) increased by as much as 51.5% compared to the same period last year. On the other hand, the construction of buildings recorded a growth of 18.7%, which was similar to the previous quarters.

An already standard part of QM analysis is to evaluate the reliability of official estimates of movement in construction activity. Namely, due to the specific nature of this sector, estimates of short-term developments in construction are the least reliable in comparison to all other sectors of the economy and most corrected at the time of the release of final annual GDP data (which happens nine to ten months after the end of the calendar year). The real trends in construction are systematically difficult to track in official statistics, since a large number of small private companies are quickly established and shut down in this sector, and much of the activity is carried out in the

Construction has undoubtedly had high growth in Q3, but this growth is likely to be noticeably lower than the SORS estimates

gray zone, also outside the scope of the SORS. In Q3, the usual difficulties of statistical monitoring in this sector were further increased, as the extraordinary growth of construction activity was triggered by a specific activity - the construction of a pipeline. The specificity of this activity is that it should have a significantly lower added value compared to other construction activities, and this is difficult to account for in the short term (without the financial statements of participating companies). Namely, when constructing the pipeline, the materials used are mainly of imported origin (imported pipes, compressors, etc.), and thus the added value of these works is much lower than when constructing other structures (e.g. roads, buildings) where construction materials used are mainly of domestic origin. Therefore, in Q3, there should be a greater difference in the growth of the gross value added of construction sector and derivative value of construction works than that shown by the official SORS data. We used a number of additional indicators that are economically related to construction to estimate the movement of construction activity in Q3, in addition to official data from the construction industry, and they indicate that the growth of this sector was much lower than the official data (35%).

We estimate that construction growth in Q3 was actually slightly below 20%

A good indicator for estimating the movement of construction activity in the formal part of construction is the growth in the wage mass of registered employees (number of employees multiplied by the average salary). This indicator suggests that the value added in the formal part of construction activity increased by over 20% in Q3 compared to the same period last year, as registered employment grew by about 9% and real wages by about 14%. This estimate should now be corrected for movements in the gray area that are not recorded. The first indication that the informal part of construction activity in Q3 experienced significantly lower growth than that in formal economy is given by the Labor Force Survey. This Survey shows that the growth of total construction workers (including both formal and informal employees) was 6%, i.e. significantly lower than the growth of registered employment (9%). In addition, another indicator that confirms that construction activity in the informal part of the economy was significantly lower than that in formal economy is the cement production index (Table T2-9). Cement is used in most construction works, both in the formal and informal sectors (but is not generally used in the construction of the pipeline), so cement production gives us additional information on the movement of construction activity without the construction of the Turkish Stream. However, the cement production index rose by only 3.3% in Q3 compared to the same period of the previous year, indicating from another angle that the official estimate of growth in construction activity of about 35% is likely to be overstated. Taking all the additional indicators into account, we conclude that construction in Q3 has undoubtedly had strong growth, but that growth in all likelihood was slightly below 20%, and not about 35% as shown by official statistics.

Table T2-9. Serbia: cement production index, 2001–2019

	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	96.4	118.7	105.9
2018	107.5	110.6	112.8	106.3	109.7
2019	112.2	96.7	103.3	-	-

Source: QM based on SORS data

The high growth in construction will last until the end of the year, and then it will most likely result in a strong slowdown

It is already certain that the extremely high growth in construction, as shown by official statistics in Q3, will continue in Q4. However, after that we expect a relatively strong slowdown since most of the construction works on the Turkish Stream will be completed by the end of the year. Despite the expected slowdown, we expect that construction will have relatively strong growth in 2020 (except that this growth will not be as extreme as in the second half of 2019). Specifically, lending activity of households and economies keeps solid growth, interest rates are still at historically very low levels and will remain so for some time, and the state continues to increase investments in infrastructure (adopted budget does not predict such a strong increase of public investments in infrastructure in 2020 in relation to the execution of 2019, but it should come as no surprise if capital expenditures break through the plan, especially as government officials are announcing the launch of a new national investment program as of 2020).

3. Labour Market

According to the Labour Force Survey (LFS), there have been improvements in the labour market. The unemployment rate is decreasing, while the employment rate is increasing compared to the same quarter of the previous year. The unemployment rate reached a record low, falling below 10% for the first time. The number of unemployed is down by as much as 63.4 thousand, or 17.1% year-on-year. On the other hand, the number of employees increased slightly, by 9,500 or 0.3% yoy. The structure of employment is changing for the better, formal employment is moderately increasing and informal employment is significantly decreasing. Formal employment recorded a year-on-year growth of 2.4%, while informal employment decreased by 7.8% year-on-year. A significant decrease in informal employment and unemployment is a positive trend. However, the question is how much this trend is due to the moderate growth of economic activity, and how much is the consequence of mass emigration of the population. Although there are hardly any statistics on external migration, as well as accurate and reliable information on the number and characteristics of emigrants, emigration affects reduction of unemployment, even if the majority of those who emigrate were the ones who were employed in Serbia. Data from the Central Registry of Compulsory Social Insurance (CROCSI) show that registered employment increased by 1.6% yoy, or by almost 34 thousand. The sectoral structure of the change in employment is also positive, as employment in the private sector grows, while it decreases in the public sector. More detailed data on the number of employees in the public sector show that the overall administration, as well as the administration at the local level, recorded a year-on-year increase in the number of employed persons. In Q3 2019 compared to the beginning of 2016[1] the local administration had an increase of 7.9% in the number of the employed. Average earnings in dinars were nominally 10.9% higher, while real growth was 9.4% yoy. Earnings are growing much faster than economic activity, resulting in a 6.2% year-on-year growth in real unit labour costs. Productivity is achieving modest growth due to a slightly larger increase in Gross Value Added than the growth in the number of employees. High wage growth, along with modest productivity gains, has led to a deterioration in the competitive position of the Serbian economy. The announced growth of the minimum wage by 11.1% from January 1, 2020, as well as the growth of public sector wages from 8% to 15%, will further increase the growth of average wages and real unit labour costs. Due to a slight appreciation of the dinar (0.4% yoy), earnings in euros increased slightly more than earnings in dinars, by 11.3% yoy.

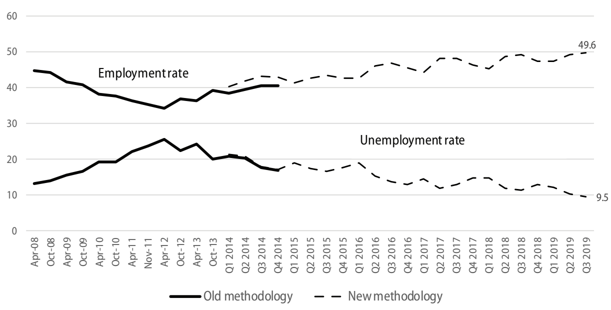
Employment and Unemployment

Unemployment rate reached a single digit value of 9.5%

The basic labour market indicators show moderate improvements compared to the same quarter of the previous year as well as to the previous quarter. The activity rate is 54.8% and is 0.6 pp lower than in Q3 2018. The employment rate recorded a slight increase of 0.4 pp in Q3 2019 compared to Q3 2018 and is 49.6%. For the first time, a single-digit unemployment rate of 9.5% was recorded.

Employment rate is rising

Graph 3.1 Employment and unemployment rates (15+), 2008 – Q3 2019.



Note: Break in 2014.
Source: LFS, SORS

The unemployment rate decreased by 0.8 pp over the previous quarter (Q2 2019) and by 1.8 pp compared to the same quarter of the previous year (Q3 2018). Graph 3. 1 shows trends in employment and unemployment rates. The graph shows a decrease in the unemployment rate and an increase in the employment rate in the last few quarters.

In Q3 2019, according to LFS data, the number of the employed was 2 million and 939 thousand. The number of the employed increased by 9,500 thousand

1 As a reminder, data on the number of the employed in the public and private sector exists as of 2016.

A significant reduction in the number of the unemployed

yoy. The number of unemployed persons amounted to 308 thousand, which is a decrease of 63 thousand persons, or 17.1% yoy. According to the National Employment Service, the number of unemployed persons is also significantly reducing and in September 2019, compared to 2018, it decreased by 80 thousand, while compared to 2017 it decreased by as much as 148 thousand. The decrease in both absolute and relative numbers of the unemployed is a positive trend, but it is only partly due to the improvement of the Serbian economy, and in part to the mass emigration of the population. Emigration of the workforce affects the reduction of unemployment, regardless of whether those who emigrate were employed or unemployed in Serbia. The departure of the unemployed abroad directly reduces unemployment in Serbia, while the departure of the employed does so indirectly by employing those who have been unemployed until then. So far, there are no official data, no reliable estimates on the number and structure of workers who have gone abroad over the past few years, but it is quite certain that the number is both macroeconomically and demographically significant.

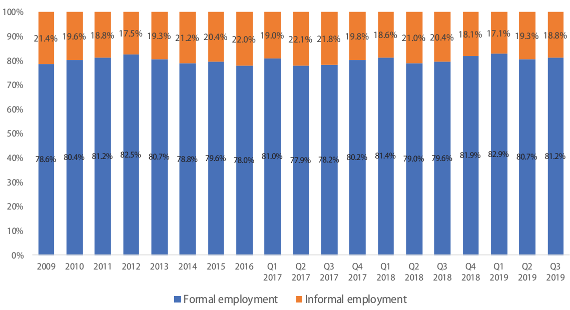
Total employment (LFS) is moderately increasing, 0.3% year-on-year

Employment structure is improving, formal employment is increasing and informal employment significantly decreasing

Informal employment and unemployment are decreasing thanks to the massive emigration of the population

The positive trend of declining informal employment and increasing formal employment continues, which we estimate as a favourable trend. The number of formally employed persons is almost 2 million and 400 thousand (2,386.6 thousand). The number of formally employed persons increased by 56 thousand persons, which is an increase of 2.4% yoy. The number of informally employed persons in Q3 2019 was 552 thousand. Informal employment decreased by almost 47 thousand, or 7.8% yoy. Due to a much larger decline in the informal than formal employment growth, total employment increased by 0.3% yoy. The informal employment rate was 18.8% and decreased by 1.7 pp compared to the same quarter of the previous year. The decrease in informal employment is also likely due to population emigration. Although some of the emigrants are people who are formally employed, we can assume that the unemployed and informally employed are more likely to emigrate. Graph 3.2 shows the structure of formal and informal employment in % of total employment.

Graph 3.2 Formal and informal employment (15+) in % of total employment, 2009-Q3 2019



Note: Break in 2014.
Source: LFS, SORS

Registered employment (CROCSI) grew by 1.6% year-on-year

Industry and Construction recorded an employment increase, while Agriculture and Services had a mild decline in employment

According to CROCSI, the number of registered employed persons is 2 million and 180 thousand. The number of registered employed persons increased by 33,578 compared to the same quarter of the previous year, or 1.6%. GVA recorded a year-on-year growth of 5%, while GDP grew 4.8%. The growth rate of economic activity is higher than the growth rate of registered employment, as well as total and formal employment, according to the LFS data. In terms of activity, employment shows a slight decline in Services and Agriculture. Employment recorded a year-on-year growth of 3% in Industry and 6% in Construction.

Employment growth rate was lower than the growth rate of economic activity, so the labour productivity slightly increased

Table 3.1 Trends in the number of the employed (15+) and real GVA by sectors, yoy change, %

	2016				2017				2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total employment CROCSI	-0.3	1.2	1.3	2.1	2.3	2.6	2.7	2.8	3.3	3.2	3.3	3.4	2.7	1.6	1.6
Formal employment LFS	1.9	2.7	3.8	5.2	4.9	5.1	5.5	2.6	1.9	2.1	3.4	4.1	6.4	2.7	2.4
Total employment LFS	2.7	6.7	7.2	5.8	3.2	4.3	2.4	1.2	1.4	0.5	1.6	1.9	4.5	0.7	0.3
Total GVA	4.2	3.5	4.4	3.2	1.8	2.0	2.3	2.4	5.3	5.2	4.3	3.5	2.5	2.8	5.0
Employment- agriculture	-3.7	6.0	6.1	-3.4	-8.0	-1.6	-2.9	-7.8	-7.1	-8.6	-7.6	-1.2	5.4	-3.4	-0.9
GVA-agriculture	7.5	4.6	11.8	8.1	-7.7	-10.6	-13.7	-11.4	12.3	15.6	16.8	15.2	0.3	-0.3	-0.1
Employment-industry	4.2	7.8	7.9	7.6	9.3	8.4	7.7	6.3	12.0	12.3	6.1	0.9	3.9	0.7	3.0
GVA-industry	6.1	2.1	3.2	2.8	0.1	2.9	5.6	2.8	5.5	2.4	-1.0	-2.5	-1.4	-2.0	2.0
Employment-construction	-2.9	4.0	-2.1	-1.8	-12.6	8.2	-0.6	2.5	20.5	0.5	6.8	10.4	13.3	12.6	6.0
GVA-construction	16.9	10.0	12.4	-2.0	-0.5	-0.4	4.1	16.0	26.8	20.5	10.0	2.8	9.8	18.1	34.7
Employment-services	4.7	6.8	8.2	9.1	5.7	4.6	2.7	2.0	-1.2	-0.8	2.6	2.6	3.9	0.9	-0.8
GVA-services	2.5	3.5	3.0	3.1	3.7	3.3	3.4	3.1	3.4	4.4	4.4	4.7	4.0	4.0	4.3

Note: Data source for employment was LFS, except for the total employment where both LFS and CROCSI data were used. GVA data for 2019 is previous data.
Source: SORS (LFS, SNA i CROCSI)

Employment increased in the private sector, while it decreased in the public sector

Total productivity recorded a year-on-year growth of 3%, while productivity in non-agricultural activities increased by 3.4%. Registered employment (CROCSI) was used to calculate productivity.

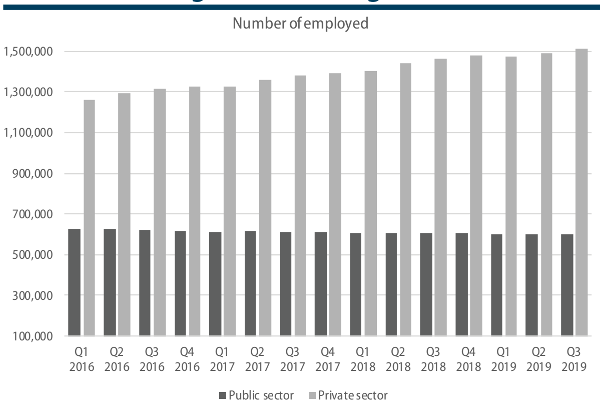
Year-on-year decrease in the number of the employed was recorded in almost all parts of the public sector except administration

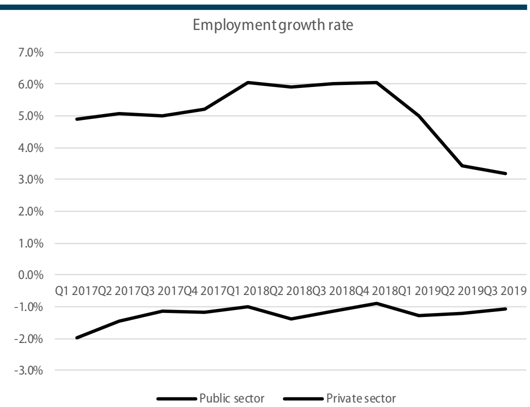
Administration at the local level increased the number of the employed by 7.9% compared to the beginning of 2016

The growth of administration at the local level is unjustified

The number of the employed in the public sector[2] is about 600 thousand, while the number of the employed in the private sector is about 1.5 million. The number of the employed in the public sector decreased by 1.1% compared to the same quarter of the previous year, while the growth in the number of the employed in the private sector was 3.2%. Compared to the beginning of 2016, the growth in the number of employees in the private sector is 19.6%, while the decrease in the number of employees in the public sector is 4.1%. Looking more closely at the public sector in Q3 2019 compared to Q1 2016, the number of the employed has been reduced in almost all parts, with the largest decrease of 13.8% recorded in public state-owned enterprises. The decrease in the number of employees in public and other state-owned enterprises was influenced by the privatisation of state-owned enterprises such as RTB Bor, PKB, as well as the bankruptcy of a number of companies in restructuring. On the other hand, administration at the local level increased by 7.9% in Q3 2019 compared to the start of 2016. Continuous decline in public sector staff and private sector growth is estimated as a good trend. However, we see the decline in the number of the employed in health and social care as well as in education and culture as a negative trend. Graph 3.3 shows trends in the number of the employed and the growth rates of the number of the employed in the public and private sectors.

Graph 3.3 Trends in employment in the public and private sectors, number of the employed (left chart) and growth rate (right chart), Q1 2016 – Q3 2019





Note: Data for Q3 2019 is previous data.
Source: CROCSI, SORS

Wages

Real growth of wages was 9.4%, year-on-year

Real growth of wages was significantly higher than the growth of economic activity

The average net wages in Q3 2019 amounted to RSD 54,285, and was nominally higher by 10.9% and in real terms by 9.4% yoy. In Q3 2019, compared to the 2018 average, the nominal growth of wages was 9.4%, while the real growth was 7.5%. Wages increased in real terms more than economic activity growth (5%) and productivity growth (3%), leading to an increase of unit labour costs. Year-on-year growth in real unit labour costs was 6.2%. This has had a long-term negative impact on the competitive position of the Serbian economy. Compared to 2008, wages increased by 12.7% in Q3 2019 (Graph 3.4). A significant growth of public sector wages has been announced, which will further increase the real unit labour costs. The minimum wage will increase by 11.1% in 2020, which is also significantly higher than the expected growth of economic

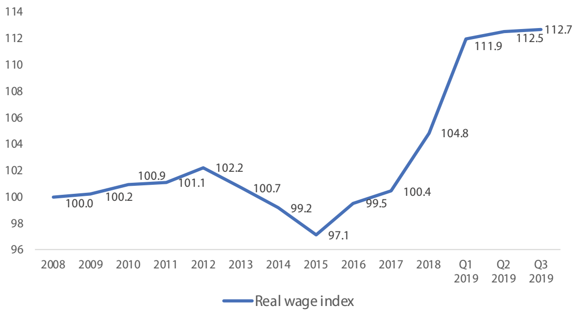
2 The public sector is part of the national economy that includes the general government level, as well as non-financial state-controlled enterprises (public and other state-owned enterprises) primarily engaged in commercial activities (Law on the Budget System, Official Gazette of the RS, No. 54/2009, 73/2010, 101/2010, 101/2011, 93/2012, 62/2013, 63/2013, 108/2013, 142/2014, 68/2015 and 103/2015). Therefore, the public sector includes beneficiaries of budgetary funds in the fields of education, culture, healthcare and social work and state administration, as well as public enterprises established by the state or local self-government units, and which carry out activities of general interest (Law on Public Enterprises and Performing Activities), Official Gazette of the RS, No. 119/2012, 116/2013 and 44/2014). In addition to the public state-owned enterprises, there is a portion of non-privatised former socially-owned enterprises. The public sector is subdivided into the following sub-groups: public state-owned enterprises, public local enterprises, administration - state level, administration - autonomous provincial level, administration - level of local self-government, healthcare and social work, and education and culture.

Large growth of wages in real terms had a negative effect on the unit labour cost, and therefore on Serbia's economic competitiveness as well

Real unit labour costs increased by 6.2% in Q3 2019 compared to Q3 2018

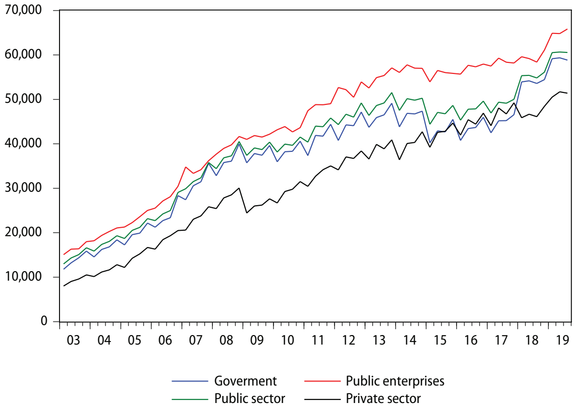
Emigration affected the growth of wages in the private sector as well.

Graph 3.4 Index of real wages (2008=100), 2008-Q3 2019



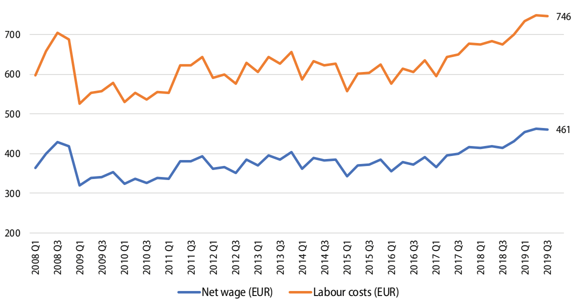
Note: Break in 2009 and 2018.
Source: Author's calculations using SORS data.

Graph 3.5 Trends in wages in the public sector, public wages, state and private sector, Q1 2003 – Q3 2019



Source: SORS

Graph 3.6 Trends in net wages and employer's costs in EUR, Q1 2008-Q3 2019



Note: Break in 2009 and 2018.
Source: Author's calculations using SORS and NBS data.

activity next year. Mass emigration, in addition to reducing unemployment, also affects the growth of wages in the private sector. Due to higher demand than supply in certain industries, the bargaining power of workers is higher, which enables an increase in wages, as well as a transition from informal to formal employment. This has happened in the countries of Central and Eastern Europe, as well as in the new EU member states.

Graph 3.5 shows the trend in average wages in the public and private sectors, as well as in parts of the public sector. We see that average wages are the highest in public enterprises - RSD 65,827, followed by the public sector - RSD 60,546. The public sector had an average wage of RSD 58,834, while the average wage in the private sector was RSD 51,405. In Q3 2019, average wages in the public sector were 17.8% higher than average wages in the private sector. The trend of narrowing the unadjusted gap between public and private sector wages continues. Let us remember that the unadjusted wage gap is not a true measure of the wage gap, because the characteristics of the person (education, work experience, occupation, etc.) have not been taken into account, as well as the fact that in the private sector part of wages is paid in cash, which is not the case in the public sector. Given the significant 8% to 15% increase in public sector wages, the gap between public and private sector wages will widen again.

The average net wage in euros was EUR 461, while the costs of the employer were EUR 746 (Graph 3.6). Net wages in euros increased by 11.3% yoy, while employer costs increased by 10.5%. In Q3 2019, compared to the same quarter of the previous year, the dinar strengthened by 0.4%. Growth of wages in euros was slightly higher than the growth of wages in dinars due to a slight increase in the value of the dinar against the euro.

Annex

Table D 3. 1 Labour market basic indicators according to LFS and CROCSI, Q1 2014 - Q3 2019.

