National Bank of Serbia

November 2017

INFLATION REPORT

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Introductory note

The *Agreement on Inflation Targeting* between the Government of the Republic of Serbia and the National Bank of Serbia, effective as of 1 January 2009, marks a formal switch of the National Bank of Serbia to inflation targeting as a monetary policy regime. The main principles and operation of the new regime are defined by the *Memorandum on Inflation Targeting as a Monetary Strategy.*

Since one of the underlying principles of inflation targeting is strengthening the transparency of monetary policy and improving the efficiency of communication with the public, the National Bank of Serbia prepares and publishes quarterly *Inflation Reports* as its main communication tool. The *Inflation Report* provides key economic facts and figures that shape the Executive Board's decisions and underpin activities of the National Bank of Serbia.

The *Inflation Report* aims to cover information on the current and expected inflation movements and to provide an analysis of underlying macroeconomic developments. It also seeks to explain the reasoning behind the Executive Board's decisions and to provide an assessment of monetary policy effectiveness during the previous quarter. Also integral to this Report are the inflation projection for eight quarters ahead, assumptions on which the projection is based and an analysis of key risks to achieving the target.

The information contained in this *Report* will help raise public understanding of monetary policy implemented by the central bank and awareness of its commitment to achieving the inflation target. It will also play a role in containing inflation expectations, as well as in achieving and maintaining price stability, which is the main statutory task of the National Bank of Serbia.

The November *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 9 November 2017.

Earlier issues of the *Inflation Report* are available on the National Bank of Serbia's website (http://www.nbs.rs).

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Veselin Pješčić, Vice Governor

Diana Dragutinović, Vice Governor

Đorđe Jevtić, Director of the Administration for Supervision of Financial Institutions

ABBREVIATIONS

bn – billion
bp – basis point
CPI – Consumer Price Index
ECB – European Central Bank
EMBI – Emerging Markets Bond Index
EU – European Union
FAO – UN Food and Agriculture Organization
FDI – foreign direct investment
Fed – Federal Reserve System
FOMC – Federal Open Market Committee
GDP – gross domestic product
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
LHS – left hand scale
mn – million
NAVA – non-agricultural value added
NPL – non-performing loan
OFO – other financial organisation
OPEC – Organization of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
q-o-q – quarter-on-quarter
RHS – right hand scale
s-a – seasonally-adjusted
SDR – Special Drawing Right
SORS – Statistical Office of the Republic of Serbia
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I Overview

Since the start of the year, year-on-year inflation has moved within the target band (3.0±1.5%), standing in September at 3.2%. As expected, in the third quarter it slowed down because of the lower year-on-year rise in the prices of energy and food due to the base effect of petroleum products and meat. Still, inflation was lower in September than predicted in the August *Report*, since the impact of the drought on fruit and vegetable prices in the third quarter turned out to be lower than estimated. Inflationary pressures are still low, as confirmed by core inflation (excluding energy, food, alcohol and cigarettes), which decelerated in August and September to 1.5% (the level from late 2016), and inflation expectations anchored within the target band of the National Bank of Serbia.

During the third quarter, both core and headline inflation slowed down, indicating further weakening of inflationary pressures in recent months.

Global economic developments in the year so far have been better than previously expected. As a result, growth of gross domestic product of the euro area, Serbia's most important trade partner, was revised up, and euro area growth in turn supported economic growth acceleration and improvement in outlook for the coming period in the surrounding countries, also important trade partners of Serbia. However, despite the step-up in global economic recovery, most countries show no credible signs of rising inflationary pressures. In line with low inflationary pressures, the European Central Bank is still pursuing an accommodative monetary policy and will continue to implement the quantitative easing programme at least until September 2018, though the monthly amount of 60 billion euros will be reduced to 30 billion euros. The Federal Reserve System did not change the target range of its benchmark rate in the third quarter, but there is widespread belief that it will be further raised in December. Also, in October it started to gradually decrease reinvestment in repayments of principal on securities purchased in quantitative easing. While the divergence of monetary policies of leading central banks breeds additional uncertainty over capital flows to emerging economies, Serbia included, improved economic outlook reflected positively on the readiness of investors to invest in the Central and Eastern Europe region, including Serbia, during the third quarter as well. Serbia's risk premium fell in October to the lowest value since its monitoring began, on the back of global factors and the improvement of macroeconomic fundamentals on account of the further narrowing of imbalances, which also increased Serbia's resilience to potential adverse effects from the international environment.

Developments in the international environment since the August Report were marked by further improvement in the outlook for growth in the euro area and the majority of other important trade partners of Serbia. While the divergence of monetary policies of leading central banks breeds uncertainty over capital flows to emerging economies, Serbia included, improved economic outlook reflected positively on the readiness of investors to invest in the Central and Eastern Europe region.

Improved foreign investor sentiment regarding Serbia continued to underpin appreciation pressures in the domestic foreign exchange market.

Appreciation pressures continued during the third quarter, primarily due to better export performance, a high inflow of foreign direct investment, greater interest of foreign investors in government securities, relatively high purchase of foreign cash and growth in FX-indexed bank assets. Since the beginning of the year, October included, the dinar strengthened by 3.5% against the euro, and by 14.3% against the dollar, owing mainly to the considerable appreciation of the euro vis-à-vis the dollar. To ease excessive short-term strengthening of the dinar against the euro, the National Bank of Serbia intervened in the interbank foreign exchange market by buying 605.0 million euros in the third quarter, most of it in August, and additional 15.0 million euros in October.

The Executive Board made decisions to continue to cut the key policy rate in consideration of the August medium-term inflation projection and the additional weakening of inflationary pressures due to factors from the domestic and international environment.

At its meetings in September and October, the Executive Board of the National Bank of Serbia decided to cut the key policy rate by 25 basis points each to 3.5%, which reflected on a further reduction in interest rates in the interbank money market and the price of dinar government securities. The Executive Board decided to continue monetary easing in view of the August medium-term inflation projection and the additional weakening of inflationary pressures due to factors from the domestic and international environment. Factors slowing inflation down included lower import prices expressed in dinars, including the prices of primary commodities, and the further decline in the country risk premium. Also, fiscal trends were more favourable than expected, reducing the government's need to borrow. On the other hand, monetary policy caution in the period observed was mandated by uncertainty in the international commodity market, mainly regarding the fluctuations in oil prices that continued into the third quarter. Uncertainties in the international financial market stemmed mostly from the divergence between monetary policies of leading central banks – the Federal Reserve System and European Central Bank, and their impact on cross-currency movements.

Bank lending accelerated further – excluding the effect of write-offs of non-performing loans over the last year, year-on-year growth in total loans sped up to 9.8%. The share of non-performing loans in total loans dropped to 12.2% in September, the lowest after January 2009.

Past monetary policy easing of the National Bank of Serbia, a decline in the country risk premium, increased interbank competition, economic growth and recovery in the labour market, and low interest rates in the euro area helped credit activity accelerate to 5.0% year-on-year in September (excluding the exchange rate effect). Excluding the effect of write-offs of non-performing loans over the last year, year-on-year growth in total loans sped up to 9.8%. The share of non-performing loans, calculated at a gross principle, declined to 12.2% in September, the lowest share after January 2009, down by 10.1 percentage points than in August 2015, when the NPL Resolution Strategy was adopted.

Positive fiscal trends continued in the third quarter, thus budget surplus measured 2.6% of gross domestic product at the level of the general government. The quantitative criterion from the arrangement with the International Monetary Fund, according to the seventh review, envisaged a balanced fiscal result of the general government, and a deficit of up to 1.1% of gross domestic product for 2017 as a whole. Excluding interest expenses, the general government surplus equalled 5.8% of gross domestic product. Relative to the same period last year, in real terms total revenue was higher by 3.9% and expenditure lower by 2.3% in the year to September. The share of central government public debt, whose growing trajectory was reversed last year, continued down this year, declining by 7.3 percentage points relative to the end of 2016.

This year, fiscal trends have been more favourable than expected, with a budget surplus of 2.6% and primary surplus of 5.8% of gross domestic product since the beginning of the year.