	2014				2015				2016				2017				2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Activity rate (%)	51.0	52.6	52.5	51.6	50.8	51.5	52.0	51.9	52.6	54.1	54.3	52.3	51.8	54.5	55.3	54.2	52.9	55.2	55.5	54.4	53.9	54.8	54.8
Employment rate (%)	40.2	41.8	43.1	42.9	41.2	42.6	43.4	42.7	42.6	45.9	46.8	45.5	44.2	48.1	48.2	46.3	45.1	48.6	49.2	47.4	47.4	49.2	49.6
Unemployment rate (%)	21.3	20.7	17.9	17.0	19.0	17.3	16.6	17.7	19.0	15.2	13.8	13.0	14.6	11.8	12.9	14.7	14.8	11.9	11.3	12.9	12.1	10.3	9.5
Informal employment rate (%)	19.7	20.4	22.8	21.8	19.7	19.7	21.5	20.4	20.3	22.7	24.1	20.9	19.0	22.1	21.8	19.8	18.6	21.0	20.4	18.1	17.1	19.3	18.8
Employment in 000, (LFS)	2453.6	2548.3	2626.8	2609.0	2504.1	2587.8	2623.9	2580.8	2570.7	2761.5	2814.0	2731.4	2652.2	2881.0	2881.9	2763.6	2688.3	2896.8	2929.3	2817.4	2810.5	2916.5	2938.7
Employment, index, (2014=100), (LFS)	95.9	99.6	102.6	101.9	97.8	101.1	102.5	100.8	100.4	107.9	109.9	106.7	103.6	112.6	112.6	108.0	105.0	113.2	114.5	110.1	109.8	114.0	114.8
Formal employment in 000, (LFS)	1969.3	2029.5	2027.6	2041.4	2010.5	2078.3	2058.6	2053.5	2048.7	2134.9	2136.6	2160.7	2148.1	2243.0	2253.5	2217.2	2188.2	2289.6	2330.4	2308.2	2328.5	2352.3	2386.6
Formal employment, index, (2014=100), (LFS)	97.6	100.6	100.5	101.2	99.7	103.0	102.1	101.8	101.6	105.9	105.9	107.1	106.5	111.2	111.7	109.9	108.5	113.5	115.5	114.4	115.4	116.6	118.3
Total employment in 000, (CROCSI)	1835.8	1844.9	1850.3	1851.0	1977.0	1982.0	1993.7	1994.0	1978.0	2008.3	2023.0	2030.3	2024.3	2061.5	2077.7	2086.7	2092.2	2126.6	2146.8	2158.7	2147.9	2 162	2 180
Total employment, index, (2014=100), (CROCSI)	99.5	100.0	100.3	100.3	107.1	107.4	108.0	108.0	107.2	108.8	109.6	110.0	109.7	111.7	112.6	113.1	113.4	115.2	116.3	117.0	116.4	117.1	118.1

Source: Author's calculations using SORS data.

Table D 3. 2 Real net wages and employer's costs in EUR, Q1 2014 - Q3 2019.

	2014				2015				2016				2017				2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Average net wages, total, (€)	361	389	383	386	343	371	372	386	355	378	373	391	367	399	398	416	415	419	414	430	455	462	461
Average net wages, industry, (€)	359	382	378	378	351	376	379	389	369	391	382	399	376	417	411	429	404	416	405	425	439	454	450
Labour costs, total (€)	588	633	623	626	557	601	603	626	576	613	607	635	596	648	647	677	676	684	676	701	735	748	746
Labour costs, industry (€)	582	622	617	615	570	611	617	632	599	635	623	649	611	677	669	699	658	678	660	692	709	735	729

Note: The industry includes B, C and D activities, weighted average of earnings. Dinar exchange rate against the euro, the period average (NBS).
Source: Author's calculations using SORS data.

4. Balance of Payments and Foreign Trade

During Q3 2019, the current deficit stood at EUR 639 million, i.e. 5.4% of GDP and was below the level of the previous two quarters. At the same time, the foreign trade deficit in Q3 2019 was EUR 1 billion, accounting for 8.4% of GDP, and lower than the values recorded in Q1 and Q2. Although deficits in Q3 decreased compared to the previous quarters of 2019, they will be higher at the year-on-year level than last year. We expect the current deficit to reach over 6% of GDP in 2019 and the foreign trade deficit to more than 10% of GDP. Foreign trade flows since the beginning of 2019 have been primarily adversely affected by the strengthening of the domestic currency, rising unit labour costs, rapid growth of domestic demand, the introduction of customs duties on the sale of goods in Kosovo and Metohija, as well as quotas on steel exports to the EU. The foreign trade flows by the end of the year will primarily be adversely affected by the expected lower growth in the eurozone as well as in the countries of the region. During Q3, there was a significant inflow of capital, and within it continued strong growth in FDI inflows. It is estimated that FDI will fully cover and exceed the current deficit level in 2019, for the fifth consecutive year. The appreciation of the domestic currency had a negative effect on foreign trade flows in the previous period, which led to an increase in the foreign trade deficit, and consequently the current deficit. Given the state of foreign trade flows, deficit levels, as well as expected trends, the Government should pursue a foreign exchange policy that would stimulate export growth while slowing import growth, in order to reverse the current trend of the foreign trade imbalance. The price competitiveness of the Serbian economy in recent years has been exacerbated by rising unit labour costs.

Foreign trade deficit and current account deficit decreased in Q3...

...but they will be higher at the year-on-year level than last year

During Q3 2019, the current deficit stood at EUR 639 million, i.e. 5.4% of GDP and below the level of the previous two quarters (Q1: EUR 893 million, i.e. 8.8%, and Q2: EUR 744 million, i.e. 6.6% of GDP). At the same time, the foreign trade deficit in Q3 2019 amounted to EUR 1 billion, accounting for 8.4% of GDP and was lower than the values recorded in Q1 and Q2 (Q1: EUR 1.1 billion, i.e. 10.8% of GDP, and Q2: EUR 1.1 billion, i.e. 9.7% of GDP in Q2). Although deficits in Q3 decreased compared to the previous quarters of 2019, they will be higher at the year-on-year level than last year. We expect the current deficit to reach around 6% of GDP and the foreign trade deficit to be double-digit - i.e. more than 10% of GDP.

Foreign trade flows since the beginning of 2019 have been primarily adversely affected by the strengthening of the domestic currency, rising unit labour costs, rapid growth of domestic demand, the introduction of customs duties on the sale of goods in Kosovo and Metohija, as well as quotas on steel exports to the EU (introduced in February 2019). In addition, the foreign trade flows by the end of the year will be primarily negatively affected by the fact that the decelerated growth in the eurozone as well as in the countries of the region will be higher than originally expected. Developments on the global market have improved the relationship between export and import prices, but this effect is not particularly significant. Price competitiveness will be exacerbated by rising unit labour costs over the next year, and there is little chance of factors neutralising this effect.

FDI are strongly rising, so the inflow of FDI in 2019 will be above the expected level of the current deficit

At the same time, in 2019, the net inflow of FDI capital is expected to be approximately at last year's level. Thus, in 2019, the estimated net FDI inflow will be above the expected level of the current deficit, which has been the case in the previous four years as well (since 2015).

Observed on an year-on-year level, the current deficit was above the level of Q3 2018

Observed on an year-on-year level, the current deficit in Q3 2019 was above the level of Q3 2018 (EUR 556 million, i.e. 5.0% of GDP, see Table T4-1 and Graph T4-2). The year-on-year increase of the current deficit of 0.34 pp of GDP was due to, on the one hand, a higher trade deficit (by 0.12 pp of GDP) and a decrease in inflows on the Secondary Income account (by 1.06 pp of GDP), with a surplus on the Services account (by 0.30 pp. of GDP), and on the other, a decreased deficit on the Primary Income account (by 0.53 pp. of GDP).

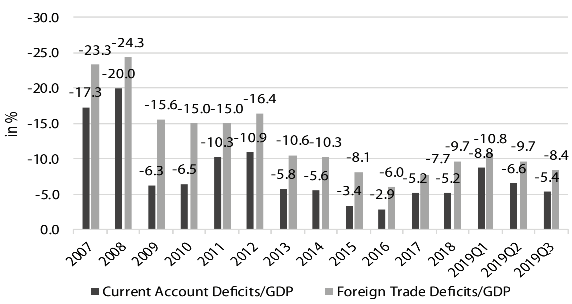
In Q3, the trade deficit was EUR 1.35 billion, accounting for 11.3% of quarterly GDP. Such a share in GDP was by EUR 110 million, i.e. 0.12 pp above the share recorded one year earlier.

Table T4-1 Serbia: Balance of Payments

	2017	2018	2018				2019		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3
					mil. euros				
CURRENT ACCOUNT	-2,051	-2,223	-724	-354	-556	-589	-893	-744	-639
Goods	-3,997	-5,245	-1,138	-1,157	-1,240	-1,710	-1,339	-1,321	-1,350
Credit	14,066	15,238	3,576	3,927	3,850	3,885	3,866	4,277	4,174
Debit	18,064	20,483	4,714	5,084	5,090	5,596	5,205	5,599	5,523
Services	966	1,092	226	247	289	329	238	221	347
Credit	5,246	6,000	1,274	1,409	1,659	1,659	1,497	1,635	1,964
Debit	4,280	4,909	1,048	1,162	1,370	1,329	1,258	1,414	1,616
Primary income	-2,533	-2,207	-622	-534	-641	-410	-625	-575	-627
Credit	568	564	113	159	139	153	127	157	161
Debit	3,101	2,771	736	692	780	563	752	732	788
Secondary income	3,514	4,137	810	1,090	1,036	1,201	833	930	990
Credit	4,097	4,740	951	1,237	1,185	1,368	983	1,099	1,148
Debit	583	602	141	147	149	166	150	169	158
Personal transfers, net [1]	2,758	3,222	633	913	854	823	649	865	878
Of which: Workers' remittances	2,049	2,531	480	741	687	623	470	698	706
CAPITAL ACCOUNT - NET	5	-7	6	-3	-7	-2	-10	-33	-10
FINANCIAL ACCOUNT	-1,648	-1,683	-568	-268	-384	-463	-772	-607	-276
Direct investment - net	-2,418	-3,188	-723	-682	-598	-1,184	-801	-995	-912
Portfolio investment	827	913	-328	181	32	1,028	49	-201	-45
Financial derivatives	-21	21	16	-10	12	2	0	-5	-2
Other investment	-265	-552	70	-432	64	-254	-99	-92	-239
Other equity	-1	-1	0	-1	-1	1	0	0	-1
Currency and deposits	-623	404	21	-317	79	621	-274	-31	301
Loans	-159	-1,303	30	-359	-202	-772	-119	-115	-654
Central banks	9	8	4	0	4	0	4	0	4
Deposit-taking corporations,	-235	-603	95	-80	-290	-328	272	8	-458
General government	9	-198	-103	-69	114	-141	-210	-58	11
Other sectors	58	-510	34	-210	-30	-303	-186	-66	-211
Insurance, pension, and standardized	15	0	0	0	0	0	0	0	0
Trade credit and advances	504	347	18	245	188	-104	295	54	114
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	228	1,123	398	674	105	-55	79	685	921
ERRORS AND OMISSIONS, net	398	546	150	89	179	128	131	170	373
PRO MEMORIA					in % of GDP				
Current account	-5.2	-5.2	-7.4	-3.3	-5.0	-5.2	-8.8	-6.6	-5.4
Balance of goods	-10.2	-12.2	-11.7	-10.8	-11.2	-15.0	-13.1	-11.7	-11.3
Exports of goods	35.9	35.6	36.8	36.8	34.9	34.1	37.9	37.8	35.1
Imports of goods	46.1	47.8	48.5	47.6	46.1	49.0	51.0	49.5	46.4
Balance of goods and services	-7.7	-9.7	-9.4	-8.5	-8.6	-12.1	-10.8	-9.7	-8.4
Personal transfers, net	7.0	7.5	6.5	8.6	7.7	7.2	6.4	7.6	7.4
GDP in euros[2]	39,206	42,856	9,725	10,677	11,045	11,408	10,202	11,313	11,894

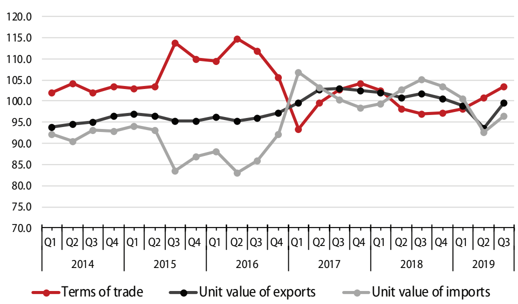
Note: Balance of Payments of the Republic of Serbia is in line with the international guidelines set out in the IMF's Balance of Payments Manual no. 6 (BPM6).
Source: NBS
1) Personal transfers represent current transfers between resident and non-resident households.
2) Quarterly values. The conversion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

Graph T4-2. Serbia: Current and Foreign Trade Deficits, 2007-2019Q3



Source: NBS, *QM*

Graph T4-3 Year-on-year indices of the trade ratio, 2014-2019Q3

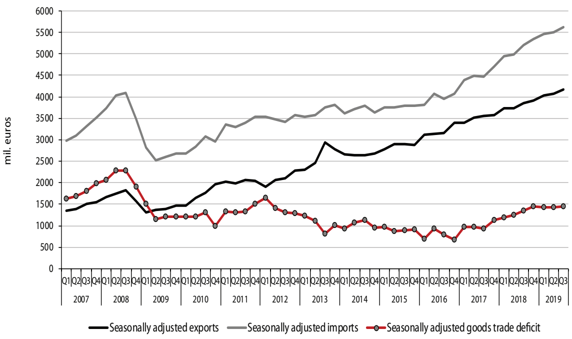


Source: SORS, *QM*

Q3 2019 saw a surplus on the Services account of EUR 347 million, an increase of EUR 58 million, i.e. 0.3 pp of GDP compared to Q3 2018 (from 2.6% to 2.9% of GDP). Therefore, the foreign trade deficit (goods and services deficit) is higher by EUR 51.6 million yoy, but due to a significant growth of GDP it recorded a lower share in GDP by 0.18 pp (from 8.6% to 8.4% of GDP). The recorded value of exports of goods during Q3 was EUR 4,174 million, representing 35.1% of GDP. Imports amounted to EUR 5,523 million and accounted for 46.4% of GDP (Table T4-1).

The net inflow from secondary income in Q3 2019 was EUR 990 million (8.3% of GDP). Of this amount, 878 million was the inflow from personal transfers. This inflow of personal transfers accounts for 7.4% of GDP, down 0.34 pp of GDP from the same quarter of the previous year.

Graph T4-4 Serbia: Seasonally adjusted exports and imports, quarterly, 2007-2019Q3



Source: NBS, SORS, *QM*

During these three months, the net outflow from Primary Income account amounted to EUR 627 million, i.e. 5.3% of GDP.

The year-on-year increase in the trade deficit was nominally higher than the surplus on the Services account, and the foreign trade deficit was higher than last year. In Q3 2019, exports and imports of goods recorded yoy growth rates of approximately 8.4% and 8.5%, respectively[1]. Thus, exports mildly and imports significantly decelerated their growth compared to the growth achieved in the previous quarter (during Q2 2019 the year-on-year increase in exports was 8.9% and imports 10.1%). Seasonally adjusted values also indicate approximately equal growth rates of exports and imports during Q3 2019 - export growth of 2.4% and imports of 2.3% compared to the previous quarter, Graph T4-4.

In Q3 2019, the unit value of imports was 3.5% below the value of Q3 2018. At the same time, the value of exports was 0.3% lower. That led to a slight improvement in the exchange ratio (see Graph T4-3). The further movement of global prices, especially petroleum products and primary agricultural products, is uncertain. After rising in mid-September, oil prices on the global market declined in October to rise again in early December.

A significant inflow of capital was realised, predominantly due to the FDI inflow…

In Q3 2019, a significant inflow of capital of EUR 1.2 billion was realised[2] (Table T4-1). Capital inflows were predominantly due to FDI, as in the previous two quarters. However, unlike Q1 and Q2, there was a significant inflow on the Other Investments account. Thus, the inflow of capital during Q3 was above the current deficit, which caused a significant increase in foreign exchange reserves.

… above current deficit, therefore recording a substantial increase in forex reserves

During Q3, the recorded capital inflow was due to the high net inflow of FDI of EUR 912 million, as well as the net inflow of EUR 239 million in the Other Investments account. FDI inflows in 2018 amounted to EUR 3.5 billion, and in the first half of 2019 to EUR 1.9 billion. In 2018, the largest inflow of FDI was recorded in the following industries: manufacturing (about 1/4 of total FDI inflow), transport and storage (1/5 of FDI), financial and insurance activities (14% of FDI inflow), construction (13%), mining (12%) and trade (9%). In the first half of 2019,[3] the industry branches with the highest FDI inflow were manufacturing (about 1/3 of total inflow), construction (1/5 of inflow), financial and insurance activities (12% of FDI inflow), transport and storage (7%), trade and information (7%), and telecommunications (6%). In addition, a modest inflow from portfolio investment was recorded (EUR 45 million, net), after a significant net outflow on this basis during Q2 2019 (EUR 201 million, net).

Net inflow on the *Other Investments* account amounted to EUR 239 million, of which a significant net inflow was recorded on the *Financial Loans* account (EUR 654 million), a net outflow on the account of *Trade Loans and Advances* (EUR 114 million), as well as a net outflow on the *Cash and Deposits* account (EUR 301 million). The additional borrowing of EUR 654 million net for financial loans, was primarily due to the borrowing of banks (EUR 458 million), primarily from short-term loans. At the same time, additional corporate borrowing was recorded (EUR 211 million, net). The government repaid EUR 11 million net and NBS EUR 4 million. The cumulative growth of foreign exchange reserves in Q3 amounted to EUR 921 million (Table T4-1).

1 The NBS data on imports and exports of goods, as well as the balance of goods, are different from the SORS data (which we use in the following sections of the text: *Exports* and *Imports*) because they do not include goods in processing (see Highlight 1 on Changing the Balance of Payments Methodology in *QM37*). Therefore, there is some difference in export and import levels as well as growth rates, depending on whether the source is NBS or SORS.
2 EUR 1.56 billion including the *Errors and Omittances* account.
3 The available data for FDI by activities for 2019, for which the source was NBS, are up and including Q2.

Exports

The accelerated growth of exports in Q3...

In Q3, exports amounted to EUR 4,385 million, up 7.2% year-on-year. Compared to the previous quarter's growth, there was a certain acceleration in export growth, which continued in October as well (Table T4-5). Seasonally adjusted values indicate that exports in Q3 were 2.4% above those in Q2 2019.

…continued in October as well

Exports excluding road vehicles also accelerated growth: 8.7% in Q3 and 10.8% in October, after 8.3% in Q2 (Table T4-5). The export value of *Energy* during Q3 was 18.4% below the value from Q3 of the previous year, while in October it was 1% above the level from October 2018. However, these rates have no greater significance for the value of total exports, since energy exports make only 3% of total exports.

The growth dynamics of *Intermediate Goods, Capital Goods* and *Non-durable Consumer Goods* is particularly important in terms of growth of total exports, due to the high share of exports of these goods in total exports. Exports of these three product groups together represent 85% of the total export value, and their individual share is respectively: 39.4%, 24.3% and 21.4% (Table T4-5). Exports of *Capital Goods* accelerated their growth significantly and in Q3 were 6.3% above last year's value, while in October they recorded 6.8% yoy growth. Exports of *Capital Goods* excluding road vehicles were up 14.4% in Q3 and 14.6% higher than in the same period of the previous year. Year-on-year growth of exports of *Non-durable Consumer Goods* also saw an acceleration in Q3 (up 10.5%) and in October (up 13.1%). On the other hand, growth of exports of *Intermediate Goods* decelerated slightly in Q3, only to accelerate again in October.

Growth of exports of Durable Consumer Goods accelerated in Q3 (16.3% yoy), while in October it slowed down to 11.7% yoy. Other exports (unclassified exports) in Q3 were 0.9% below last year's value, while in October they were 0.2% higher than last year's value.

Lower level of external demand in the coming period

In the first ten months of 2019, 2/3 of total exports were exported to EU countries and these exports were 6.9% higher than in the same period in 2018. However, the slowdown in economic growth in EU member states will lead to a decrease in external demand for our goods.

In 2019, the value of exports was adversely affected by the introduction of customs duties on goods sold in Kosovo and Metohija, as well as quotas on steel exports to the EU. By the end of 2019, the value of exports will be adversely affected by lower economic growth in the eurozone and countries in the region than initially expected. The further movement of global commodity prices, primarily the prices of petroleum products, is uncertain.

Table T4-5 Serbia: Exports, year-on-year growth rates, 2017 – October 2019

	Exports share in 2018	2017	2018	2019				2019			
				Q1	Q2	Q3	October	Q1	Q2	Q3	October
	in %			in mil. euros						in %	
Total	100.0	15,051	16,282	4,083	4,473	4,385	1,613	6.6	6.2	7.2	9.1
Total excluding road vehicles	93.4	13,801	15,214	3,869	4,192	4,216	1,542	10.1	8.3	8.7	10.8
Energy	3.0	382	492	90	97	137	48	8.6	-16.0	-18.4	1.0
Intermediate products	39.4	5,743	6,411	1,640	1,810	1,744	634	5.4	10.4	8.9	10.2
Capital products	24.2	3,633	3,933	977	1,076	968	385	2.3	1.8	6.3	6.8
Capital products excluding road vehicles	17.6	2,383	2,864	762	795	799	314	18.8	11.2	14.4	14.6
Durable consumer goods	5.3	811	857	213	249	245	95	8.3	9.7	16.3	11.7
Non-durable consumer goods	21.4	3,358	3,480	852	917	991	352	4.8	4.0	10.5	13.1
Other	6.8	1,124	1,109	312	324	301	100	37.6	11.4	-0.9	0.2

Source: SORS

The foreign exchange policy should be stimulating for the further growth of exports

Although the real exchange rate of the dinar weakened slightly in Q2 and Q3, since the beginning of 2019 the dinar has strengthened in real terms against the euro by 0.5%[4]. This continued the trend of strengthening of the dinar started at the end of 2016, which certainly in the previous period adversely affected foreign trade flows and led to an increase in the foreign trade deficit, and consequently influenced the current deficit growth. The level of the current and foreign trade deficit and the expected trends in foreign trade indicate that in the coming period, the exchange rate policy should be pursued in order to stimulate the growth of exports

4 See the section *Prices and Foreign Exchange Rate* in this and the previous issue of *QM*.

and slow down the growth of imports, and to reverse the current trend of increasing foreign trade imbalances. The increase in unit labour costs in the coming years would further impair the international competitiveness of the Serbian economy.

Imports

Imports in Q3 2019 amounted to EUR 5,781 million, 6.7% above Q3 2018 (Table T4-6). As a result, imports slightly slowed down their growth, after a certain slowdown in the previous quarter (8.9% growth in Q1 and 7.7% in Q2 2019). October data indicate a more pronounced deceleration in import growth, as the level recorded this month was only 0.7% above the October 2018 value.

In Q3 2019, a miled deceleration in the growth of imports was recorded …

The most pronounced yoy decline in imports in Q3 2019 was recorded by Energy (-17.5%), and it continued in October (-22.4%), which is largely due to the lower global prices of oil. Thus, the value of imports excluding energy imports in Q3 was 10.1%, and in October it was 4.4% higher than last year's value.

…The deceleration further continued and intensified in October

In addition, imports of unclassified goods (*Other* in Table T4-6) recorded a lower level compared to the last year's level (-4.4% in Q3 and -5.5% in October). On the other hand, imports of *Capital Goods* and *Durable Consumer Goods* after significant yoy growth in Q3 recorded a yoy decline in October. The growth in imports of *Intermediate Goods* has been double-digit since the beginning of 2019. After accelerating growth in Q3 (16.5% yoy), the import value of these products recorded a slight slowdown in October (12.9% yoy).

The movement of imports in the coming quarters will be influenced by the movement of oil prices on the global market, which is uncertain in the forthcoming period. Increasing imports will be driven by rapid growth in domestic demand. If the trend of a real appreciation of the dinar persists, which has been present for a long time, will also work towards increasing imports in the coming quarters.