In the first nine months of this year, euro-denominated commodity exports rose by 11.4% compared to the same period last year, while keeping broad product and geographical dispersion. At the same time, euro-denominated commodity imports increased by 12.7%, as a result of higher energy imports prompted by cold weather early in the year, the rise in oil prices, increased industry needs for equipment and intermediate goods, and to some extent also of continued growth in household consumption, which reflected on higher imports of consumer goods. This, together with the expected higher outflow in the primary income account in conditions of a growing foreign direct investment inflow, resulted in a current account deficit increase by 394 million euros relative to the same period last year. At the annual level, the current account deficit is expected to measure 4.6% of gross domestic product. The current account deficit is also expected to be fully covered by the net foreign direct investment inflow, whose projection for 2017 was revised upward to 2.1 billion euros, since the performance so far has exceeded our expectations. Compared to the same period last year, the net inflow of foreign direct investment rose by 12.6%, which, coupled with a considerably smaller net outflow under portfolio investment and financial loans, resulted in a surplus in the financial account.

Euro-denominated commodity exports continued to record high year-on-year growth (11.4%), remaining broadly dispersed by product and geographical area, while imports increased (12.7%) on the back of higher industry needs for equipment and intermediate goods. A high inflow of foreign direct investment (growing by 12.6% year-on-year) continued to more than fully cover the current account deficit (134.2%).

Continued activation of investment and rising external demand continued to spur growth in manufacturing. In addition to the further growth in service sectors driven by higher domestic demand, and the recovery of construction, this contributed to the seasonally-adjusted growth in gross domestic product by 1.1% in the third quarter. On the expenditure side, the expected positive contribution to gross domestic product growth came from private investment and net exports due to higher exports

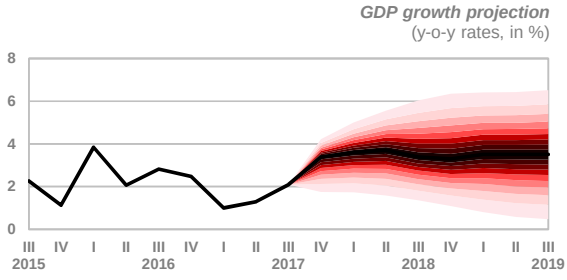
Growth in gross domestic product accelerated to 2.1% year-on-year in the third quarter, driven by higher activity in manufacturing and service sectors, and the continued recovery of mining and energy.

and lower imports, as well as from the continued recovery of household consumption. Year-on-year, according to the preliminary estimate of the Statistical Office of the Republic of Serbia, gross domestic product growth accelerated to 2.1% in the third quarter. The acceleration resulted from good performance in manufacturing, and also from the continued recovery in mining and energy. On the other hand, a negative contribution came from agriculture because of adverse agrometeorological conditions and last year's high base effect.

The improvement in Serbia's business and investment climate is also demonstrated by the progress made in international competitiveness lists.

A considerable improvement in Serbia's business and investment climate is also confirmed by its advance in the World Bank's Doing Business list for 2018, for the third consecutive year, to 43rd place. Also, according to the new World Economic Forum's Global Competitiveness Report, as in the previous year, Serbia advanced the most in terms of macroeconomic environment indicators (by 31 positions), which was mostly contributed by low and stable inflation, the reduction in the budget deficit, a growing share of national savings in gross domestic product and a more favourable credit rating of the country. In terms of achieved inflation, in 2017 Serbia retained the first place, shared with another 35 countries.

According to our projection, gross domestic product growth should measure around 2% in 2017 and accelerate to around 3.5% in 2018 and 2019.



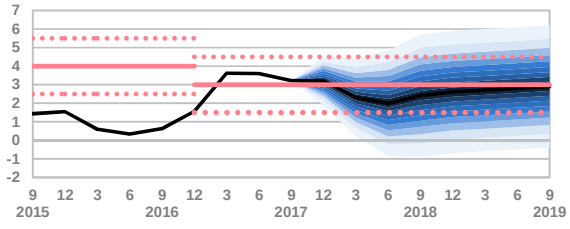
Given the significant improvement in the investment climate in the past several years, with exports boasting a wide production and geographic diversification, and the majority of sectors that were not influenced by negative supply-side factors continuing to post good results, we believe that the foundation has been created for acceleration of economic growth on sustainable grounds in the medium run. In line with further improvement of the business environment, a high and project-diversified inflow of foreign direct investment, implementation of infrastructure projects and past monetary policy easing, according to our estimate, private investment should be one of the key drivers of economic growth in this and coming years. In addition, a growing positive contribution should come from household consumption on account of further labour market recovery. Continued activation of investment and a more favourable outlook for euro area growth, including in the region of Central and Southeastern Europe, should have a positive impact on further growth in exports. On the production side, in the coming period, growth in gross domestic product should be driven by industry and service sectors, and construction is also expected to give a positive

contribution. On the other hand, the contribution of agriculture is expected to be negative this year. The risks to the projection for this year are mildly asymmetric downward and pertain primarily to the outcome of this year's agricultural season and the pace of recovery of the mining and energy sectors. Given that the downside risks to the projection this year are due to supply-side shocks, whose effects on economic activity will wane with the normalisation of conditions, risks are asymmetric upward for the next year on the same grounds.

Under the November central projection, year-on-year inflation will continue to move within the target tolerance band of 3.0±1.5% until the end of the projection horizon (in the next two years). In the first half of 2018, inflation will be slowed by the high base for prices of petroleum products and other products that recorded a one-off hike early this year, guiding inflation to move below the target midpoint. Rising prices of primary agricultural commodities and aggregate demand will work in the opposite direction. The risks to the projected inflation path are symmetric and relate primarily to future developments in the international commodity and financial markets and, to a degree, administered price growth.

Under the new central projection, year-on-year inflation will continue to move within the target tolerance band (3.0%±1.5 percentage points) until the end of the projection horizon.

Inflation projection
(y-o-y rates, in %)



The inflation projection until the end of this year and in the first half of next year is lower than the August projection. This is due to the lower than expected rise in consumer prices in the third quarter and lower import prices compared to the previous projection, reflecting, among other things, the nominal appreciation of the dinar. In addition, the assumed administered price growth is lower this year than in the August inflation projection.

The new medium-term inflation projection is lower than the one from the August Report both for this and for the first half of next year.

Looking ahead, monetary policy decisions of the National Bank of Serbia will continue to depend on the Executive Board's assessment of the intensity of the (dis)inflationary impact of inflation factors. This means that the National Bank of Serbia will continue to closely monitor and assess movements and trends in the domestic market and in the international environment, including both the international financial market and the market of primary commodities. The NBS will as so far use all available instruments to make sure inflation remains low and stable over the medium term which, together with the preservation of financial stability, will contribute to sustainable economic growth.

The monetary policy stance in the period ahead will continue to depend primarily on developments in the international environment.

II Monetary policy since the August *Report*

Since the August Inflation Report, the key policy rate was trimmed by a total of 50 basis points, to 3.5%, its lowest level in the inflation targeting regime. The NBS Executive Board made the decisions on further monetary policy easing taking into consideration the August medium-term inflation projection which was lower than the previous one, as well as the further weakening of inflationary pressures based on the factors emanating from the domestic and international environment.

Headline and core inflation decelerated in Q3 more than had been expected, while the inflation expectations of the financial sector and corporates were lowered further, indicating that inflationary pressures are still low. Also, the effects of the drought on inflation were lesser than expected, and lower import prices expressed in dinars acted as a drag on inflation. In addition, fiscal movements were much more favourable than expected, while the risk premium dropped to its lowest level on record for Serbia.

By contrast, monetary policy caution was mandated by movements in the international environment. Uncertainty was still primarily related to the movements in the prices of primary commodities in the global market and monetary policy decisions of leading central banks which could affect the capital flows towards emerging economies. However, despite the global economic recovery, there were no signals of rising inflationary pressures on the demand side or that monetary policy tightening of leading central banks could be faster than announced.