Table T4-6 Serbia: Imports, year-on-year growth rates, 2017 – October 2019

	Imports share in 2018	2017	2018	2019				2019			
				Q1	Q2	Q3	October	Q1	Q2	Q3	October
	in %			in mil. euros				in %			
Total	100.0	19,396	21,919	5,529	5,877	5,781	2,146	8.9	7.7	6.7	0.7
Energy	11.6	2,026	2,541	586	558	549	231	11.2	-2.4	-17.5	-22.4
Intermediate products	35.6	6,913	7,810	2,021	2,228	2,258	803	10.1	12.4	16.5	12.9
Capital products	21.0	4,186	4,593	1,107	1,198	1,149	426	0.7	1.0	4.1	-1.8
Durable consumer goods	2.0	405	436	103	126	122	45	-0.6	22.5	19.5	-4.1
Non-durable consumer goods	14.9	2,930	3,269	836	875	917	352	7.3	12.6	16.4	4.6
Other	14.9	2,936	3,269	875	892	787	289	19.8	6.5	-4.4	-5.5
Imports excluding energy	88.4	17,370	19,378	4,942	5,319	5,233	1,915	8.7	8.8	10.1	4.4

Source: SORS

Foreign Debt

At the end of June 2019, foreign debt stood at EUR 27.8 billion, i.e. 63.3% of GDP

Seriba's foreign trade at the end of June 2019 was EUR 27,817 million[5], i.e. 63.3% of GDP (Table T4-7). Compared to March 2019, the foreign debt was higher by 676 million euros (by 0.6 pp of GDP).

Foreign debt increased by EUR 676 million during Q2, which was predominantly the result of private-sector debt growth - by EUR 644 million, while the public sector additionally borrowed EUR 32 million (Table T4-7). During Q2, companies increased their level of foreign debt by EUR 619 million (of which EUR 327 million was an increase in the level of long-term debt and 292 a rise in short-term debt). At the same time, banks additionally borrowed EUR 22 million net (EUR 67 million on long-term debt, while the level of short-term debt was EUR 44 million lower than at the end of Q1, see Table T4-7).

5 The source of data for foreign debt and international investment position was NBS and the latest available data was for June 2019.

Growth of foreign debt during Q2 2019 was predominantly due to the private sector borrowing, mostly by companies

Between June 2018 and June 2019, foreign debt increased by EUR 1.73 billion. During this period, the public sector reduced its foreign debt borrowing by EUR 334 million, while the private sector borrowed EUR 2.07 billion at the same time. In this one-year period, on the basis of long-term debt, companies additionally borrowed abroad EUR 1.6 billion, of which EUR 1.25 billion was an increase in long-term debt. Banks borrowed EUR 451 million, of which EUR 212 million was an increase in long-term debt (Table T4-7).

Compared to June 2018, the foreign debt was higher by EUR 2.07 billion, out of which the growth of long-term debt of companies was EUR 1.25 billion

Table T4-7 Serbia: Foreign debt trend dynamic, 2015 – 2019

	2015	2016	2017	2018				2019	
				Mar.	Jun	Sep.	Dec.	Mar.	Jun
	stocks, in EUR millions, end of the period								
Total foreign debt	26,234	26,494	25,573	25,385	26,084	26,502	26,829	27,142	27,817
(in % of GDP) [4]	*73.3*	*72.1*	*65.2*	*63.1*	*63.1*	*62.8*	*62.6*	*62.6*	*63.3*
Public debt[1]	15,295	15,680	13,910	13,767	14,094	13,994	13,422	13,728	13,760
(in % of GDP)[4]	*42.7*	*42.7*	*35.5*	*34.2*	*34.1*	*33.2*	*31.3*	*31.7*	*31.3*
Long term	15,295	15,680	13,910	13,767	14,094	13,994	13,422	13,728	13,760
o/w: to IMF	15	0	0	0	0	0	0	0	0
o/w: Government obligation under IMF SDR allocation	493	494	462	458	468	468	472	480	475
Short term	0	0	0	0	0	0	0	0	0
Private debt[2]	10,939	10,815	11,663	11,619	11,990	12,508	13,407	13,413	14,057
(in % of GDP) [4]	*30.6*	*29.4*	*29.7*	*28.9*	*29.0*	*29.6*	*31.3*	*31.0*	*32.0*
Long term	10,636	10,142	10,770	10,778	11,068	11,358	11,927	12,137	12,532
o/w: Banks debt	2,057	1,408	1,519	1,507	1,556	1,641	1,717	1,701	1,768
o/w: Enterprises debt	8,576	8,729	9,242	9,261	9,502	9,706	10,199	10,425	10,751
o/w: Others	4	6	9	10	10	11	11	11	13
Short term	303	672	893	840	922	1,150	1,480	1,277	1,525
o/w: Banks debt	186	590	817	761	833	1,067	1,346	1,117	1,073
o/w: Enterprises debt	116	82	76	79	89	83	134	159	452
Foreign debt, net 3), (in% of GDP)[4]	44.3	44.4	39.8	37.7	36.2	36.3	36.3	36.2	35.6

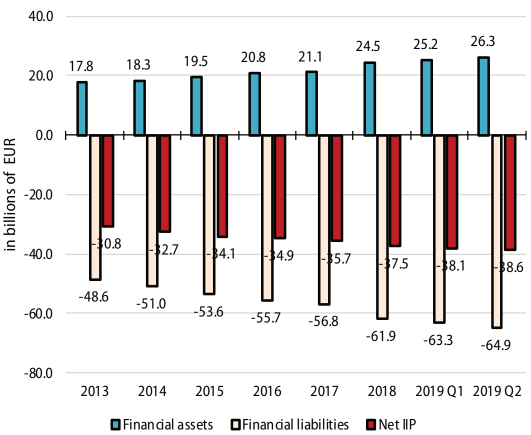
Note: Republic of Serbia's foreign debt is calculated according to the principle of „maturing debt", which includes the amount of debt per principal and the amount of accrued interest not paid at the moment of the agreed maturity.
Source: NBS, QM
1) The foreign debt of the Republic of Serbia's public sector includes the debt of the state (which includes the debt of Kosovo and Metohija for loans concluded before the arrival of the KFOR mission, unregulated debt to Libya and clearing debt to the former Czechoslovakia), of the National Bank of Serbia, local self-government units, funds and agencies founded by the state and the debt for which the state guarantee was issued.
2) The foreign debt of the Republic of Serbia's private sector includes the debt of banks, enterprises and other sectors, for which a state guarantee has not been issued. Private sector's foreign debt does not include loans concluded before December 20, 2000 for which no payments are made (EUR 974.8 million, of which EUR 422.6 million refers to domestic banks, and EUR 552.2 million to domestic enterprises).
3) Total foreign debt reduced by NBS forex reserves.
4) The sum of the GDP of the observed quarter and the previous three quarterly GDP values is used.

International Investment Position

During the first six months of 2019, Serbia's IIP recorded a EUR 1.3 billion increase…

…At the end of June, it was EUR 38.6 billion

Graph T4-8 Serbia: Net International Investment Position, in billions of EUR



Source: NBS
Note: Net financial liabilities are shown as negative values in the graph.

At the end of the first half of 2019, the International Investment Position (IIP)[6] of Serbia was EUR 38.6 billion, with Serbia's claims abroad amounting to EUR 26.3 billion, and liabilities EUR 64.9 billion (Graph T4-8). During the first six months of 2019, both financial assets and financial liabilities grew by EUR 1.8 billion and EUR 3.1 billion, respectively. Thus, in this period, the growth of IIP was EUR 1.3 billion.

Individual positions within the net financial liabilities indicate that, at the end of June 2019, FDI reached EUR 36.7 billion, that loans were at the level of EUR 17.9 billion and that the portfolio investments were EUR 5.05 billion. Therefore, since the beginning of the year, there has been an increase in liabilities of 2 billion euros for FDI, EUR 191 million for loans, and EUR 288 million for portfolio investments.

6 The International Investment Position of the country (MIP) includes financial assets and liabilities of international character. It represents the difference between foreign financial assets in our possession (foreign reserves, our direct and portfolio investments abroad, approved loans abroad, etc.) and foreign financial liabilities in Serbia (foreign direct and portfolio investments, debts abroad, etc.). The country is a net creditor if its claims and assets abroad are higher than foreign assets in the country and its foreign debts.

5. Prices and the exchange rate

In the third quarter of 2019, year-on-year inflation continued its slowdown and dropped to just 1% in October, which is below the NBS target interval (3 ± 1.5%). Main reasons behind the decline in price of the average consumer basket by 0.6% in the observed period are the fall in prices of fresh vegetables more than it is seasonally common and oil products due to a favorable movement of world oil prices. The fact that the drop in the prices of a small number of products is responsible for an unexpectedly strong slowdown in yoy inflation is also confirmed by the movement of underlying inflation (measured by the Consumer Price Index excluding food, alcohol, tobacco and energy), which remained low and stable at around 1.3%. Fueled by a slowdown in domestic inflation and international circumstances that will keep financing conditions very favorable (primarily the easing of monetary policy by the ECB and the Fed), as of July the NBS has cut its key policy rate three times by 25 basis points - from 3% at 2.25%. By the end of the year, we expect slight acceleration of year-on-year inflation due to a low base effect and rise in electricity prices for households, so that December inflation is likely to be around 1.5%, while average annual inflation in 2019 will be around 1.8%. In the next year, stronger inflationary pressures are possible both on the supply and demand side. Namely, the trend of real wage growth above the growth of economic activity will continue in 2020, which should increase the cost pressures on pricing. Especially since we expect that the impact of some factors that have so far partially offset labor cost growth that was higher than productivity growth, such as declining interest expenditure, will begin to slowly disappear. Favorable developments in the labor market, recent monetary policy relaxation and excessive public sector wage increases of almost 10% on average will lead to an increase in domestic consumption and inflationary pressure strengthening on the demand side. Due to a high base effect in the first few months, the effect of these factors will only be visible in the second half of 2020, when year-on-year inflation should be within the 2-3% interval. During Q3 and October, appreciation pressures on the dinar prevailed, because of an increase in inflow of foreign direct and portfolio investments into government securities, as well as seasonal growth of foreign remittance. During the reporting period, the NBS purchased almost EUR 1.4 billion net to prevent the domestic currency from strengthening too much, so that the dinar only slightly appreciated against the euro (0.3%). As the fall in prices in Serbia was more pronounced than in the Eurozone, the real dinar exchange rate actually weakened by 0.3%. However, at the level of the whole 2019, the dinar has strengthened in real terms against the euro by 0.5%, thus continuing the trend of real appreciation of the domestic currency started at the end of 2016 - cumulatively by 6.5%, in this year as well. Considering that we have been recording deterioration in international trade flows for a long time, this is a clear signal that the real exchange rate is currently not at the level that stabilizes foreign trade balances. In addition to direct impact on deterioration of Serbia's price competitiveness, a permanently stable and overvalued dinar can, in the long run, disrupt the structure of the domestic economy by stimulating the development of non-tradable goods sector, at the expense of the export potential growth of the country. A possible stronger slowdown in European economies or shorter recession would increase depreciation pressures in the coming year, but we estimate that NBS would prevent stronger depreciation of the dinar through foreign exchange market interventions.

Prices

Inflation additionally slowed down in Q3 2019, with yoy inflation dropping to a mere 1% in October

The third quarter of 2019 was marked by a strong influence of disinflationary factors, which led to an additional fall in year-on-year inflation and its drop to a mere 1% in October (Table T5-1). The main reasons for the surprisingly strong slowdown in overall inflation over the recording period are the fall in prices of fresh vegetables, noticeably above seasonally common, and petroleum products due to the previously unexpected fall in world oil prices. If we look at all ten months in

Table T5-1. Serbia: Consumer Price Index, 2013-2019

	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
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					
dec	182.8	1.6	1.6	-0.2	-1.9
2016					
dec	185.6	1.5	1.5	-0.2	1.8
2017					
dec	191.2	3.0	3.0	0.1	1.1
2018					
jan	191.8	1.9	0.3	0.3	1.3
feb	192.4	1.5	0.6	0.3	2.7
mar	192.7	1.4	0.8	0.2	3.2
apr	193.5	1.0	1.2	0.4	3.6
maj	194.7	2.2	1.8	0.6	4.9
jun	195.4	2.3	2.2	0.4	5.7
jul	194.8	2.4	1.9	-0.3	2.7
avg	195.4	2.6	2.2	0.3	1.5
sep	194.8	2.1	1.9	-0.3	-1.2
oct	195.4	2.2	2.2	0.3	1.2
nov	194.8	1.9	1.9	-0.3	-1.2
dec	195.0	2.0	2.0	0.1	0.4
2019					
jan	195.7	2.0	0.4	0.4	0.6
feb	197.1	2.4	1.1	0.7	4.8
mar	198.0	2.8	1.5	0.5	6.3
apr	199.4	3.0	2.3	0.7	7.8
maj	198.9	2.2	2.0	-0.3	3.7
jun	198.4	1.5	1.7	-0.3	0.8
jul	197.9	1.6	1.5	-0.3	-3.0
avg	197.9	1.3	1.5	0.0	-2.0
sep	197.0	1.1	1.0	-0.5	-2.8
oct	197.3	1.0	1.2	0.2	-1.2

Source: SORS.

2019, prices in Serbia on average increased cumulatively by 1.2%. Throughout the period, one of the key factors that determined the trend in overall inflation was the new agricultural season and consequent sharp fall in the prices of fresh vegetables (by 16.5%, a contribution of -0.7 p.p). As the prices of other products in the food and non-alcoholic beverages group went up on average (primarily fruit, meat, bread and cereals), the cumulative contribution of this group to inflation was still slightly positive, amounting to 0.2 p.p. Due to a January and July increase in excise duties, prices of tobacco products, until and including October, increased by 7.6% in total (contribution of 0.4 p.p), while energy prices contributed to inflation by 0.1 p.p so far this year. In other words, the contribution of all other products included in calculation of underlying inflation (measured by the consumer price index excluding food, alcohol, tobacco and energy) was about 0.5 p.p. Bearing in mind that year-on-year inflation slowed down more than it was expected, an average inflation in the first ten months was lower than the NBS expectations with which we started the year 2019 and stood at 1.9%.

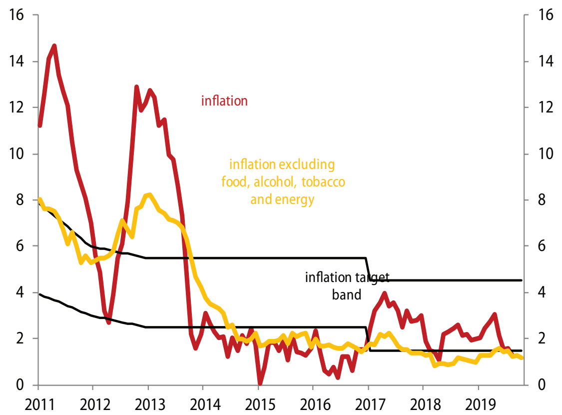
At the end of the year, we expect inflation to be near the lower limit of the NBS target interval (3 ± 1.5%), with a gradual acceleration in 2020 - especially in the second half of the year

In the last two months of 2019, we expect a gradual acceleration of year-on-year inflation, so December inflation is likely to be a bit over 1.5% - the lower limit of the allowed deviation from the NBS target (3 ± 1.5%), while the average annual inflation in 2019 will be about 1.8%. The key factors that should contribute to the realization of this forecast are the base effect (November 2018 recorded a price drop by an average of 0.3%, which is not expected this year) and announced increase in price of electricity for households as of December by 3.9%, which will contribute to inflation growth in that month by almost 0.2 p.p. In 2020, we forecast a moderate acceleration of inflation due to a gradual growth in cost pressures, as, by all odds, the trend of increasing labor costs above productivity growth will continue. The rise in unit labor costs will be affected by the insufficient supply of workforce in Serbia due to emigration, but also by relatively high increase in the minimum labor cost, which will take effect early next year. Inflationary pressures on the demand side should also increase, primarily as a result of monetary policy relaxation this year, and fiscal policy will contribute to this as well, due to a very large increase in public sector wages (nearly 10% on average). Nevertheless, in the first quarter of next year, year-on-year inflation will continue to move around the lower level of the NBS target interval due to the base effect – as a reminder- in the first four months of 2019, prices increased by a high 2.3% on average, which will in the same period next year push the total inflation downwards. In the second half of 2020, the base effect will change the direction of the impact, because during this year we had an above average decrease in prices of fresh vegetables as of May. Due to all these factors, we expect a gradual acceleration of y-o-y inflation from June, which should generally be in the 2-3% interval. Similar expectations were expressed by the NBS in its latest medium-term inflation projection, according to which the average inflation is expected to be around 2.2% in the second half of 2020.

Despite a slight increase of inflationary pressures in 2019, they are still insufficient to outweigh the disinflationary impact of extraordinary factors

Primera radi, podaci APR-a nedvosmisleno ukazuju na to da je zbog pada kamatnih stopa na zaduživanje privredeUnderlying inflation (measured by the Consumer Price Index excluding food, alcohol, tobacco and energy) slowed slightly during Q3 and October, averaging 1.3% (Chart T5-2). Underlying inflation has been on average at that level throughout 2019, which clearly suggests that inflationary pressures in the domestic economy are still relatively weak - although they increased moderately when compared to the last year. When observed on a monthly basis, the underlying inflation in the second half of the year was generally 0.2-0.3%, except in September when we recorded its decline by 0.6%, mainly due to a seasonal decline in package tours by about 30%. In accordance with our previous expectations, real wages grew at a much faster pace than economic activity and labor productivity in the first three quarters of this year, and this should have increased cost pressures on pricing. However, while unit labor costs increased by more than 6% year-on-year, this effect is still missing. There are indications that this is happening, at least in part, because some other production costs are being reduced, which offsets the increase in labor costs in the previous period. For example, the Serbian Business Registers Agency (SBRA) data unequivocally indicate that the fall in interest rates on corporate borrowing led to a significant decrease in interest costs, and it is possible that in the meantime, there was an increase in efficiency of internal processes in the form of a lower consumption of energy or raw materials. On the other hand, private consumption has grown at a rate of just over 3% since the beginning of the year, which is slightly below the growth rate of non-agricultural GDP (3.6%). We estimate that this still does not generate some stronger inflationary pressures on the demand side, but rather reflects on an increase in imports and deterioration in foreign trade balances. The weak inflationary pressures and consequently low and stable carrying inflation was also contributed by the slight strengthening of the dinar against the euro this year, as well as low inflation in the international environment.

Chart T5-2. Serbia: Y-o-y Inflation Rate and Underlying Inflation and the NBS Target Band 2011-2019



Source: NBS and *QM* estimates

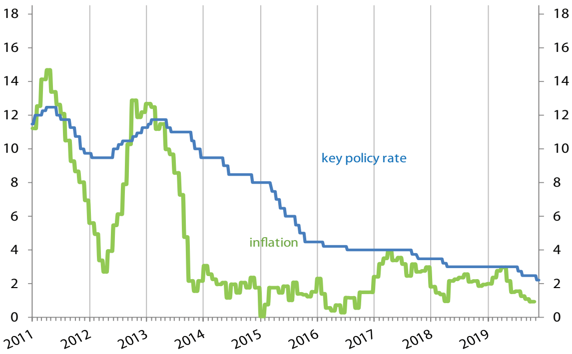
In 2020, inflationary pressures, both on the supply and demand side, could significantly increase

Wage growth will continue in the next year, far exceeding productivity gains in Serbian economy. Namely, as of January 2020, there will be an increase in the minimum wage by 11.1%, and wages in public sector will increase by an average of almost 10%, while we also expect further wage growth in private sector due to market pressures caused by labor migration. With a gradual depletion of the factors that partially offset the impact of rising labor costs on price formation (primarily interest rate cuts) in the past, it should increase cost pressures and contribute to acceleration of underlying inflation. Such developments in the labor market will also contribute to a further increase in domestic consumption, which, in addition to former impact on increase in imports, could start to spill over to an increase in inflation. Additionally, domestic demand growth will also be affected by accelerating growth in credit activities of banks (see chapter on Monetary Policy).

As a response to a slowdown in inflation, the NBS has reduced the key policy rate by 0.25 basis points three times since Q3 - from 3% to 2.25%

Due to a low and stable underlying inflation, sharp slowdown in total inflation over the past few months and forecast according to which the inflation will continue to move in the lower half of the target interval of 3 ± 1.5% until the end of the following year, the NBS has reduced the key policy rate three times by 0.25 p.p. since the beginning of Q3 (Chart T5-3). In this way, the key policy rate has been lowered from 3% to 2.25% since November, which is its lowest level since switching to inflation targeting regime. In addition to domestic factors contributing to weak inflationary pressures in Serbia, this decision was also influenced by international factors - primarily the slowdown in global economic growth and inflation and the additional relaxation in monetary policy of key central banks. Thus, the US Fed has cut its key policy rate three times by 25 basis points (from 2.5% to 1.75%) this year, while the European Central Bank has lowered the interest rates deeper into negative territory. Also, in November, the ECB launched a new monetary stimulus cycle by purchasing the bonds worth 20 billion EUR per month (see Monetary Policy section). Thus, an exceptionally favorable conditions in the international financial market continued, which has reduced the pressure on monetary policy of developing countries and, in some cases, opened the room for its further easing. Namely, recent decisions of the world's leading central banks have led to a continuation of the trend of increased capital inflows into developing countries, creating pressure toward further strengthening of their national currencies. This effect is certainly visible in Serbia, since during Q3 and October, the NBS intervened in the interbank foreign exchange market by net purchase of almost 1.4 billion EUR to alleviate the appreciation pressures on the dinar.

Chart T5-3. Serbia: NBS Reference Interest Rate and y-o-y Inflation Rate, in %, 2011-2019

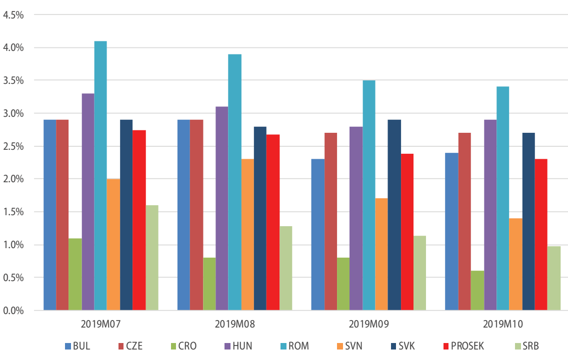


Source: NBS

Q3 recorded inflation slowdown in most Central and Eastern European countries, but inflation in Serbia is still among the lowest in the region

The good agricultural season and movement of oil prices in the world market contributed to a slowdown in inflation in Central and Eastern European countries during the third quarter, which dropped from an average of 2.7% in July to 2.3% in October (Graph T5-4). According to the latest available data, Romania (3.4%), Hungary (2.9%) and the Czech Republic (2.7%) currently have the highest price increases, while the countries with the lowest year-on-year inflation are Serbia (1%) and Croatia (0.6%). Although inflation in the entire region has been affected by similar factors in 2019 so far (primarily the prices of fresh fruits and vegetables and petroleum products), the fact is that year-on-year inflation in Serbia has been slightly more pronounced, and it is lower by half when compared to the average of the region. The first observation is probably the result of the fact that the share of food and non-alcoholic beverages in the average consumer basket in Serbia is higher than in the CEE countries, which is why the changes in prices of these products have a greater influence on the movement of total inflation in our country. The fact that inflation in Serbia has been chronically below the regional average is due to the fact that inflationary pressures in the domestic economy are still relatively weak, which is generally not the case in CEE. Extremely favorable labor market trends, as well as faster wage growth than productivity, have been present in these countries for a long time, and as a result inflationary pressures on both the supply and demand sides are already relatively strong. As previously mentioned, we have started recording similar trends in Serbia as well (we expect them in 2020), which is why the experience of comparable countries suggests that we could expect a stronger growth of inflationary pressures in the domestic economy in the coming year.

Chart T5-4. Inflation in Serbia and selected countries in Central and Eastern Europe



Source: Eurostat, SORS and *QM* calculations

After relatively strong acceleration of inflation in the first four months of 2019, we recorded a slowdown as of May, which continued throughout the third quarter. Prices fell by an average of

In Q3 2019, disinflationary trends continued and prices decreased on average by 0.7%

0.7% during Q3, contributing to a further fall in year-on-year inflation - from 1.5% in June to 1.1% in September. The key disinflationary factor in the observed period was the movement in prices of fresh vegetables, which, with the arrival of the new agricultural season, dropped more than it is seasonally usual - by as much as 22% (contributing to overall inflation by -0.9 p.p). Prices of the remaining products in the food and non-alcoholic beverages group went up slightly on average, reducing this group's negative contribution to -0.8 p.p. (Table T5-5). Due to a fall of oil prices in the world market in past few months, oil prices have decreased by an average of 1.5%, which crucially influenced the products and services in transport group to make a negative contribution to the overall inflation of 0.1 p.p. Also, as usual, the prices of clothing and footwear decreased by an average of 2.3% during the summer season (contribution of -0.1 p.p.). Actually, the only significant inflationary factor in Q3 was the increase in price of tobacco products, which rose by an average of 3.7% due to a regular July stock reconciliation (contribution of 0.2 p.p.). The prices of other products and services did not change significantly, and their aggregate contribution to inflation was slightly negative (below 0.1 p.p.).

Deflation stopped in October on a monthly basis, but year-on-year inflation nevertheless dropped to 1%

After five consecutive months where we had a fall in price levels, October recorded a low inflation of 0.2%. This is primarily the result of a seasonal rise in clothing and footwear prices by an average of 1.8% (contribution of 0.1 p.p.), and to a similar extent, total inflation was also contributed by the increase in prices of oil products by about 0.9%. Despite a slight rise in price level this month, year-on-year inflation continued to slow down (as monthly inflation in October last year amounted to 0.3%) and stood at 1%. If we look at all ten months in 2019, the cumulative price increase was 1.2%, while the average annual inflation in that period amounted to 1.9%.

Table T5-5. Serbia: Consumer Price Index: Contribution to Growth by Selected Components

	Share in CPI (in %)	price increase in Q3 2019.	Contribution to overall CPI increase (in p.p.)	price increase in october 2019.	Contribution to overall CPI increase (in p.p.)	price increase in 2019.	Contribution to overall CPI increase (in p.p.)
Total	100.0	-0.7	-0.7	0.2	0.2	1.2	1.2
Food and non-alcoholic beverages	32.8	-2.4	-0.8	0.0	0.0	0.7	0.2
Food	29.2	-2.7	-0.8	0.0	0.0	0.7	0.2
Alcoholic beverages and tobacco	7.4	2.3	0.2	0.0	0.0	5.2	0.4
Tobacco	4.7	3.7	0.2	0.0	0.0	7.6	0.3
Clothing and footwear	4.5	-2.3	-0.1	1.8	0.1	-1.7	-0.1
Housing, water, electricity and other fuels	13.6	0.5	0.1	0.0	0.0	1.3	0.2
Electricity	4.8	0.2	0.0	0.0	0.0	0.2	0.0
Furniture, household equipment, routine maintenance	4.6	-0.3	0.0	-0.1	0.0	0.9	0.0
Health	5.0	0.3	0.0	0.2	0.0	1.5	0.1
Transport	12.9	-0.9	-0.1	0.4	0.1	0.6	0.1
Oil products	5.8	-1.5	-0.1	0.9	0.1	1.0	0.1
Communications	5.0	0.4	0.0	0.0	0.0	1.6	0.1
Other items	14.3		0.0		0.0		0.3

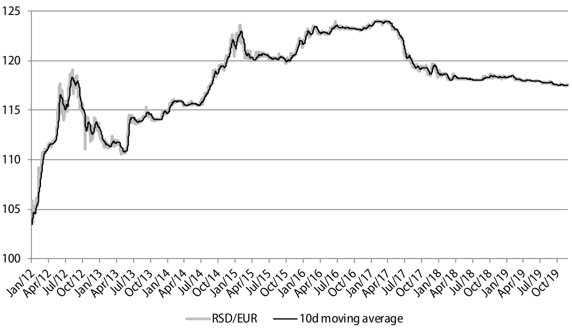
Source: SORS and *QM* estimates

The Exchange Rate

During Q3 and until mid-November, appreciation pressures on the dinar were prevailing, which has nominally strengthened against the euro by 0.5% since the beginning of the year.

As in the previous period, during the second half of 2019 appreciation pressures on the dinar mostly prevailed, which nominally strengthened against the euro by 0.3% during Q3 and October. Thus, the total nominal strengthening of the dinar against the European currency in the first ten months amounted to 0.6%. The key factors that were contributing to the growth of foreign currency supply in the domestic foreign exchange market, as well as appreciation pressures, were the increased inflows from foreign direct investment and portfolio investments in government bonds. Despite strong pressures to strengthen the domestic currency, the exchange rate has remained fairly stable since the beginning of Q3, fluctuating at a narrow interval between 117.5 and 117.8 dinars per 1 euro (Graph T5-6). The NBS made a crucial contribution to this by frequent and extensive interventions in the interbank foreign exchange market, which in the observed period bought 1,505 billion EUR in order to prevent an excessive strengthening of the dinar - mostly in the second half of the year. We record contrary tendencies when it comes to the dinar exchange rate against the US dollar and Swiss franc. During Q3, October and November, the euro depreciated mainly against the dollar, which subsequently resulted in a 2.9% weakening of the dinar against the US currency. Since the beginning of the year, the dinar nominally weakened by 3.3% in total against the dollar. As the euro was also weakening against the Swiss franc for most of the year, the domestic currency depreciated against the franc by 1.9% until and including November.

Chart T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2012-2019

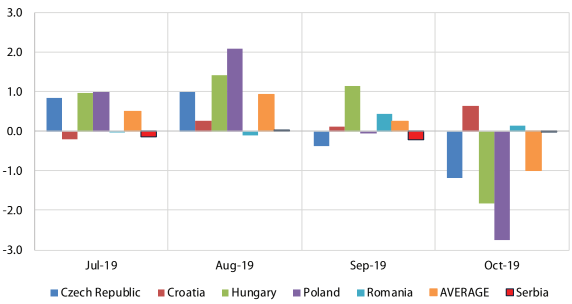


Source: NBS

NBS continues to strongly suppress exchange rate oscillations in both directions, which is why the dinar is one of the most stable currencies in the region

Unlike dinar, most of the CEE countries' currencies were exposed to depreciation pressures during Q3, so they generally weakened against the euro - mostly the Hungarian forint (3.5%), Polish zloty (3%) and the Czech koruna (1. 5%). The situation changed completely in October, when the currency basket in the countries of the region with a similar exchange rate regime strengthened on average by 1% against the euro (Chart T5-7). It is characteristic that the fluctuations in the exchange rate in Serbia for a longer period of time have been, as a rule, smaller than in comparable countries. We believe that this is largely due to the NBS's frequent interventions on IFEM, which in the first ten months of this year bought over 2.5 billion euros to prevent excessive strengthening of the domestic currency, and also appeared as a buyer of foreign currencies in order to prevent the dinar weakening (250 million). Thus, in 2019, the NBS continued to implement its policy of de facto targeting the level of nominal exchange rate, making the dinar one of the most stable currencies in the region in previous period. Preventing an excessive strengthening of the dinar is currently a good policy because the extended period of appreciation of the domestic currency (as of the end of 2016) has a negative impact on the price competitiveness of the domestic economy and it contributed to the deterioration of foreign trade balances in this and previous years. However, the problem comes from the fact that the NBS is reacting even to first signs of depreciation pressures on the dinar, as happened in the second half of November, because that is not in line with the policy of directing the exchange rate to a level that keeps the country's external balances in equilibrium.

Chart T5-7. Nominal exchange rate change (in %) in selected countries

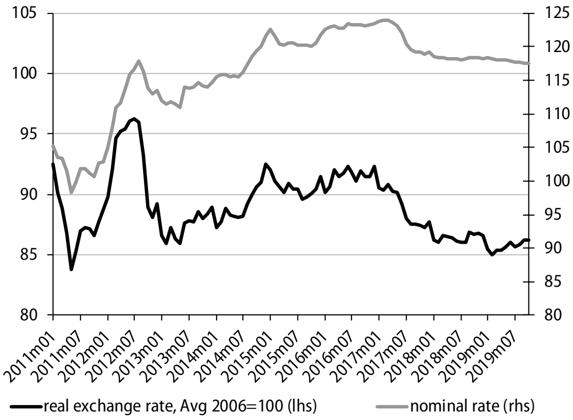


Source: Eurostat, NBS and *QM* calculations
Note: an increase represents depreciation

Despite nominal appreciation, the dinar fell in real terms against the euro in Q3 due to lower domestic inflation

Trends from the previous quarter continued in Q3, so that the real dinar exchange rate weakened slightly against the euro again - by 0.3% (Graph T5-8). Bearing in mind that the domestic currency strengthened nominally by 0.3% in the observed period, this movement of the real exchange rate is the result of a lower domestic inflation compared to the Eurozone (-0.7% versus -0.1%). However, if we look at the entire 2019, the dinar strengthened in real terms against the European currency by 0.5%, which means that the trend of real appreciation of the domestic currency continued during this year as well, which was established at the end of 2016. In addition to the dinar, in 2019 the currencies that strengthened in real terms in the CEE region were only the Czech koruna (by 3.1%) and the Polish zloty (by 0.7%) - but this is no surprise bearing in mind the macroeconomic fundamentals of these countries. Such an assessment does not stand for Serbia, in fact we can say that the real appreciation of 6.5% when compared to December 2016 was in contradiction with other basic macroeconomic trends. The policy of an excessively strong real dinar exchange rate is problematic for two reasons. Although not the only cause, the real dinar strengthening in the past few years is undoubtedly one of the explanations for the deterioration of foreign trade flows and the growth of foreign trade deficit, which in turn indicates that the domestic currency is not at the level that keeps foreign trade balances in equilibrium (i.e. it is overvalued). Namely, in combination with an expansionary monetary policy, an extremely stable and strong dinar exchange rate contributes to growth in domestic demand largely spilling over to an increase in consumer goods imports. Moreover, the development of economy sectors that produce non-tradable goods at the expense of tradable goods intended for export is being encouraged, which can have negative long-term effects on Serbia's economic growth. Therefore, we once again point out to the fact that a mild and controlled real depreciation of the dinar would have a much more positive effect on the domestic economy than the policy of a firm defense of the current nominal dinar exchange rate.

Chart T5-8. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly Averages, 2011-2019



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

Unfavorable international macroeconomic trends could increase the depreciation pressures on the dinar

Any stronger slowdown in European economies or a shorter recession would also cause a fall in capital inflows in Serbia, which would, in conditions of a high current account deficit, increase the depreciation pressures on the dinar. However, we do not expect a stronger depreciation of the dinar in this case either, as the NBS has a high amount of foreign currency reserves, and so far has shown a willingness to use them to preserve the stability of the dinar. Higher depreciation of the dinar could only be expected in the event of a stronger recession in Europe, which is not likely for now.

Trends

6. Fiscal Trends and Policy

Moderate growth of public revenue and spending continued in Q3, with a consolidated fiscal surplus of RSD 16.2 billion (1.2% of quarterly GDP). Public revenue growth in Q3 was fuelled by solid tax revenue growth (from all taxes except VAT), while non-tax revenue continued to moderately decline, even though it was still higher than initially planned. The increase in public spending in Q3 was due to the moderate growth of all current spending (except interest and subsidies) and the strong growth of capital spending. In the first ten months of 2019, a consolidated fiscal surplus of RSD 47.7 billion was achieved (1.1% of GDP), due to the solid growth of both revenue (all types) and spending (current and capital). If the current trends continue, the fiscal result in 2019 could be close to equilibrium. The fiscal framework for 2020 foresees an adequate fiscal deficit (of 0.5% of GDP), with a slight improvement in the structural characteristics of the fiscal policy, through increased public investment and a slight reduction in the fiscal burden on labour. However, the planned faster growth of wages, higher than economically justified, neutralised part of the fiscal space, which made it impossible to make a significant step forward in improving the structure of public spending. The planned increase in public investment to 4.5% of GDP is adequate, but in order to have a positive impact on economic growth, it is necessary to move from discretionary to methodologically founded selection of investment projects, and to improve the efficiency of their realisation. At the same time, there were no concrete measures in the economic and fiscal framework for 2020 to improve public sector efficiency. Public debt at the end of Q3 was EUR 23.9 billion (about 52% of GDP), which was about EUR 930 million more than at the end of 2018, primarily due to government borrowing to provide funds for the purchase of the Komercijalna Banka shares. If current trends continue, public debt could reach around 52-53% of GDP by the end of the year.

Fiscal Tendencies and Macroeconomic Implications

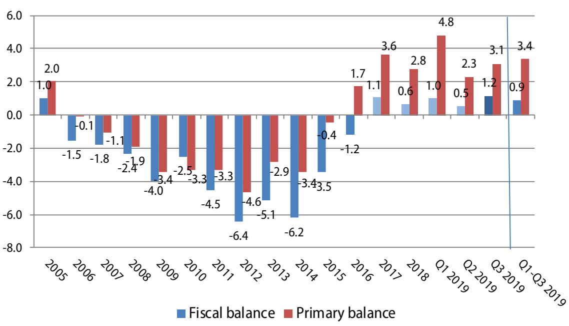
In Q3, a fiscal surplus of RSD 16.2 billion (1.2% of GDP) was achieved

In Q3, the year-on-year real growth of public revenue continued, as well as of public spending, both compared to the same period of the previous year and in relation to the previous quarter[1]. Consequently, a consolidated fiscal surplus RSD 16.2 billion was achieved in that quarter (1.2% of quarterly GDP), while the primary surplus amounted to RSD 43.6 billion (about 3.1% of quarterly GDP). Similar trends continued in October, when a strong real year-on-year growth of both public revenue and public spending continued (by 13.9% and 12.9% respectively).

In the first ten months, the surplus was RSD 47.7 billion - higher than planned, but lower than the last year's

In the first ten months of 2019, a consolidated surplus of around RSD 47.7 billion was achieved (around 1.1% of the 10-month GDP), while the primary surplus amounted to about 3.4% of GDP. Considering the usual annual dynamics of public revenue and public spending from previous years, the plan for 2019 and realisation in the period January-October, it is estimated that the fiscal surplus achieved in that period was higher than planned by about 10-12 billion dinars. This was primarily the result of better realisation of public revenue in relation to the plan, both tax and non-tax. However, in the first ten months of 2019, public spending was also higher than expected, which partially offset the effect of faster revenue growth. The overall estimate is that the fiscal surplus achieved in the first ten months of 2019 was moderately higher

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



Source: *QM* calculations

1 Real growth rates of all variables compared to the previous quarter of the current year were calculated on the basis of seasonally adjusted data.

than planned, albeit lower than in the same period last year, when the surplus was about RSD 65 billion.

Public revenue continued to grow in Q3...

In Q3 2019, public revenues continued a year-on-year growth, amounting to 4.4%, which was slightly faster than in the previous quarters, primarily due to continued strong growth of tax revenues, while non-tax revenues declined. In the first nine months of 2019, public revenue achieved a real year-on-year growth of 5%, which represents a net result of tax revenue growth (by 6.2%) and a moderate non-tax revenue decline (by 4.7%).

…thanks to increased tax revenue, which was the result of a faster growth of income and spending than GDP

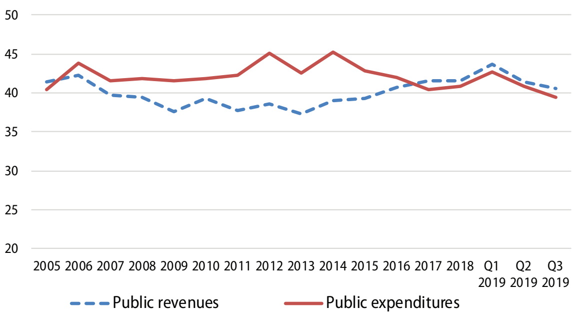
Tax revenue in Q3 increased by 5.8% in real terms compared to the same period of the previous year, which was close to the growth achieved in the previous quarter. And compared to Q2, the tax revenue was 1.1% higher. In the first nine months, tax revenue achieved solid moderate real growth of 4.9%, which is slightly higher than the real growth of Gross Domestic Product. The growth was recorded in all tax revenues, but it was the most pronounced in income tax and corporate income tax, while the lowest growth was from VAT.

The year-on-year increase in tax revenue in Q3 was a result of strong growth in compulsory social security contributions (by 8.7%) and excise taxes (by 13.5%), as well as income taxes, corporate income taxes and customs duties, while revenues from VAT recorded a moderate yoy decline (by 2.4%). In Q3 tax revenue growth was slightly faster than GDP growth, which was due to, among other things, faster growth of income and spending. Therefore, the strong growth of revenue from income tax and social contributions was the result of growth of wages and employment. The growth of revenue from excise tax can be a consequence of the low base effect, as in Q3 2018 the excise tax revenue recorded a significant decline. This conclusion is also indicated supported by the fact that excise tax revenues in Q3 were 0.8% lower in real terms compared to Q2 of the current year. Due to irregular dynamics, estimates of trends in excise duty collection can be given only based on data for several quarters. In the first nine months, excise tax revenue increased by 4.9% in real terms, which was in line with trends in spending and tax rates. The increase in customs revenue, which was over 10% in Q3 (and about 7.4% in the first nine months of 2019), was primarily due to a significant increase in imports. In conditions of growth in retail trade and imports, the decline in VAT revenues in Q3 could be ascribed to higher returns, as well as to the effects of some one-off factors. However, in the first three quarters of 2019, VAT revenue recorded a real year-on-year growth of 3.1%, which was slower than the growth of retail trade and imports. Since the effects of temporary and one-off factors in the long-term may not provide a proper explanation for these dynamics, a slower growth in VAT revenue than expected could also signal a decline in collection efficiency, which is often the case in election periods.

Non-tax revenue continued to decline... but is still high

In Q3, the decline of non-tax revenue continued by 5.3%, so in the first three quarters of 2019, a real 4.7% year-on-year decline of tax revenue was recorded.[2] Although the decline in non-tax revenue, to the extent that it was a consequence of the decline in the collection of dividends from public companies, is estimated to be economically justified, this decline was smaller than planned in 2019 (or foreseen by the Fiscal Strategy). This indicates, however, that the state has continued its policy of aggressively collecting dividends from public and state-owned enterprises, thereby adversely affecting their investment potential. Instead, from the perspective of stimulating economic growth, it would be justified to stop the practice of aggressive dividend collection and introduce an obligation for enterprises to invest retained earnings in fixed assets.

Graph T6-2. Serbia: Consolidated public revenue and public spending (% of GDP)



Source: *QM* calculations using MoF data

2 Inflows from concession fees were generated in April 2019, of which RSD 2.5 billion was reported as non-tax revenues, and RSD 42.2 billion as an inflow from a source of funding ("below the line"). Therefore, the growth of non-tax revenue in Q1 cannot be attributed to this transaction.

Public spending, both current and capital, is growing

In Q3, the trend of accelerating the growth of public spending continued, which increased in real terms by 5.7% yoy, owing to the moderate growth of current spending (by 5.1%) and the strong growth of capital spending (by 14.9%). Spending on goods and services (by 15.9%), as well as employees (8.3%) and pensions (by 6.3%) were most responsible for the increase in current spending, while spending on interest and subsidies declined.

In the first nine months of 2019, public spending recorded a significant year-on-year growth (by 6.6%), which was slightly faster than the growth of the economy. This is estimated to be economically unfavourable, since public spending in Serbia is still higher in relative terms than in comparable countries of Central and Eastern Europe. The growth of public spending was driven by a strong increase in capital spending (by over a quarter), but also by current spending - primarily for goods and services, salaries and pensions. Only subsidy spending recorded a moderate decline (by 2.7%), while interest spending almost stagnated, which is considered positive. The overall estimate is that the public spending structure has improved in the first three quarters, but some types of current spending (goods and services, salaries and pensions) are growing faster than economically justified, and plans for 2020 indicate that similar trends will continue.

Capital spending continued strong year-on-year growth in Q3, so that between January and September, these expenditures increased by about 26.6% compared to the same period last year, amounting to approximately 3.9% of nine-month GDP. Growth of capital spending in 2019 is judged to be economically justified when it comes to increasing investment in infrastructure. However, since the Government does not publish detailed data on the structure of capital spending, the extent to which this is the case cannot be confirmed.

Considering the existing dynamics and the announced one-off measures (on the spending side) that will be implemented in Q4, it is estimated that in 2019, the fiscal result will be close to equilibrium. Given that the Serbian economy is growing relatively slowly, it is estimated that there is significant room for creating fiscal incentives through the transition to a mild deficit policy and a significant improvement in the structural characteristics of the fiscal policy.

Planned fiscal deficit for 2020 is adequate...

The fiscal strategy for 2020 envisages a deficit of the consolidated state sector of 0.5% of GDP. The Budget Law adopted at the end of November, which foresees a budget deficit of 0.3% of GDP, is in line with the projected deficit of the consolidated state sector. The projected level of tax revenues in 2020 is estimated as realistic, i.e. relatively conservative. The planned consolidated fiscal deficit is assessed as adequate, taking into account developments in economic activity and the level of public debt. In addition, the fiscal framework for 2020 foresees a further increase in capital spending to 4.5% of GDP and a slight reduction in the fiscal burden on labour, which is also assessed as positive. Return to the systematic indexation of pensions according to the so-called "Swiss formula" is also assessed as economically adequate, since in the past few years Serbia was one of the few European countries to apply the principle of discretionary (politically-motivated) decision-making regarding indexation. Consequently, the projected increase in pension spending in 2020 is estimated as sustainable. On the other hand, the projected increase in the salaries of public sector employees, on average by 9%, is higher than the expected growth of economic activity, and as such is assessed as inadequate, i.e. politically motivated.

…but the improvement of structural characteristics of the fiscal policy is insufficient

Although the budget for the coming year envisages a certain improvement of the structural characteristics of fiscal policy (increase in the share of public investments and reduction of the fiscal burden on labour), the opportunity was missed to make this improvement more significant, since part of the fiscal space was used for higher wage growth. Increasing public investment to 4.5% of GDP is only a necessary but not sufficient condition to have a positive impact on economic growth. In order to achieve that impact, public investments need to be maintained at that level for a longer period of ten years, while maintaining fiscal deficits at up to 1% of GDP, and increasing the share of infrastructure spending in total public investment.

In addition, a (methodologically based) system of selection of investment projects is needed, which would ensure that only those projects that are unambiguously economically and socially viable are financed from limited public resources. Also, it is necessary to improve the system of contracting and supervision of project implementation, in order to reduce losses on unjustified transaction costs and increase the efficiency of implementation.

Improving the efficiency of planning and realisation of public investments is only one of the segments in which the efficiency of the public sector needs to be significantly improved. For long-term sustainable and dynamic growth of the economy, it is necessary to maintain macroeconomic stability permanently, but also to significantly improve the efficiency of the state through structural reforms, i.e. of the public sector in all its segments, especially in the areas of justice, administration efficiency, education and healthcare. The relatively poor results of Serbian students on the PISA tests are a consequence of the systematic and long-standing underestimating of the importance of education, both in terms of allocating budget funds for education and in affirmation of the value system in a society where education is of little importance.

Public Debt Trend Analysis

Public debt at the end of Q3 was EUR 23.9 billion (52% of GDP)

At the end of Q3 2019, Serbia's public debt stood at EUR 23.9 billion (52% of GDP), including non-guaranteed debt of local self-governments, about 52.8% of GDP, which was about EUR 390 million more than at the end of Q2 and about EUR 930 million more than at the end of 2018. Growth of public debt in Q3 was not caused by fiscal movements, but was a result of government borrowing to provide funds to repay the principal of part of the existing public debt during Q4, as well as to purchase the shares of international financial institutions in the Komercijalna banka's capital, which was realised in November.

Tabela T6-3. Serbia: Public debt dynamics 2000-2019 (bn. of dinars)

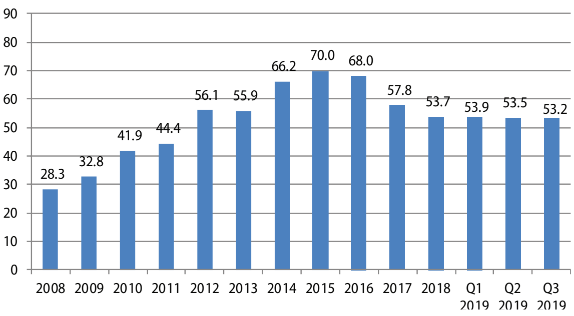
	2000	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Q1 2019	Q2 2019	Q3 2019
I. Total direct debt	14.2	7.9	8.5	10.5	12.4	15.1	17.3	20.2	22.4	22.7	21.4	21.5	21.9	22.0	22.4
Domestic debt	4.1	3.2	4.1	4.6	5.1	6.5	7.0	8.2	9.1	8.8	9.1	9.4	9.5	9.6	9.7
Foreign debt	10.1	4.7	4.4	5.9	7.2	8.6	10.2	12.0	13.4	13.9	12.4	12.1	12.4	12.5	12.7
II. Indirect debt	-	0.9	1.4	1.7	2.1	2.6	2.81	2.5	2.4	2.1	1.8	1.5	1.5	1.5	1.5
III. Total debt (I+II)	**14.2**	**8.8**	**9.8**	**12.2**	**14.5**	**17.7**	**20.1**	**22.8**	**24.8**	**24.8**	**23.2**	**23.0**	**23.4**	**23.6**	**23.9**
Public debt / GDP (QM)[3]	**169.3%**	**28.3%**	**32.8%**	**41.9%**	**44.4%**	**56.1%**	**55.9%**	**66.2%**	**70.0%**	**68.0%**	**57.8%**	**53.7%**	**53.9%**	**53.5%**	**52.0%**

1) According to the Public Debt Law, public debt includes debt of the Republic related to the contracts concluded by the Republic, debt from issuance of the t-bills and bonds, debt arising from the agreement on reprogramming of liabilities undertaken by the Republic under previously concluded contracts, as well as the debt arising from securities issued under separate laws, debt arising from warranties issued by the Republic or counterwarranties as well as the debt of the local governments, guaranteed by the Republic.
2) Estimate of the Ministry of Finance of the Republic of Serbia
3) QM estimate (Estimated GDP equals the sum of nominal GDP in the current quarter and three previous quarters)
Source: QM calculations based on the MoF data

Borrowing is done under fa Borrowing is carried out on favourable terms - due to the good situation in international markets and the achieved macroeconomic stability

Two Eurobond issues realised in June and November, amounting to EUR 1.55 billion, with a yield rate of 1.5% (on ten-year bonds issued in June) and 1.25% (on ten-year bonds issued in November), are rated as successful. Favourable borrowing conditions were largely influenced by the general positive conditions on the international financial market (which is also reflected in the fact that other countries in the region are borrowing under similar conditions), and the macroeconomic stabilisation achieved in the previous period had a positive effect. Thus, due to the achieved macroeconomic stability, the Serbian EMBI index is low, i.e. lower than in Turkey, Romania and Hungary, and close to the value of this index for Croatia, and slightly higher than in Poland.

Graph T 6-4. Serbia's public debt trends (% of GDP)



Source: *QM* calculations [3]

Real appreciation of the exchange rate had a slight effect on the debt reduction

In Q3, the appreciation trend in the movement of the dinar against the euro and the US dollar continued, which led to a decrease in public debt. Although appreciation trends in the short term have a positive effect on the dynamics and sustainability of debt, it simultaneously has a negative impact on net exports and economic growth, which in the long run has a negative impact on the level and sustainability of public debt.

Public debt at the end of the year could amount to about 52-53% of GDP

If there are no major real fluctuations in the exchange rate and the fiscal balance moves within the expected limits, if the economy grows by about 3-3.5% and there are no major new advance borrowings, the public debt at the end of the year could amount to around 52- 53% of GDP, while, if there are no unforeseen events, it could drop to below 50% of GDP the following year.

Appendices

Annex 1. Serbia: Consolidated General Government Fiscal Operations, 2010-2019 (bn RSD)

	2010	2011	2012	2013	2014	2015	2016	2017	2018					2019			
									Q1	Q2	Q3	Q4	*Q1-Q4*	Q1	Q2	Q3	*Q1-Q3*
I PUBLIC REVENUES	**1,278.4**	**1,362.6**	**1,472.1**	**1,538.1**	**1,620.8**	**1,694.8**	***1,842.7***	**1,973.4**	**473.8**	**526.9**	**536.9**	**567.7**	**2,105.3**	**526.0**	**552.2**	**568.0**	**1,646.2**
1. Current revenues	1,215.7	1,297.9	1,393.8	1,461.3	1,540.8	1687.6	*1833.3*	1964.9	472.5	525.1	534.3	558.7	2090.6	524.4	549.4	565.0	1638.8
Tax revenue	1,056.5	1,131.0	1,225.9	1,296.4	1,369.9	1463.6	*1585.8*	1717.9	420.0	456.4	465.3	480.5	1822.2	459.4	495.9	498.7	1454.0
Personal income taxes	139.1	150.8	35.3	156.1	146.5	146.8	*155.1*	167.9	40.1	40.6	48.2	50.5	179.4	44.5	51.3	50.5	146.3
Corporate income taxes	32.6	37.8	54.8	60.7	72.7	62.7	*80.4*	111.8	22.9	44.6	22.9	22.1	112.5	33.3	42.5	26.9	102.7
VAT and retail sales tax	319.4	342.4	367.5	380.6	409.6	416.1	*453.5*	479.3	110.3	125.6	139.7	124.2	499.8	128.7	128.2	138.2	395.1
Excises	152.4	170.9	181.1	204.8	212.5	235.8	*265.6*	279.9	76.9	62.2	71.5	79.4	290.0	69.8	74.2	81.5	225.5
Custom duties	44.3	38.8	35.8	32.5	31.2	33.3	*36.4*	39.7	10.0	10.4	10.9	12.4	43.6	10.8	11.3	12.1	34.3
Social contributions	323.0	346.6	378.9	418.3	440.3	505.7	*527.5*	71.9	142.5	153.5	153.8	170.0	619.7	152.2	167.8	169.3	489.4
Other taxes	46.0	43.5	42.6	43.5	57.3	63.3	*67.3*	567.4	17.2	19.5	18.4	22.1	77.1	20.1	20.6	20.1	60.8
Non-tax revenue	159.2	36.9	37.9	34.9	170.9	224.0	*247.5*	247.0	52.4	68.7	69.1	78.2	268.4	65.1	53.5	66.3	184.8
II TOTAL EXPENDITURE	**-1,419.5**	**-1,526.1**	**-1,717.3**	**-1,750.2**	**-1,878.9**	**-1,844.0**	***-1,899.7***	**-1,921.1**	**-470.1**	**-496.8**	**-515.5**	**-590.7**	**-2,073.0**	**-514.1**	**-545.2**	**-551.9**	**-1,611.1**
1. Current expenditures	-1,224.8	-1,324.8	-1,479.9	-1,549.8	-1,628.0	-1696.6	*-1,717.9*	-1745.3	-434.8	-451.6	-453.9	-507.0	-1847.2	-474.9	-487.3	-483.4	-1445.6
Wages and salaries	-308.1	-342.5	-374.7	-392.7	-388.6	-419.2	*-417.7*	-426.3	-116.0	-117.4	-115.9	-119.6	-468.8	-123.8	-128.8	-127.2	-379.8
Expenditure on goods and services	-202.5	-23.3	-235.7	-236.9	-256.8	-257.6	*-283.6*	-301.6	-66.4	-85.0	-82.6	-109.3	-343.4	-72.3	-91.0	-97.0	-260.3
Interest payment	-34.2	-44.8	-68.2	-94.5	-115.2	-129.9	*-131.6*	-121.2	-42.0	-22.1	-30.8	-13.7	-108.6	-46.1	-23.9	-27.4	-97.4
Subsidies	-77.9	-80.5	-111.5	-101.2	-117.0	-134.7	*-112.7*	-113.3	-17.9	-29.0	-23.0	-39.7	-109.7	-23.2	-24.8	-21.4	-69.4
Social transfers	-579.2	-609.0	-652.5	-687.6	-696.8	-710.0	*-716.8*	-720.1	-180.3	-182.8	-181.8	-201.0	-746.0	-194.4	-192.7	-190.8	-578.0
o/w: pensions5)	*-394.0*	*-422.8*	-473.7	-498.0	-508.1	-490.2	*-494.2*	-497.8	-128.6	-130.2	-129.6	-136.9	-525.2	-140.3	-140.0	-139.5	-419.9
Other current expenditures	-22.9	-31.7	-37.4	-36.9	-53.7	-45.3	*-55.6*	-62.7	-12.1	-15.3	-19.7	-23.7	-70.8	-15.1	-26.2	-19.5	-60.8
2. Capital expenditures	-105.1	-111.1	-126.3	-84.0	-96.7	-114.5	*-139.3*	-133.9	-28.9	-39.7	-54.0	-76.8	-199.3	-36.1	-53.4	-62.8	-152.3
3. Called guarantees	-2.7	-3.3	-3.7	-7.9	-29.7	-30.1	*-39.1*	-28.8	-4.0	-4.5	-7.1	-4.1	-19.7	-2.3	-2.8	-3.6	-8.6
4. Buget lendng	-30.0	-25.0	-38.2	-35.6	-55.4	-2.7	*-3.3*	-13.2	-2.4	-1.1	-0.5	-2.7	-6.8	-0.7	-1.7	-2.1	-4.6
CONSOLIDATED BALANCE	**-141.0**	**-163.5**	**-245.2**	**-212.1**	**-258.1**	**-149.1**	***-57.1***	**52.3**	**3.7**	**30.1**	**21.4**	**-23.0**	**32.2**	**11.9**	**7.0**	**16.2**	**35.1**

Source: *QM* calculations based on the MoF data

Annex 2. Serbia: Consolidated General Government Fiscal Operations, 2010-2019 (real growth rates, %)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018					2019			
											Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q1-Q3
I PUBLIC REVENUES	**3.3**	**-8.9**	**-1.5**	**-4.6**	**0.6**	**-2.2**	**3.2**	***3.1***	***7.5***	***4.0***	**3.6**	**2.7**	**5.4**	**6.5**	**4.6**	**8.4**	**2.5**	**4.4**	**5.0**
1. Current revenues	3.5	-9.1	-1.5	-4.4	0.1	-2.6	3.3	*3.3*	*7.4*	*4.1*	*3.3*	*2.4*	*5.1*	*5.7*	*4.3*	*8.4*	*2.3*	*4.3*	*4.9*
Tax revenue	3.7	-8.8	-2.5	-4.1	1.0	-1.7	3.5	*0.3*	*7.2*	*5.2*	7.0	0.8	3.6	5.1	4.0	6.8	6.3	5.8	6.2
Personal income taxes	6.3	-10.8	-3.9	-2.9	2.1	-12.2	-8.1	*-1.2*	*4.5*	*5.1*	5.3	-1.9	8.5	6.8	4.8	8.2	23.5	3.4	11.2
Corporate income taxes	18.5	-27.0	-3.6	3.9	35.1	2.9	17.4	*-15.0*	*26.9*	*35.0*	19.5	-10.6	3.2	-2.7	-1.3	41.8	-6.8	16.1	11.4
VAT and retail sales tax	2.5	-10.2	-0.7	-4.0	0.0	-3.8	5.4	*0.2*	*7.8*	*2.6*	-0.9	3.3	7.4	-1.2	2.2	13.9	-0.2	-2.4	3.1
Excises	0.7	11.6	4.2	0.6	-1.2	5.1	1.6	*9.4*	*11.4*	*2.3*	16.7	-6.2	-10.8	8.7	1.6	-11.4	16.6	12.5	4.9
Custom duties	1.8	-32.4	-14.9	-21.5	-14.0	-15.6	-6.5	*5.9*	*8.1*	*5.8*	5.5	5.9	7.3	12.0	7.8	6.0	6.1	10.1	7.4
Social contributions	4.3	-7.0	-6.5	-3.9	1.9	2.6	3.1	*-2.1*	*3.2*	*3.8*	8.2	5.9	6.8	7.6	7.1	4.3	7.0	8.7	6.7
Other taxes	-2.3	-4.9	14.5	-15.2	-8.8	-5.2	29.2	*8.9*	*5.1*	*4.4*	2.0	3.6	1.1	13.5	5.2	13.7	3.5	7.8	8.1
Non-tax revenue	2.6	-11.3	5.8	-6.1	-6.2	-8.7	1.5	*27.9*	*9.3*	*-3.1*	-16.3	17.3	16.9	9.4	6.5	21.1	-23.8	-5.3	-4.7
II TOTAL EXPENDITURE	**5.0**	**-4.8**	**-1.7**	**3.3**	**4.3**	**-0.3**	**5.2**	***-3.2***	***1.9***	***-1.7***	***5.6***	***3.7***	***9.5***	***4.9***	***5.8***	***6.8***	***7.3***	***5.7***	***6.6***
1. Current expenditures	6.9	-3.3	-2.2	3.1	4.1	-2.7	2.9	*-1.4*	*0.2*	*-1.2*	*2.7*	*1.1*	*5.5*	*2.6*	*3.8*	*6.7*	*5.5*	*5.1*	*5.7*
Wages and salaries	10.9	-6.0	-5.9	0.4	2.0	-2.6	-3.1	*-9.7*	*-1.4*	*-0.9*	*11.4*	*6.6*	*6.4*	*7.3*	*7.8*	*4.2*	*7.3*	*8.3*	*6.6*
Expenditure on goods and services		-5.7	-0.3	4.3	1.5	-6.6	6.2	*-1.1*	*8.9*	*3.3*	*8.1*	*14.9*	*11.8*	*11.2*	*11.6*	*6.2*	*4.7*	*15.9*	*9.0*
Interest payment	-2.8	-5.7	-0.3	17.4	41.9	28.8	19.3	*11.2*	*0.2*	*-10.6*	*-12.8*	*-14.5*	*-3.7*	*-21.8*	*-12.1*	*7.2*	*5.4*	*-12.4*	*0.5*
Subsidies	-13.3	19.0	40.6	7.4	29.1	-15.6	13.2	*13.6*	*-17.3*	*-2.3*	*-6.6*	*6.7*	*2.3*	*-15.0*	*-5.1*	*26.4*	*-16.2*	*-8.3*	*-2.7*
Social transfers	10.1	-26.0	13.9	5.8	-0.1	-2.1	-0.7	*0.5*	*-0.1*	*-2.1*	*1.7*	*0.6*	*2.5*	*1.5*	*1.6*	*5.3*	*3.1*	*3.6*	*4.0*
o/w: pensions5)	*9.5*	2.2	-3.9	3.9	*4.4*	*-2.3*	*-0.1*	*-4.8*	*-0.3*	*-2.2*	*2.8*	*2.7*	*2.1*	*6.2*	*3.4*	*6.6*	*5.1*	*6.3*	*6.0*
Other current expenditures	14.9	6.7	-6.1	23.9	9.9	-8.4	42.6	*-16.7*	*21.4*	*9.6*	*-10.1*	*10.6*	*26.8*	*5.5*	*10.7*	*22.3*	*67.0*	*-2.2*	*26.6*
2. Capital expenditures	-4.3	-6.7	-11.8	5.3	6.0	-38.2	12.7	*16.8*	*20.3*	*-6.7*	*136.8*	*9.6*	*77.5*	*32.9*	*45.9*	*22.1*	*31.7*	*14.9*	*21.9*
3. Called guarantees	283.5	-2.2	-2.7	-3.3	-3.7	248.7	267.8	0.1	28.5	-28.5	-52.3	-23.4	4.7	-50.5	-32.9	-44.2	-40.0	-50.6	-46.0
4. Buget lending	13.3	-24.0	-30.0	-25.0	-38.2	44.2	52.2	-95.1	20.8	283.9	62.2	-61.0	-83.7	1.8	-49.3	-70.4	55.7	297.2	11.4

Source: *QM* calculations based on the MoF data

3 Including the non-guaranteed debt of the local self-governments

7. Monetary Trends and Policy

Inflation slowed down even more in Q3 and, along with the expansive monetary policy on the global capital marked, it caused the National Bank of Serbia (NBS) to lower its key policy rate by 0.25 percentage points in Q3 and again in November. Bearing in mind that these trends will remain relatively unchanged to the end of the year we expect inflation to probably stand below the lower limit of the target framework. The appreciation pressure in the previous quarter peaked in Q3 which led to a series of interventions on the FX of a record 1.2 billion in net foreign currency purchases. Despite the creating of liquidity through interventions on the FX, the growth of state deposits in NBS accounts and increased investments by business banks in REPO bonds significantly neutralized this channel of creating money. The level of primary money was increased by 155 million Euro in Q3. In the same period, the nominal and real y.o.y. growth rate of the M2 are characterized by the continuing high y.o.y. growth rates with the increase in credit activity in the economy compared to households have a relatively greater effect. The overall net placements by business banks in Q3 rose significantly because of the combined effect of increased placements on those grounds. The net placements to the economy and households recorded a growth compared to the previous quarters while the overall growth of credit activity was reinforced additionally by the increase in net cross-border placements which the economy took abroad in Q3. Together with the growth of credit activity, a record rise was reported in sources for new placements. The growth of credit potential in Q3 was guided by growth in domestic deposits by the economy and households and through loans taken by domestic banks abroad and the increase in capital and reserves accounts. The writing off of NPLs and sale to persons outside the banking sector directly from bank balances continued in Q3 but a greater effect on the drop in NPLs came from the growth of overall credit activity. The higher offer of capital on the domestic market and the drop in inflation caused a drop in interest rates on indexed loans and loans in Dinars which will remain on similar levels in the coming period.

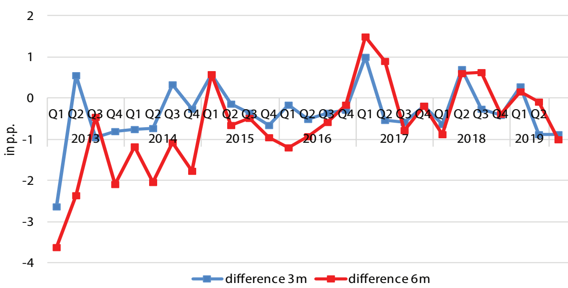
Central bank: balance and monteray policy

The NBS lowered its key policy rate twice …

…because inflation weakened despite the securing of liquidity through the FX

Inflation started weakening in the previous quarter and that continued in Q3 with indications that the trend would continue to the end of the year. Deflation at monthly level was recorded in July and September while the average level of prices in August was unchanged with a minimum growth of 0% in October. The drop in the y.o.y. inflation rate which has been present since July along with deflation at monthly level caused inflation to remain below the target framework of 3±1.5 percentage points with data on planned inflation indicating that it is around 1 percentage point below NBS expectations in its projections three and six months ago (Graph T7-1). Given those conditions and despite the interventions on the FX which created more than 1.2 billion in added liquidity in Q3, the NBS corrected its key policy rate twice. In July and August, the key policy rate was lowered by 0.25 percentage points to stand at 2.5 percent before the latest session of the NBS Executive Board in mid-November when a second drop was put in place bringing it to 2.25 percent. Although the reduction of the key policy rate should indirectly ease the pressure on the FX and at least partly take the level of inflation back closer to the lower level of the targe framework. NBS interventions are in line with current trends on the domestic money market bearing in mind that the inflow of foreign capital because of the

Graph T7-1. Changes in planned inflation three and six months in advance of the real situation 2013-2019



Source: NBS

relaxed monetary policy among leading global players generates pressure to strengthen the Dinar exchange rate. Since the FED started injecting liquidity into the domestic capital market along with a similar practice by the European Central Bank (ECB) for the first time since the financial crisis began, the inflow of cheap capital from the international market is expected to continue in the coming period at least to in the first half of next year. Although the greater interest among business banks for investments in REPO placements is having an effect on the reduction of the money mass, Dinar liquidity in Q3 was evidently generated by NBS interventions and the recovery of credit activities in the economy (Table T7-2).

Table T7-2. NBS interventions and foreign currency reserves 2017-2019

	2017				2018				2019		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
Repo stock (in milions of euros)	480.53	572.42	634.74	384.53	348.00	562.51	339.53	142.95	139.16	343.76	607.44
NBS interest rate	4.00	4.00	3.75	3.50	3.25	3.00	3.00	3.00	3.00	3.00	2.50
NBS interest rate	-5.11	1.94	4.17	2.68	0.40	-2.60	4.24	2.59	-2.98	2.59	5.41
NBS interest rate	4.48	15.71	7.77	3.50	4.75	3.50	1.65	3.10	3.00	3.00	2.50
NBS interventions on FX market (in milions of euros)	-345.00	160.00	765.00	680.00	400.00	1190.00	1595.00	1580.00	35.00	955.00	2105.00
INCREASE					**in millions of euros, cumulative from the beginning of the year**						
NBS own resreves[1)]	-269.73	-265.22	364.16	-4.87	-154.90	653.92	547.26	616.64	67.93	1069.09	2012.01
NDA	-171.42	-248.75	-704.00	137.47	-264.65	-845.34	-649.45	-142.59	-199.62	-1069.54	-1856.43
Government, dinar deposits[2)]	-41.59	-358.48	-755.64	-247.10	-376.19	-567.19	-612.17	-153.41	-158.73	-756.46	-1015.75
Repo transactions[3)]	-207.38	-285.41	-346.27	-95.49	43.47	-168.83	42.95	241.88	12.74	-200.34	-455.14
Other items , net[4)]	77.56	395.14	397.91	480.06	68.07	-109.33	-80.23	-231.06	-53.63	-112.74	-385.55
H	-441.15	-513.96	-339.84	132.60	-419.56	-191.42	-102.19	474.05	-131.69	-0.45	155.58
o/w: currency in circulation	-104.02	-114.39	-103.93	39.59	-102.01	-41.46	60.29	157.82	-37.81	29.95	61.86
o/w: excess liquidity	-351.17	-422.08	-269.15	22.35	-335.18	-200.87	-265.64	185.56	-143.78	-99.60	-32.80
					in millions of euros, cumulative from the beginning of the year						
NBS, net	-464.59	-618.87	452.21	-280.73	64.63	915.44	997.16	1069.34	187.71	901.78	2051.96
Gross foreign reserves	-469.25	-632.21	431.51	-302.83	36.47	894.42	977.20	1048.44	181.07	891.82	2039.45
Foreign liabilities	4.66	13.34	20.70	22.10	28.16	21.03	19.96	20.90	6.64	9.96	12.51
IMF	-0.04	5.81	7.68	8.67	9.42	1.44	1.75	0.84	-0.95	2.18	1.12
Other liabilities	4.69	7.53	13.02	13.43	18.75	19.59	18.21	20.07	7.59	7.78	11.38
NBS, NET RESERVES-STRUCTURE											
1. NBS, net	-464.59	-618.87	452.21	-280.73	64.63	915.44	997.16	1069.34	187.71	901.78	2051.96
1.1 Commercial banks deposits	144.67	156.34	123.17	159.61	47.26	38.80	-33.79	-572.93	-69.13	403.58	276.35
1.2 Government deposits	50.18	197.32	-211.22	116.25	-271.67	-305.19	-420.98	115.36	-50.65	-236.27	-316.31
1.3 **NBS own reserves**	-269.73	-265.22	364.16	-4.87	-159.78	649.05	542.39	611.77	67.93	1069.09	2012.01

Source: NBS.

1) Definition of NBS net own reserves is given in section 8 Monetary trends and policy", Frame 4, QM No. 5.

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

3) This category includes NBS Treasury Bonds and repo operations.

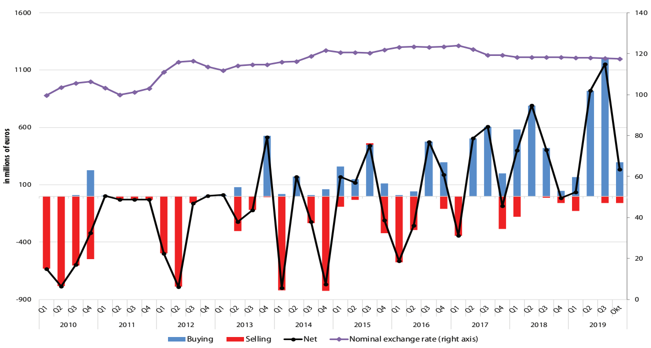
4) Other net domestic assets include: domestic loans (net bank debts, not including Treasury Bonds and repo transactions; net economy debts) along with other assets (capital and reserves; and items on the balance: other assets) and corrected by changes to the exchange rate.

NBS bought 1.2 billion Euro on FX in Q3 …

… to prevent faster strengthening of Dinar exchange rate

Appreciation pressure has been present since the start of the year and they peaked in Q3 causing the NBS to constantly intervene to buy foreign currency on the FX. In Q3, the overall amount of foreign currency bought on the FX stood at 1.21 billion Euro with the NBS intervening again in October with a net purchase of 235 million Euro (Graph T7-3). That means that the NBS bought a total of more than 2.4 billion Euro on the FX since the start of the year (in all of 2018, the NBS was a net buyer of foreign currency on the FX to the value of 1.58 billion Euro). That significant level of interventions was aimed at preventing the strengthening of the Dinar and it came as the consequence of a visibly greater inflow of capital from abroad in the form of foreign direct investments, portfolio investments and cross-border credit activities by banks and the economy. The direction of interventions affect the level of NBS net own reserves which rose in Q3 by 943 million Euro (in Q2 those net own reserves increased by 1 billion Euro, Table T7-2). Unlike the net own reserves which rose in Q3, net domestic assets (NDA) recorded a drop of 787 million Euro. The drop in NDA is the consequence of the combined effect of increased state deposits with

Graph T7-3. NBS interventions on FX 2010-2019



Source: NBS

the NBS by 259 million Euro, return of business banks to placements in REPO of 255 million Euro and an increase of 273 million Euro of other net domestic assets. The drop in NDA was not sufficient to neutralize the effects of increased NBS net own reserves and an increase in primary money of 155 million Euro was recorded in Q3.

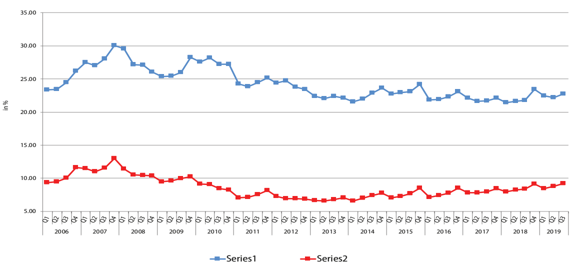
Monetary system: money mass structure and trends

M2 y.o.y. growth rates still high …

.. aided by increased credit activity in the economy sector

The M2[1] nominal growth rate in Q3 of 13.1% y.o.y. continued the trend of high quarterly growth noted in mid-2018 (in Q2 the M2 nominal growth rate stood at 11.2% y.o.y., Table T7-5). A faster growth of the money mass was noted at quarterly level when an increase of 3.5 percent was registered compared to the value at the end of June. The quarterly growth of the money mass is the consequence of the rise in net assets which explains the 2.4 percentage point quarterly increase and the growth of NDA which contributes 1.1 percentage points to the overall rate. Real indicators which take into consideration the level of y.o.y. inflation rates show that the growth of M2 in Q3 stood at 12% which is one of the greatest quarterly rates of real growth. The speeding up of the real growth rate of the M2 is the result of the recovery of credit activity in the households and enterprises sector which is reflected in the record y.o.y. real growth rate of 8.6 percent. The greatest change was noted in the real growth rate of loans to the economy which in Q3 stood at 9.6 percent y.o.y. and is the greatest growth recorded in the past few years.

Graph T7-4. Money mass trends as percentage of GDP, 2005-2019



Source: *QM* calculation

Table T7-5. Growth of money and accompanying aggregates, 2017–2019

	2017				2018				2019		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
					y-o-y, in %						
M2 1)	10.3	7.4	5.6	3.6	3.3	7.9	8.2	14.5	14.8	11.2	13.1
Credit to the non-government sector 2)	4.1	2.0	0.7	1.8	1.9	4.0	5.9	9.4	9.7	9.1	9.8
Credit to the non-government sector 2),	3.5	3.5	2.9	4.7	5.1	5.6	6.5	9.6	10.0	9.2	10.4
Households	11.0	11.8	10.8	10.9	10.2	10.6	12.3	12.7	12.4	9.3	8.9
Enterprises	-1.3	-2.1	-2.4	0.4	1.3	1.8	2.0	7.2	8.0	9.1	11.6
M2 1)	6.4	3.8	2.3	0.6	2.0	5.6	7.2	12.3	11.8	9.7	12.0
Credit to the non-government sector 2),	2.1	2.7	2.4	4.0	4.6	4.7	5.5	7.8	8.0	7.5	8.6
Households	8.6	9.7	9.0	9.2	8.9	8.8	10.0	10.4	10.0	7.6	7.4
Enterprises	-1.7	-2.0	-2.1	0.4	1.5	1.5	1.9	5.8	6.3	7.4	9.6
					in bilions of dinars, end of period						
M2 1)	2,182.7	2,173.3	2,204.5	2275.5	2255.1	2345.7	2424.3	2605.3	2588.9	2609.1	2699.4
M2 1) dinars	772.7	785.2	808.3	872.1	838.6	893.1	924.3	1017.3	974.8	1031.0	1093.0
Fx deposits (enterprise and housholds)	1,410.0	1,388.1	1,396.2	1403.4	1416.5	1452.6	1500.0	1588.0	1614.0	1578.1	1606.4
					quarterly growth M2 4) and shares						
M2 1)	-0.6	-0.4	1.4	3.2	-0.9	4.0	3.3	9.2	-0.7	1.3	3.5
NFA, dinar increase	-1.6	0.6	1.1	2.9	-1.5	6.5	1.2	4.2	-1.6	2.2	2.4
NDA	1.0	-1.0	0.4	0.3	0.6	2.5	1.8	5.0	1.0	-1.4	1.1

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

Increase in foreign currency deposits mainly affects nominal growth of M2…

Within the structure of the y.o.y. nominal growth rate of the M2, the biggest contribution came from foreign currency deposits whose increase explains the 5.76 percentage point overall growth of the M2 at y.o.y. level. The lesser monetary aggregate M1, which typically has the greatest

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

...while other monetary aggregates record positive contributions

effect on the growth of M2, contributed with 5.76 percentage points to the overall increase in primary money of 13 percent compared to the previous year. The remaining growth came from increased savings and timed deposits which contributed 1.75 percentage points.

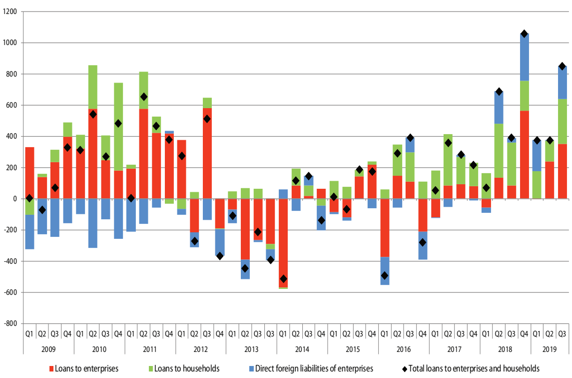
Banking sector: placements and sources of financing

Credit activity speeds up in Q3 ...

... thanks to a rise in net placements to enterprises and households

The net placements by banks in Q3 recorded a significant rise compared to the previous quarter. The overall net placements by business banks rose by somewhat less than 1.1 billion Euro but the real state is slightly above that (Table T7-7) taking into consideration the amount of NPLs deleted from the banking system balances in Q3. The recorded increase is mainly the result of the growth of net placements to enterprises and households which increased by 638 million Euro or slightly less than the record increase at the end of 2018 and almost at the level of the overall increase over the previous two quarters. The encouraging thing is that most of the growth of credit placements was on the basis of a higher growth of net new placements to the economy of 352 million Euro while households continued to increase their debts to business banks by 286 million Euro. Current asset loans accounted for 44.7 percent of the newly-approved loans while 58.7 percent of loans to households were cash loans. The higher amount of new loans taken by the state compared to the growth of deposits which the state holds with business banks had a positive effect on the overall placements by business banks. On that basis, net loans to the state increased in Q3 by 191 million Euro. Finally, the continued investments by business banks in REPO placements increased the overall growth of net placements by the domestic banking sector in Q3. Business banks placed 262 million Euro into the purchase of NBS REPO bonds despite the lowering of the key policy rate.

Graph T7-6. Growth of new loans to enterprises and households, 2005-2019



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

Net cross-border loans rise in Q3...

...raising level of net placed loans.

The growth of net loan placements in Q3 was the result of the recovery of the credit activity in the economy and was additionally stimulated by the growth of net cross-border loans taken by domestic companies in this quarter. Domestic companies took 211 million Euro in new loans in Q3, more than was repaid to foreign banks on previous transactions (Graph T7-6). Based on the growth of credit activity from domestic and cross-border sources, the overall placements to enterprises and households in Q3 stood at 849 million Euro, including a 563 million Euro growth of net placements to the economy. Taking into account the amount written off and the sale of NPLs which were on bank balances, this amount confirms that it is closer to 600 million Euro at Q3 level (Graph T7-6). If we take into account the fact that the economy was very cautious in the 2009-2017 period in regard to increasing net debts, this data could represent a signal of positive expectation by business people in terms of economic activity trends in the future. In Serbia, loans to enterprises and households from domestic sources are currently at the level of around 69% of the GDP which is about 10-15 percentage points below the level of recorded in similar economies in the region and that means that there is room for an additional growth of credit activity by banks.

Visible increase of bank credit potential in Q3...

Sources for new placements were significantly increased following a slight growth in the previous quarter (in Q2 the increase stood at 177 million Euro, Table T7-7). The credit potential saw a visible increase of almost 1.5 billion Euro in Q3. Sources for new placements were mostly increased due to the growth of domestic deposits by 794 million Euro, with the largest part being an increase in deposits by enterprises. In Q3, the economy increased the amount of net deposits by 439 million Euro while the net deposits of households increased by 335 million

Trends

Table T7-7. Bank operations – sources and structure of placements, corrected[1)] trends, 2017-2019

	2017				2018				2019		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
	in millions of euros, cumulative from the beginning of the year										
Funding(-, increase in liabilities)	354	-252	-1,138	-2,185	286	-727	-1,388	-3,641	573	396	-1,077
Domestic deposits	107	-104	-426	-1,032	65	-664	-854	-2,694	80	0	-794
Households deposits	-69	-164	-258	-517	-166	-411	-646	-1,016	-292	-611	-966
dinar deposits	27	-7	25	-121	15	-110	-250	-442	-35	-193	-333
fx deposits	-96	-157	-283	-395	-181	-301	-396	-574	-256	-418	-633
Enterprise deposits	175	60	-167	-515	231	-253	-208	-1,677	372	611	172
dinar deposits	207	142	-30	-307	170	-95	-44	-657	358	140	-228
fx deposits	-31	-82	-137	-208	61	-158	-164	-1,021	14	471	401
Foreign liabilities	218	49	-317	-546	-169	-217	-531	-821	136	101	-264
Capital and reserves	29	-198	-395	-607	390	154	-3	-126	357	295	-20
Gross foreign reserves(-,decline in assets)	-35	-153	-286	-261	215	-75	138	625	-54	-113	80
Credits and Investment[1)]	255	856	1,162	1,237	219	978	1,227	1,548	-89	369	1,460
Credit to the non-government sector, total	61	474	740	972	105	582	941	1,695	174	544	1,182
Enterprises	-119	-36	58	138	-58	75	159	723	-2	238	590
Households	180	510	682	833	162	507	781	972	176	306	592
Placements with NBS (Repo transactions and treasury bills)	202	289	341	90	-39	175	-48	-244	-4	200	462
Government, net[2)]	-8	93	82	176	154	221	334	96	-259	-376	-185
MEMORANDUM ITEMS											
Required reserves and deposits	-161	-94	-83	-30	120	213	287	1,130	1	-147	-44
Other net claims on NBS[3)]	-324	-401	-220	62	-338	-249	-262	-80	-31	-284	-134
o/w: Excess reserves	-326	-415	-223	42	-339	-254	-280	-197	40	-254	-139
Other items[4)]	-79	18	545	1,176	-514	-152	-8	428	-400	-220	-274
Effective required reserves (in %)[5)]	16	15	15	15	15	15	15	17	17	17	16

Source: NBS

1) Calculating growth is done under the assumption that 70% of all placements are indexed in Euro. Growth for originally Dinar values of deposits are calculated using the average exchange rate for the period. For foreign currency deposits – as the difference calculated on the basis of the exchange rate at the ends of the period. Capital and reserves are calculated based on the Euro exchange rate at the ends of period and do not include the effects of changes to the exchange rate in calculating the remainder of the balance.

2) NBS bonds include state and NBS treasury bonds solda at repo rate and at rates set on the market for permanent auction sale with a due date longer than 14 days.

3) Net loans to the state: loans approved to the state are reduced by the state deposits with business banks; a 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 dues to the NBS.

5) Items on the bank balances: other assets, deposits by companies in bankruptcy, inter-banking relations (net) and other assets including capital and reserves.

6) Effective mandatory reserve is the share of mandatory reserves and deposits in the overall amount of deposits (households and enterprises) and bank debts abroad. The basis to calculate mandatory reserves does not include subordinate debt because that data is not available

… mainly due to increase in domestic deposits and cross-border debt as well as growth of capital and reserves

Euro. Despite the significantly higher profitability of Dinar savings, the growth of deposits by households in Q3 was mainly in foreign currency while Dinar deposits recorded a rise of 140 million Euro. The growth of deposits by enterprises was traditionally predominantly in Dinars while the increase in foreign currency deposits by the economy stood at 70 million Euro. Sources for new placements in Q3 increased additionally because of the increase in capital and reserves by domestic banks which totaled 315 million Euro and that meant even faster growth than the previous quarter at a similar level. Business banks continued their practice of taking loans abroad in Q3 and increased the credit potential of the banking sector by 365 million Euro.

Table T7-8. Share of NPL by debtor type, 2008-2019

	2009	2010	2011	2012	2013	2014	2015	2016				2017				2018				2019		
	Dec	Dec	Dec	Dec	Dec	Dec	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	balance at the end of period																					
Corporate	12.14	14.02	17.07	19.06	27.76	25.5	24.40	26.89	26.26	23.56	19.48	19.92	19.24	16.86	13.83	12.51	12.51	10.37	9.63	9.57	9.07	8.35
Entrepreneurs	11.21	15.8	17.07	15.92	20.82	43.29	29.92	33.03	30.12	28.44	27.42	26.49	25.02	23.90	16.96	12.60	12.16	9.98	9.07	8.82	8.57	8.67
Individuals	6.69	6.71	7.24	8.32	8.59	9.97	10.53	10.95	10.63	10.36	9.66	9.21	8.35	7.56	6.43	5.84	5.71	5.15	4.72	4.66	4.62	4.46
Ammount of dept by NPL (in bilions of euros)	1.58	1.94	2.63	3.19	4.09	3.70	3.52	3.76	3.75	3.45	2.83	2.83	2.77	2.63	2.16	9.93	9.80	1.59	1.52	1.51	1.46	1.43

Source: *QM* calculation

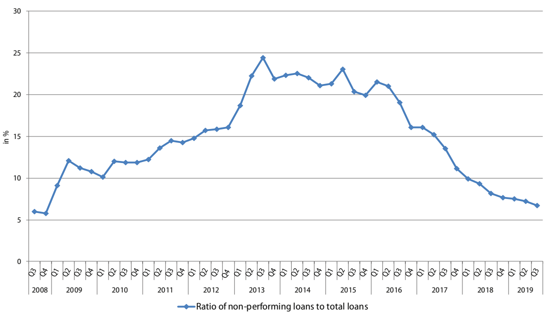
Share of NPLs continues to drope …

… and draw closer to pre-crisis level

The trend of a slight drop in the share of NPLs in overall placements continued in Q3 mostly because, as in previous quarters, of the effects of the growth of credit activity. According to Credit Bureau data and methodology used by QM[2] the share of NPLs in overall placements dropped to 6.74 percent at the end of September which is about equal to the share of NPLs in Serbia before the financial crisis broke out at the end of 2008 (Graph T7-10). The 0.72 percentage point drop in the share of NPLs among companies compared to the end of June (Table T7-9) was almost the only

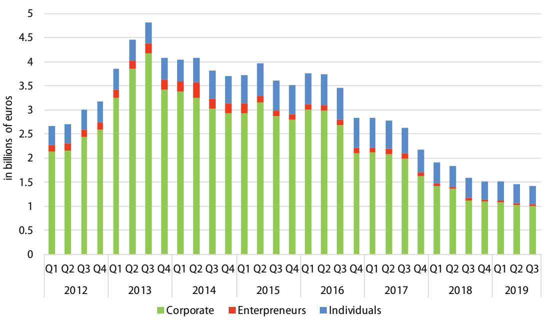
2 For details on the manner of calculating the share of NPLs see QM 6 - Spotlight On 1: NPLs in Serbia – what is the true measure?

Graph T7-9. Share of NPLs in overall placements, 2008-2019



Source: *QM* calculation

Graph T7-10. Remaining debt in loans fallen late, 2012-2019



Source: *QM* calculation

cause of the drop in overall placements. NPLs placed to households recorded a drop of 0.16 percentage points in the overall placements in this segment while on the other hand Q3 saw a slight increase in the share of NPLs in the entrepreneur segment of 0.1 percentage point. Viewed in absolute amounts, NPLs in Q3 were reduced by some 36 million Euro compared to the previous quarter. That drop was caused by the further writing off of NPLs and sale to persons outside the banking sector directly from bank balances (Graph T7-11).

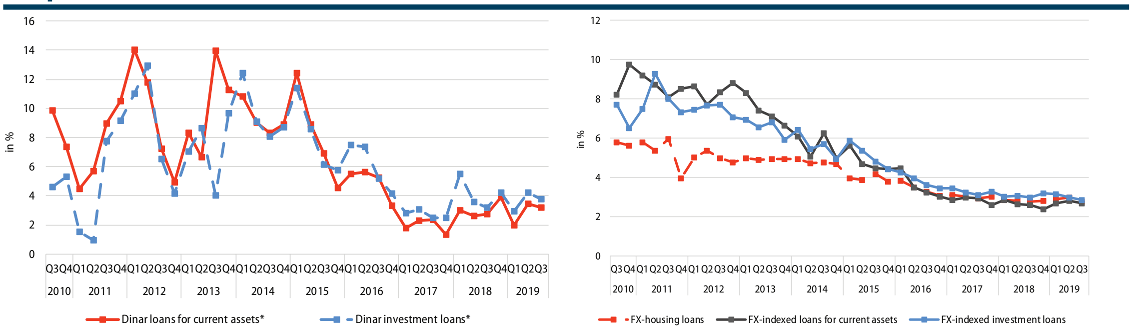
Interest rates: state and trends

Monetary easing by FED and ECB…

… made room to reduce interest rates even more

Changes in monetary policy direction by the ECB and FED meant that cheap capital continued to be available on international markets. In September, the ECB launched its third re-financing program which is planned to last to March 2021 in order to maintain favorable credit conditions along with an injection of 20 billion Euro a month through purchase of bonds. At the same time, the FED started injecting liquidity into the system after more than 10 years to maintain interest rates for overnight loans (which are the dominant instrument for banks to secure liquidity) with the planned range for this year. The period of monetary policy expansion at global level had an effect on interest rates on the money market in Serbia. Interest rates for basic credit groups in Q3 recorded an evident drop following growth in the previous quarter. A somewhat more evident change was in average weighted interest rates on indexed housing loans which was lower by 0.25 percentage points compared to the end of June. The average weighted interest rates on indexed current asset loans were 0.12 percentage points lower compared to the previous quarter while a drop of 0.13 percentage points was recorded in average weighted interest rates on indexed investment loans (Graph T7-12b). A more pronounced drop was recorded in real interest rates on Dinar loans because inflation slowed down additionally (Graph T7-12a). The average weighted interest rate on Dinar investment loans recorded a drop in real terms of 0.47 percentage points following a sudden rise in Q2. A somewhate lower drop was recorded in the average real weighted interest rate on current asset funds which stood at 0.23 percentage points of the value at the end of June.

Graph T7-11. Interest rates on Dinar and indexed loans, 2010–2019



Source: *QM* calculation
* real interest rates

HIGHLIGHTS

Highlight 1. Wages, Productivity and International Price Competitiveness

Milojko Arsić[1]

Labour costs are one of the most important indicators of the international price competitiveness of a particular economy. The reason for this is that labour costs have a relatively high share in the price of products, and differences in wages between countries are relatively high. The direct contribution of labour costs to company costs is modest and usually ranges between 10-20%. However, labour costs are present in almost all other inputs used by the company: purchased goods, costs of materials and services, energy and interest costs, etc. The share of labour costs in GDP usually ranges between 50 and 70%, which is a better measure of the direct and indirect importance of labour costs in the economy. Another specific characteristic of labour costs is that their value varies from country to country significantly more than is the case with the prices of other inputs used in production, such as raw materials, energy, etc. The large differences in labour costs across countries are due to the fact that despite globalisation, there is still no global labour market. Unlike labour, other inputs are mostly freely traded on the global market, so differences in their prices across countries are moderate[2].

The most important factor determining the level of real wages in a country is the level of productivity, that is, the value of production per worker. The country's wages support its international competitiveness if they are aligned with productivity levels. If wages are higher than the level corresponding to productivity, it negatively affects its international price competitiveness and encourages the growth of external deficits. The impact of such wages on economic growth may be positive in the short term, due to stimulating domestic demand, but this is unlikely in small open economies. On the other hand, when wages are low relative to productivity, they boost exports but stifle domestic demand so that their impact on growth is not equivocal.

The average level of real wages in a country largely depends on the level of productivity in the tradable goods sector, which includes industry, agriculture and some types of services[3]. Productivity differences in the tradeable goods sector between countries are large, primarily due to differences in the value of capital per worker, or due to differences in the technical equipment available to workers. In addition, there are differences in the level of knowledge and skills of workers in different countries. As a consequence of these factors, differences in the level of wages in the tradeable goods sector between countries are significant. Wages in sectors of non-tradable goods, such as public administration, health, education, personal services, etc. are determined by the wages in the tradeable goods sector in a particular country. The differences in productivity in the non-tradeable goods sector between countries are smaller[4], but the differences in the level of wages of employees in the mentioned activities are large because they are determined in each country by wages in the tradable goods sector.

Just as productivity levels determine wage levels, so does the dynamic of productivity determine the dynamic of real wages[5]. This basically means that real wages and consumption of citizens over a longer period of time have a similar growth rate as the growth of production, that is, growth of value added per worker. In shorter periods of time, several years or even a decade, real wages may rise faster or slower than productivity. However, this is followed by a correction that aligns wage levels with productivity levels. For example, real wages in Serbia grew faster than productivity in the 2001-2008 period, and later in 2009-2015, wages grew more slowly than productivity. However, from 2015 until now, and this will almost certainly continue in the next year, real wages in Serbia are growing faster than productivity again.

Graph 1.

The movement of real wages relative to productivity determines the movement of unit labour costs, that

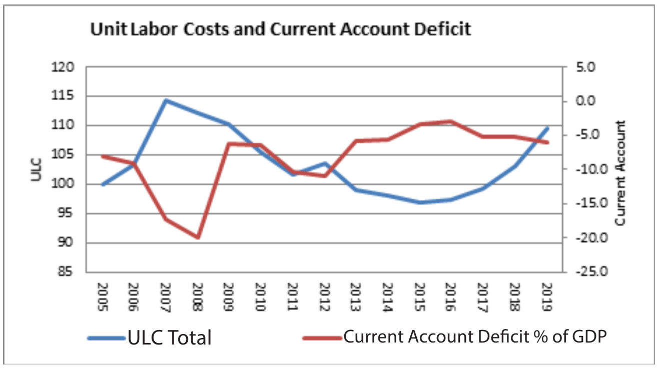
1 University of Belgrade - Faculty of Economics.
2 Krugman, P. R. (1992)
3 Balassa (B.) (1964) and Samuelson (P.) (1964).

4 In the case of non-tradeable goods, there are differences in the quality of service between countries, while productivity is similar. Doctors, teachers, judges, hairdressers, lawyers, etc. in developed countries are not more productive than in underdeveloped countries, but they have significantly higher wages because they are formed at the country level under the dominant influence of productivity in the tradable goods sector.
5 ECORYS (2011)

is, the share of labour costs in the unit of production[6]. If unit labour costs in a country rise, then, all other conditions being equal, product prices rise, so that country becomes less price competitive compared to the rest of the world. Of course, changes in other important prices in the economy such as the exchange rate, interest rates or energy prices can amplify or mitigate this effect.

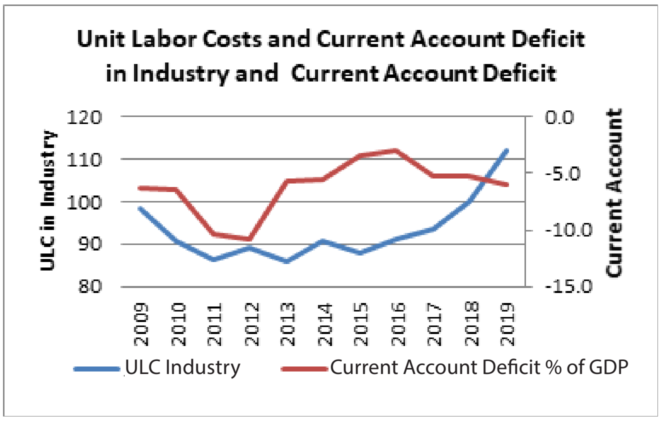
Unit labour costs in Serbia increased in the pre-crisis period, only to fall by about 15% between 2008 and 2015. After 2015, unit labour costs increased again significantly, rising by about 13% between 2015 and 2019. The negative effect of unit labour costs growth on foreign economic competitiveness over the last three years has been mitigated by a fall in interest rates and a fall in Serbian companies' spending on this[7]. In 2018 alone, companies' spending on interest was reduced by more than RSD 30 billion compared to the previous year, thus neutralising some of the increase in unit labour costs. However, in the future, we cannot count on a significant additional decline in interest rates in Serbia, and thus no possibility to offset the rise in unit labour costs in this way. While interest rates have mitigated the negative impact of unit labour costs on the price competitiveness of the Serbian economy over the last three years, strengthening the real value of the dinar has further impaired its competitiveness.

Graph 2



A similar trend is shown by unit labour costs in industry, which decreased by about 13% in the period 2008-2013, only to stagnate in the period 2013-2016, followed by a 23% increase in 2016-2019.

Graph 3



Graphs 2 and 3 show a relatively high alignment between the dynamic of unit labour costs and the current account deficit in Serbia. In periods when unit labour costs increased, or shortly thereafter, the current account deficit also increased. Contrary to that, in periods when unit labour costs were declining, or shortly thereafter, the current account deficit also declined. The negative effect of the increase in unit labour costs on international competitiveness is amplified if it is accompanied by an increase in the real value of the national currency, which has been the case in Serbia over the last three years.

Therefore, the important question is whether the decline in unit labour costs in the period 2008-2015 created a "reserve" that enables them to grow in the coming years without losing the price competitiveness of the Serbian economy. Related to this is the question of how such a reserve could be determined? Considering the impact of unit labour costs on the price competitiveness of the economy, we estimate that the best signal that such a reserve exists would be a surplus in Serbia's foreign trade and current account in 2015. The existence of such a surplus would imply that the deterioration of the price competitiveness and the external balance is possible, without adversely affecting the country's external position. A number of Central and Eastern European countries have had a surplus in their current account balance over the last two years, with strong wage growth over the past two years, but they can be said to have had a reserve for reducing price competitiveness and increasing foreign deficits.

However, in 2015, Serbia's foreign trade deficit was 8.1% of GDP, while the current account deficit was 3.4% of GDP. Therefore, we estimate that there was no reserve for the deterioration of price competitiveness and the growth of external deficits. The current account deficit of about 3% of GDP is probably at the upper end of long-term sustainability. Therefore, policies that encourage its further increases, such as increasing unit labour costs and strengthening the real value of the

6 Turner, P. and Van t Dack, J (1993)

7 The decline in spending on interest, similar to the strengthening of the dinar, caused the rise of unit labour costs not to translate into the rise in prices in Serbia. In the future, it cannot be expected that interest rates will further decrease significantly, or that the dinar will actually strengthen faster than the productivity gap in Serbia and the region.

dinar, move Serbia's economy further away from the macroeconomic balance, thus undermining the long-term economic growth.

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SPOTLIGHT ON:

Spotlight on: 1. Real Estate Market in Serbia Price Analysis

Aleksandar Radivojević[1]

In recent years, there has been a clear increase in the prices of newly built residential buildings in Serbia, and especially in Belgrade. This trend is not only characteristic of Serbia. Real estate prices have been on the rise since 2015 in most European countries, which is also a characteristic of most Central and Eastern European countries, with which, due to the large number of similarities, we can compare developments in Serbia. The reasons for rising real estate prices in Serbia may be different. The rise in living standard and average wage of the population has a positive effect on the rise in prices of all products, including real estate. Favorable interest rates on home loans also affect prices through demand growth. An increasing number of tourists organizing private accommodation in Serbia has increased the demand for apartments as a form of investment in the tourism sector, while the profit that can be earned through this business has increased the monthly rent, especially in Belgrade. The growth of real estate prices in Belgrade was also potentially influenced by the strengthening of Belgrade as a regional political and economic center, better working conditions in public administration and state-owned enterprises, mainly situated in Belgrade, increased quality of construction, the supply / demand ratio for apartments, and more. Whether these factors have actually occurred and what was their impact on the change in real estate prices can only be speculated, since the quantitative impact of individual factors on the rise in real estate prices is difficult to assess due to the lack of reliable data for most potential causes.

The level and rise in prices of newly built real estate in Serbia in the last two years is increasingly accompanied by the question of whether the real estate market in Serbia and / or Belgrade is in a price "bubble", i.e. whether the value is unrealistic and whether a fall in prices can be expected. The same issues around the world have become relevant after the last major economic crisis, which began in 2007-2008, but the conditions for its emergence were created years before 2007 in the banking and real estate markets in the United States. At that moment, a price bubble was present on the real estate market, i.e. real estate value was significantly above the real and sustainable level, while the conditions for taking a home loan were very favorable. Just over a decade after the crisis in the banking sector, the conditions for housing loans are again favorable, and whether there is a "bubble" is a question to which a large number of institutional and private sector actors are trying to find an answer, but, as we have stated, the factors that influence the real estate market are numerous so it is very difficult to make a concrete conclusion.

During the years following the economic crisis, a number of indicators have been developed to track developments in the real estate market, which cannot give a definitive answer to the question of whether or not there is a price bubble, but can give clues as to how the market in some countries and cities is moving and whether there is a risk of market overheating.

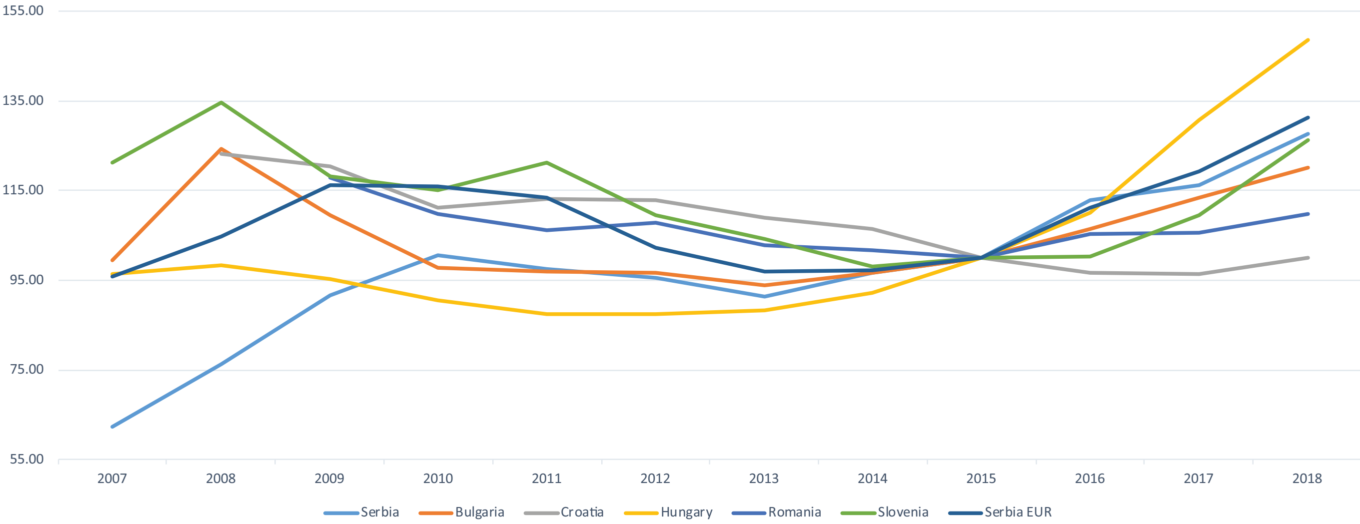
Within this analysis, we will analyze Serbia as a whole and Belgrade as the capital, economic center, regional center, and much more, which makes it significant for a specific analysis. The first part of the analysis observes the movement of prices of newly built residential apartments in the territory of Serbia and a number of indices that are often used as indicators that can point to a potential price bubble in the real estate market. These indices were then observed in relation to their values in the countries of the region. In the second part of the analysis Belgrade was observed through the analysis of the same and similar indices, while the comparison was made with other cities in Serbia, the capitals of the countries of the region and a number of international cities.

Properties of the Real Estate Market in Serbia

As one indicator of developments in the real estate market in the EU Member States, Eurostat monitors the Housing Price Index, which shows changes in the price of housing purchased by EU households. This index monitors real estate prices, so it can indicate the regional trend and possible deviations of some countries from the trend, which are a consequence of the developments in the internal markets. Graph 1 shows the movement of the index values for Serbia and several countries in the region that are members of the European Union.

1 Faculty of Economics, University of Belgrade

Graph 1. Pricing Index of Newly Constructed Residential Buildings (20015 = 100), Serbia and EU Countries of the Region, 2007-2018



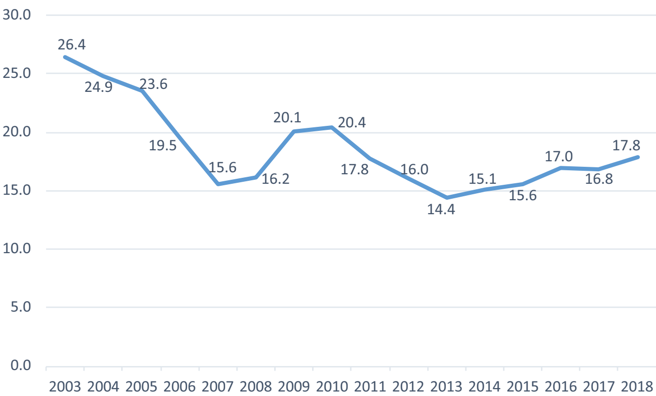
Source: Eurostat, House Pricing Index for European Union Countries, author calculation based on SORS data for Serbia.

It should be borne in mind that this index observes price movements in national currencies, so possible deviations from the trend may be due to high inflation rates or significant changes in the exchange rates over the years observed. Even so, we can see in the graph a somewhat common index movement for the observed countries. It can be seen that in most of the countries observed there is a tipping point in 2008, which marks the beginning of the global economic crisis in Europe, after which prices start to fall, after that indices slowly recover in the years after 2013. What is interesting from the perspective of Serbia is the fact that Serbia is the only country among the observed countries that in the years immediately following the crisis (2008 and 2009) did not experience a fall in the prices of newly built real estate, but an increase of 22% and 20%. These rates are much lower when observed in euros, which is a feature of the real estate market in Serbia, 9% in 2008 and 11% in 2009.

Real Estate Price to Earnings Ratio

In order to analyze the real estate market and the possible presence of inflated prices, various national agencies and financial institutions are monitoring indicators that may indicate potential problems. One commonly used index is an index that represents the ratio of real estate prices to average earnings. This index basically shows the number of years a citizen of a country has to spend working to buy a newly built housing unit. Index values fluctuate most often due to the choice of an analyst of the living space required for living. One of the most famous reports on the state of the real estate market "Global Real Estate Bubble Index" produced by UBS Bank annually defines the area of a residential unit at 60m^2.

Graph 2. Real Estate Price to Earnings Ratio, Serbia, 2003-2018

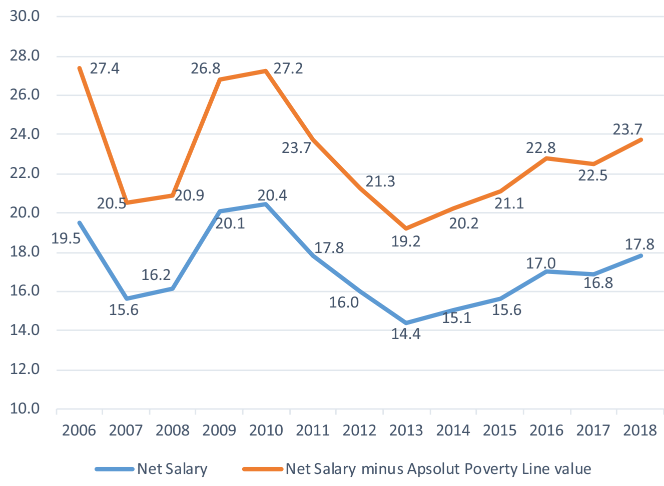


Source: Author calculation based on SORS data

In this analysis, we will also use this surface when calculating the index. The index is therefore calculated as the average value of a newly built housing unit of 60m^2 divided with the average annual net earnings. Graph 2 shows the movement of index values for Serbia in the period 2003-2018, that is, the number of years required to purchase a defined area dwelling unit if all net earnings are allocated to that purchase.

As we can see from the graph, the number of years required to buy newly built real estate in Serbia declined from 2003 to 2007, and in the next period 2007-2010 again registered growth. From 2010 to 2013 there was a further decline, until the best result was achieved in 2013, when the required number of years was 14.4. After 2013, in line with the rise in real estate prices in Serbia (Table 1),

Graph 3. Adjusted Real Estate Price to Earnings Ratio Serbia, 2003-2018



Source: Author calculation based on SORS data

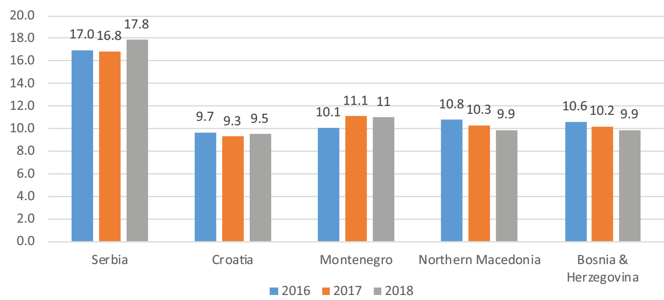
the index, that is, the number of years required to buy a real estate, began to rise, which indicates a slower growth in average earnings than the rise in real estate prices. At the end of 2018, the index value was 17.8.

Although generally accepted, this index implies the absence of other expenses in earned income, that is, expenditure exclusively on real estate. The index defined in this way is used to compare different countries and cities, as well as to compare values with those generated during the “bubble” in the real estate market, and to indicate possible risks. However, this index does not indicate the actual time it takes to resolve the housing issue. Therefore, this paper presents an adjusted index in Graph 3, which shows the value of this index when earnings are reduced by the amount of cost of living that puts a person above the poverty line[2]. Such index indicates the actual average number of years it takes an employed person with an average salary in Serbia to buy newly constructed real estate of an average value of $60m^2$, provided that only a minimal amount is allocated from the net salary per month that will bring that person just above the absolute poverty line.

The index correction increases the number of years on average (for the period 2006-2018) by slightly less than 6 years and follows the same trend. Accordingly, in 2018, it takes just under 24 years of life on the absolute poverty line to provide a newly built $60m^2$ apartment, or one-third of life expectancy.

We can compare the index of real estate prices and average earnings for the countries of the region, which according to a large number of indicators represent comparable countries for Serbia, thus assessing whether the market of newly built real estate in Serbia is overvalued. Graph 4 shows the index values for 2016, 2017 and 2018 for Serbia, Croatia, Montenegro, Northern Macedonia and Bosnia and Herzegovina. The number of years required to buy real estate in Serbia is significantly higher than in other observed countries in the region. The smallest number of years is needed in Croatia (9.5), then in Northern Macedonia and Bosnia and Herzegovina (9.9), and finally in Montenegro (11). Croatia has the best result in terms of index value, despite the fact that the average value of real estate is the highest among the observed countries, due to the fact that the average net earnings are much higher than in other observed countries. In comparison to other observed countries (Montenegro, Northern Macedonia, Bosnia and Herzegovina), the price of real estate in Serbia is primarily the reason for such a high index value in Serbia compared to these countries, because the earnings in Serbia are similar to the earnings in these countries.

Graph 4. Real Estate Price to Earnings Ratio, Countries of the Region, 2016-2018



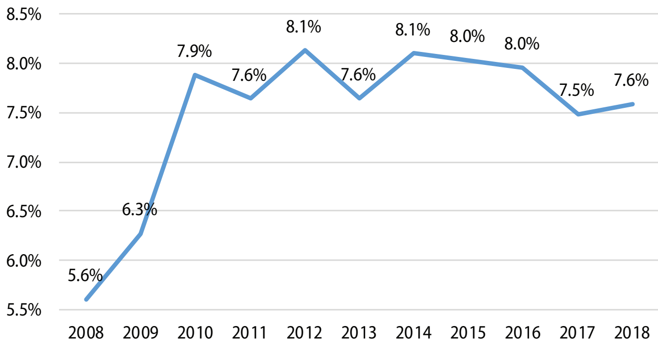
Source: Statistical Offices of Serbia, Bosnia and Herzegovina, Croatia, Montenegro and Northern Macedonia

Trends in the Share of Mortgage Loans in GDP

The change in the share of mortgage loans in the gross domestic product is also one of the indicators of the overheating of the real estate market. In Serbia, the share of mortgage loans in GDP in 2018 was relatively low 7.6%. More importantly, there has been no significant annual variation over the last ten years. Compared to 2008, share is only 2 percentage points higher, while after 2010 it has been steadily moving in the range of 7.5% to 8.1%.

2 The average net wage is adjusted by the amount that defines the absolute poverty line in each of the years observed.

Graph 5. Share of Mortgage Loans in the GDP of Serbia, 2008 - 2018

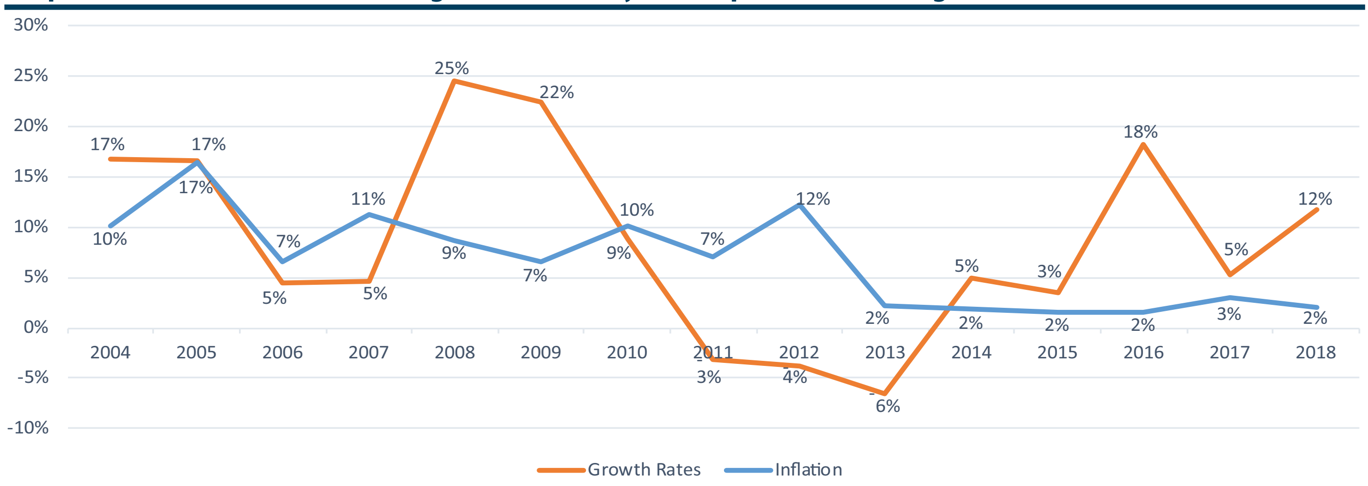


Source: NBS

Properties of the Real Estate Market in Belgrade

The prices of newly built apartments in Belgrade are two times higher in 2018 (RSD 248,058 per square meter) than in 2007 (RSD 113,813 per square meter). In the last 15 years, the growth rates have reached as high as 25%, and in 12 years where the price increase has been recorded, even in 6 years the growth rate was over 10%. Serbia has been in recession in three years in the observed period, fiscal consolidation was carried out, which included the reduction and freezing of public sector wages and pensions, the period was marked by the global economic crisis and other factors, while the price decrease was recorded only in 3 of the observed 15 years at rates of only -3%, -4% and -6% (Graph 6).

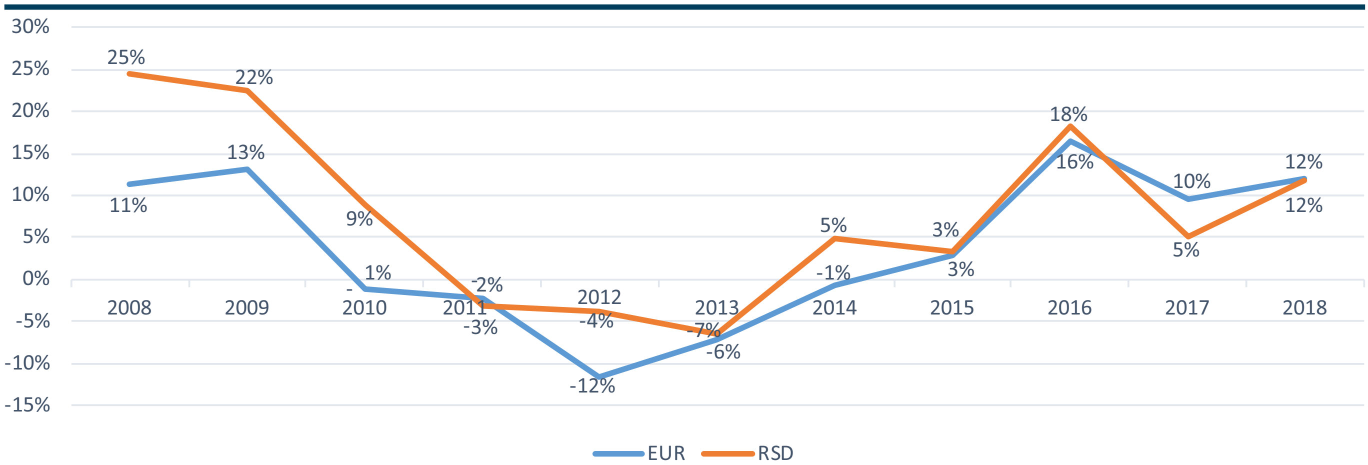
Graph 6. Growth Rates of the Average Price of Newly Build Apartments in Belgrade and Inflation, 2004-2018



Source: Author based on SORS data

Real estate prices in Serbia are almost completely defined in euros in reality, so it is important to observe the movement of prices of newly built dwellings in euros for the analysis of prices in the real estate market in Belgrade. When the values in dinars are converted into euros according to the official middle exchange rate of the National Bank of Serbia on the last day of the observed year, we see a slightly more moderate trend in growth rates (Graph 7).

Graph 7. Growth Rates of the Average Price of Newly Build Apartments in Belgrade, in Dinars and Euros, 2008-2018



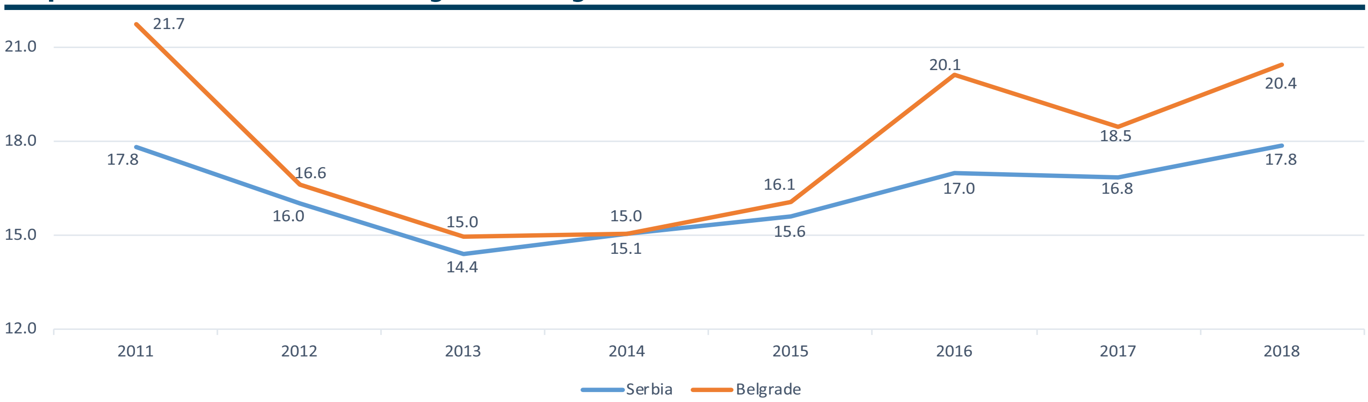
Source: Author based on SORS and NBS data

However, growth rates, in dinars or euros, do not provide sufficient information on the market situation, due to the fact that any growth rate, even 25% in one year, may be differentiated depending on other developments in the country or the city. For example, a 25% increase in the price of newly built square meters may be extremely low if average wages have increased by 200% in that year, or extremely high if there has been a high decline in average wages, economic growth, employment, living standards, etc. Therefore, as for Serbia, below we present indicators that describe in more detail the state of the market with a focus on the citizen as the end user of the housing space. Indeks odnosa cena nekretnina i prosečne neto zarade.

Real Estate Price to Earnings Ratio

Graph 8 shows the index representing the ratio of real estate prices and average income in Belgrade compared to the data already presented for Serbia as a whole. The number of years required to buy a newly built 60m² apartment in Belgrade in 2018 was 2.6. years higher in relation to the entire territory of Serbia. In the observed period (2011-2018), in Belgrade on average, compared to Serbia as a whole, an additional 1.6 years of work was needed in order to buy a newly built 60m² property.

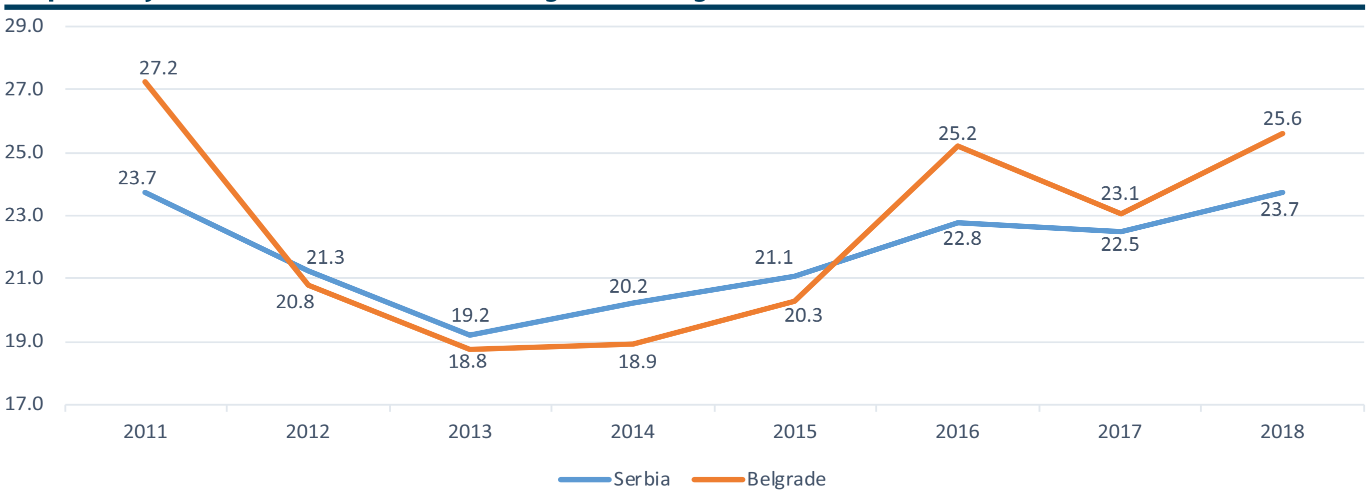
Graph 8. Real Estate Price to Earnings Ratio Belgrade, and Serbia, 2011-2018



Source: Author calculation based on SORS data

When looking at the values of the index corrected for the amount of the absolute poverty line, the number of years in Belgrade increases by an average of 4.6 years in the observed period, and in 2018 it was by 5.2. years higher and amounted to 25.6 years (Graph 9).

Graph 9. Adjusted Real Estate Price to Earnings Ratio, Belgrade and Serbia, 2011-2018

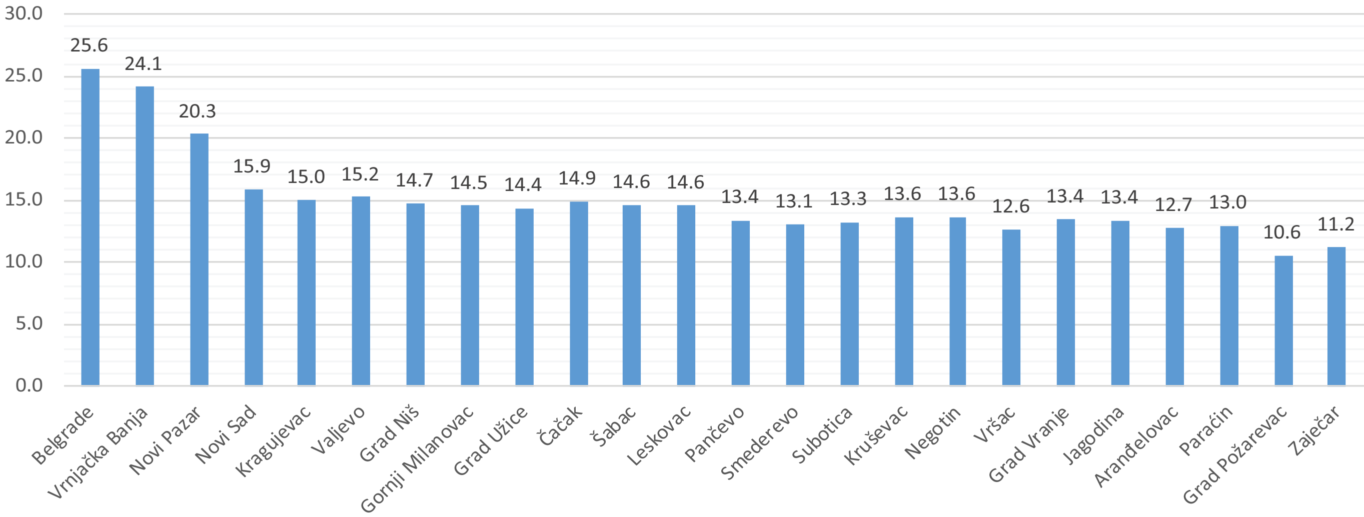


Source: Author calculation based on SORS data

According to this indicator, Belgrade can be compared with other cities and municipalities of Serbia. Index values, where the average wage is reduced for the value of the absolute poverty line, are shown in Graph 8. The graph shows that the number of years needed to buy a newly built apartment of 60m² is largest in Belgrade. Vrnjacka Banja, as one of the most important tourist places in Serbia, ranks second with 24,1 years. Significant regional centers Novi Pazar, Novi

Sad and Kragujevac follow. Belgrade is the city in which the most years of work is needed due to the significantly higher price per square meter of the newly built apartment compared to other cities in Serbia. Namely, the average net salary is the highest in Belgrade in the observed period, which should have resulted in less required years than in other observed cities (index = price of square meeter / average net salary). However, the average salary in Belgrade deviates the most compared to Novi Pazar (1.62 times higher) and Vrnjacka Banja (1.57 times higher), while on the other hand the least deviation of the average price of a newly built square meter in Belgrade compared to other observed cities is 1.84 times compared to Novi Sad and 1.96 times compared to Vrnjacka Banja. In all other observed cities, the price of the newly built square meters of the apartment is by more than 2.4 times lower. These data show that the reason for this position of Belgrade is precisely the much higher price of the square meters compared to other cities in Serbia. Vrnjacka Banja, which ranks second on this list, has an average net earnings higher only than Novi Pazar among the cities surveyed, while the price of square meter is higher only in Belgrade and Novi Sad. The reason for such a high index for Vrnjacka Banja is the low net average salary and the high price of newly built real estate.

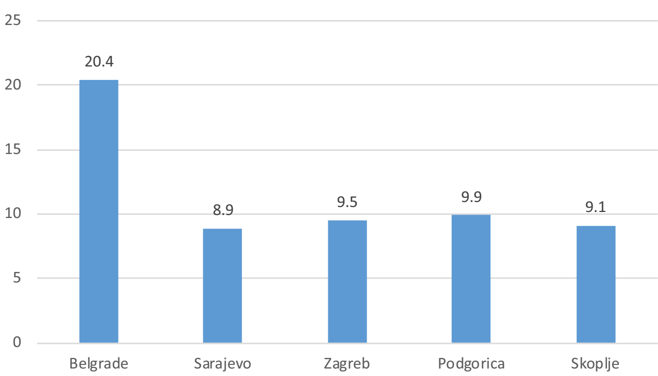
Graph 10. Adjusted Real Estate Price to Earnings Ratio, Municipalities and Cities of Serbia, 2018



Source: Author calculation based on SORS data

Another indicator of the overestimation of apartment prices in Belgrade may be the comparison with other cities in the region, Sarajevo, Skopje, Zagreb and Podgorica. According to the official statistics of the countries of the observed cities, the number of years required to buy a newly built apartment of 60m^2 is more than twice as high in Belgrade than in other observed cities. The minimum number of years required is in Sarajevo - 8.9. It takes 9.1 in Skopje, 9.5 in Zagreb, 9.9 in Podgorica, and 20.4 in Belgrade. According to the value of this indicator, Belgrade deviates more than twice from Zagreb due to a much higher average salary in Zagreb than in Belgrade, while in comparison with other observed cities the reason is much higher (slightly more than twice) the average price of squares in Belgrade, while the average salary is at about the same level.

Graph 11. Real Estate Price to Earnings Ratio, Comparable Cities of the Region, 2018

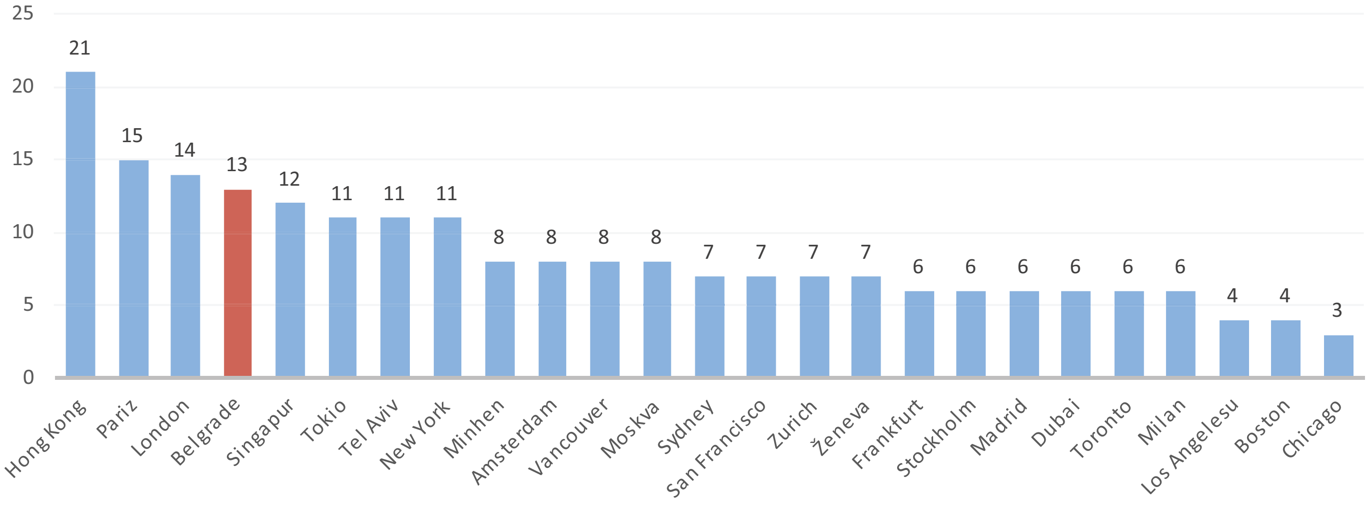


Source: Statistical Offices of Serbia, Bosnia and Herzegovina, Croatia, Montenegro and Northern Macedonia

The Global Real Estate Bubble Index produced by UBS Bank annually in 2019 identified 7 cities in which the real estate market bubble is present (Munich, Toronto, Hong Kong, Amsterdam, Frankfurt, Vancouver, and Paris). It defines the area as 60 m^2 and includes several sub-indices, including the Real Estate Price to Salary Ratio, the Rental Value to the Real Estate Value Ratio, and the movement of mortgage loan to GDP ratios, some of which will be observed for Belgrade.

The real estate price to earnings ratio used by UBS Bank differs from the standard ratio as it does not use the total average earnings, but the average earnings in high paying industries (financial sectors, etc.). As UBS does not analyze Belgrade, for the sake of comparability, the index in this case was calculated as the ratio of the average value

Graph 12. Real Estate Price to Earnings Ratio, 2018



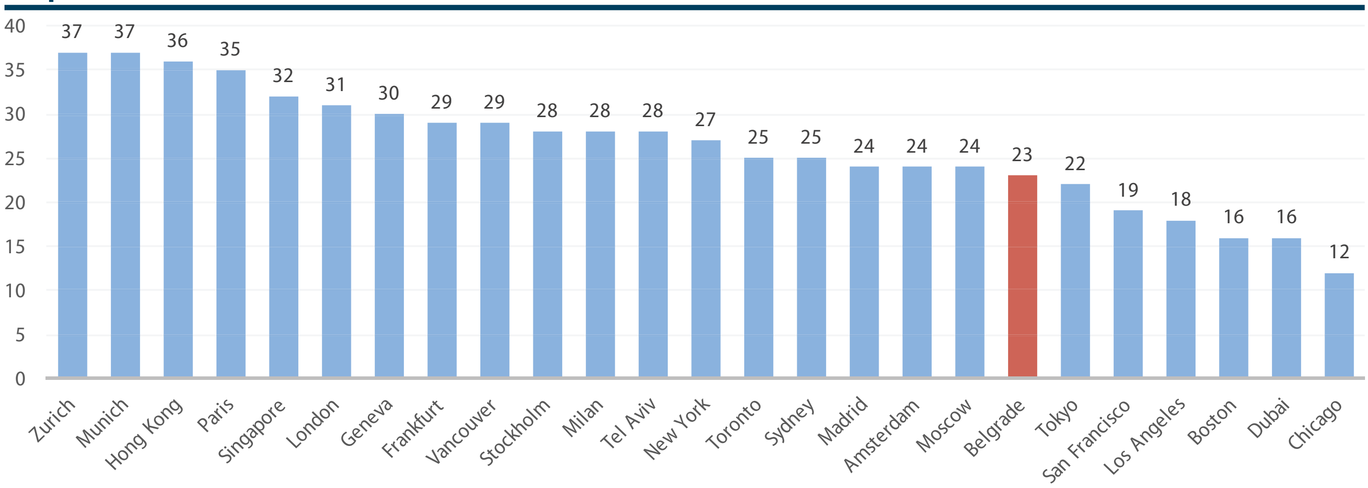
Source UBS report, Author estimate for Belgrade.

of a newly built apartment of $60m^2$ and the average net earnings of an employed person with a university degree in Belgrade. The number of years required for an employee with a university degree in Belgrade to purchase such a defined housing space is 13. In Graph 10 we can see that this value is high on the scale of cities observed by UBS, and above the value of 5 of the 7 cities that UBS qualifies as cities at risk of having a "bubble" in the real estate market. It should be borne in mind that this is one of several indicators that UBS is looking at, but also that London, which also has a value higher than Belgrade, though not at risk of ballooning, is nevertheless ranked as a city with an overestimation of real estate prices

Rental Value to the Real Estate Value Ratio

Similar to the indicator of the relationship between the price of real estate and average salary, the indicator of the relationship between the price of real estate and the amount of annual rent of the same real estate indicates essentially the number of years required to rent a newly built property in order to pay off its purchase value. The obtained value of this indicator for Belgrade was calculated by analyzing the value of renting apartments on specialized websites for renting in Belgrade and estimating the value of individual apartments depending on location, square meters, equipment, etc. The value for Belgrade, i.e. number of years of renting in order to compensate for the money invested. is 23. If compared to the values of cities observed by the UBS report, Belgrade occupies a relatively good place according to this indicator (Graph 11), which means that the funds invested in the apartment return relatively quickly compared to other observed world cities.

Graph 13. Rental Value to the Real Estate Value Ratio, 2018



Source UBS report, Author estimate for Belgrade.

Is the Price of Real Estate on the Belgrade Market Overpriced?

As in the case of Serbia, during the global economic crisis in Belgrade, there was a significant increase in the prices of newly built square meters of 25% in 2008 and 22% in 2009, which is significantly higher than the inflation rate in those years (Graph 6). The increase in average prices per square meter of newly built apartments in Belgrade in 2009, the year in which the global economic crisis reached Serbia and the Serbian economy went into recession, is partly due to the large decrease in the number of built square meters, by as much as 31%. This decline continued in the coming year when price growth was 9%. It was only when the quantity of newly built apartments started to rise (2011 6%, 2012 28%, 2013 0%) did prices fall by -3%, -4% and -6%. As in 2009, the market did not allow for a larger decrease in the price of square meters, reducing the amount of newly built square meters by as much as -38% (2014), -18% (2015) and -9% (2016) this time, which affected price growth up to as much as 18% in 2016. Following the resurgence of the housing supply, as measured by the number of newly built square meters, price growth declined from 18% in 2016 to 5% and 12% in 2017 and 2018, respectively.

What follows as a conclusion is that the Belgrade real estate market is characterized by a decrease in the amount of newly built square meters in periods when the price begins to decline. After a period of decline, the price drops and the number of square meters built decreases supply relative to demand, which returns the market to positive rates of price growth. Although there is increasing talk of the existence of a "bubble" in the real estate market in Belgrade, based on the movement of data on newly built apartments, we can talk about a possible overestimation of the price, but based on previous trends, we cannot expect a significant fall in the price of the newly built apartments, even if the market starts to record negative growth rates (as we saw in 2011-2013).

As there are a number of additional factors affecting the growth of real estate prices, which is related to the country to which the city belongs, in order to obtain additional information on the state of the real estate market in Belgrade, we can observe the movements within the country, i.e. differences in the movement of average prices of newly built apartments in Serbia by city. In 2018 compared to 2011, the average price per square meter of a newly constructed apartment in Belgrade increased by 36%. In Vrsac this growth was 59%, in Smederevo 54%, Gornji Milanovac 34%, Vrnjacka Banja 30%, Pirot 29%, Cacak, Sabac and Subotica 27%, Novi Sad 26%, etc. These data show that the price increase in Belgrade does not essentially deviate from the price increase in other cities, considering that it is the capital of Serbia.

As we have seen, the indicator of the share of mortgage loans in GDP is at a relatively low level, and its movement shows no significant worrying growth. Favorable conditions in the banking market have recently been referred to as the main factor that has increased demand and raised property prices in Serbia. However, the number of mortgage loans in Serbia decreased by 1% in 2017, increased by 8% in 2018, and in 2019 according to the latest available data, it achieved a growth rate of 1.3%.

As we saw the citizen of Serbia, especially Belgrade, it takes many more years of work to buy a newly built property in the city where they live in relation to the countries of the region (Northern Macedonia, Bosnia and Herzegovina, Croatia, Montenegro), and when this is compared to other cities in the world, Belgrade occupies a high place, and a higher number of years needed to purchase the apartment is only in cities which are characterized as the ones with overestimated prices. Therefore, there is no doubt that the value of real estate prices, not only in Belgrade but in some other municipalities and cities in Serbia, is overestimated.

However, the Belgrade real estate market has the ability to adjust to price reductions by reducing supply, due to the fact that a high supply may lead to a certain fall in prices, followed by a drop in supply. The share of mortgage loans in GDP is not a concern in terms of size or trend. The ECB's policy will continue to favor lending in the coming period to respond to the slowdown in European Union growth, and favorable trends in the banking sector are expected to continue. The increase in the number of tourists and the lack of implementation of the regulation of "apartment for one day" accommodation and monthly renting of apartments, have led to a relatively good position for investing in the purchase of an apartment for profit on the basis of renting and increased value (Graph 11), this type of investment is additionally interesting because of the high risk of investment in other economic activities due to poorly developed market mechanisms. Belgrade is increasingly positioning itself as the regional center of the Western Balkans, which is driving increase in home buying as an investment and an increase in foreign demand. As we have seen the rise in the prices of newly built apartments in Serbia in recent years, not only is it not limited to Belgrade but it is not even the largest in Belgrade. Considering all mentioned, we should not expect a significant decrease in the prices of newly built apartments, primarily in Belgrade, even if the value, at this point, is certainly overestimated according to the indicators presented in this paper.

Quarterly Monitor
of Economic Trends and Policies in Serbia

QM is a bulletin of the Faculty of Economics at the University of Belgrade, FREN, which, since 2005, objectively and methodologically, analyses trends and policies using modern methods of economic analysis. The editorial board, as well as the committee, are mostly composed of professors and associates of the Faculty of Economics at the University of Belgrade.

UNIVERSITY OF BELGRADE
Faculty of Economics

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FREN

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The founder of FREN is the Faculty of Economics in Belgrade. FREN was founded in 2005.

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