Since the August *Report*, the Executive Board's decisions to continue with key policy rate trimming were made in consideration of the August medium-term inflation projection, as well as the further weakening of inflationary pressures relative to inflation, stemming from factors in the domestic and international environment. The August inflation projection was lower than the previous one on account of the increase in consumer prices in Q2 undershooting the anticipated figures, as well as due to lower import prices expressed in dinars, including the prices of primary agricultural commodities and oil. It was estimated that y-o-y inflation would continue to move within the bounds of the new target band (3.0±1.5%), slowed down by the high base effect from the prices of petroleum products and, as of early 2018, by the drop-out of this year's one-off price hikes of certain products and services from the y-o-y inflation calculation. A gradual rise in the global prices of primary agricultural commodities and aggregate demand in Serbia will work in the opposite direction.

Taking into account such inflation projections and considering new information on economic developments at home and abroad, the NBS Executive Board **lowered the key policy rate by 25 bp in both September and October, to 3.5%**. Thus, since May 2013, when the cycle of monetary policy easing began, the key policy rate was cut by a total of 8.25 pp.

As the Executive Board had expected, y-o-y inflation slowed down in the past several months, as did core inflation, which fell to 1.5% y-o-y in August and remained unchanged in September. However, inflation decelerated more than had been expected given that the effects of the drought on inflation were lesser than anticipated. Namely, the August projection presumed that because of the drought, the fall in the prices of fruit and vegetables in Q3 would be lesser than usual for the season. Coupled with the anticipated increase in the prices of primary agricultural commodities in the global and domestic markets, this could have certain second-

round effects on other prices as well. However, the adverse effects of the drought on the prices of fruit and vegetables, as well as the prices of primary agricultural commodities, were weaker than had been estimated, and it would seem that the second-round effects never occurred. This is indicated by the prices of processed food which remained almost unchanged, while both one- and two-year ahead inflation expectations were additionally lowered.

Relative to the August projection, another drag on inflation were lower import prices expressed in dinars, including the prices of primary agricultural commodities and oil. In addition, the country risk premium, in conditions of improved fundamentals at home and under the impact of global factors, was brought down to its lowest level on record for Serbia. Bearing in mind the expected continuation of positive macroeconomic trends, the Executive Board expects the trend in the country risk premium to remain relatively stable in the coming period. Moreover, it expects that the continued growth in exports, together with FDI, which will remain more than sufficient to cover the current account deficit, will contribute to relatively stable movements in the foreign exchange market in the period ahead.

Fiscal movements are more favourable than anticipated, as confirmed by the achieved surplus at the consolidated level of around 2.6% of GDP in the year to September. This reduced the government's need for borrowing and, among others, contributed to the reduction of the share of general government public debt in GDP, which has declined by 7.3 pp since the start of the year. The Executive Board expects that the fiscal efforts made so far, supported by economic growth, will enable the continuation of the tendency to reduce public debt.

The Executive Board made monetary policy decisions in consideration of the fact that the international commodity and financial markets have been fraught with uncertainty for some time already, which mandates caution. Uncertainties also surround global primary commodity prices, as attested by the volatility of oil prices during Q3. Uncertainties in the international financial market continue to stem largely from the diverging monetary policies of leading central banks, the Fed and the ECB, which may affect capital flows to emerging economies in the coming period. However, despite the global economic upturn, for the time being there are no signals of a rise in inflationary pressures on the demand side and that leading central banks might tighten their monetary policies faster than previously announced. In addition, when making the decisions, the Executive Board was aware that, owing to a favourable macroeconomic outlook in the period ahead, Serbia is now more resilient to potentially adverse effects from the international environment.

By lowering the key policy rate, the NBS provides additional support to credit activity and economic growth. Bearing in mind past monetary policy easing as well as the new, November inflation projection, movement of its key factors, better economic performance in Q3 and prospects for the coming period, the Executive Board **did not change the key policy rate in November**.

III Inflation movements

Moving within the target tolerance band of 3±1.5% since the start of the year, inflation came at 3.2% y-o-y in September. In Q3 it decelerated mainly due to the expected lower y-o-y rise in the prices of energy and food on account of the base effect from prices of petroleum products and meat.

In Q3, core inflation slowed down to 1.5% y-o-y, and inflation expectations stayed at a relatively low level, indicating still low inflationary pressures.

Inflation movements in Q3

Consistent with expectations stated in the previous *Inflation Report*, mainly as a result of the base effect of meat prices, y-o-y inflation declined to 2.5% in August, returning in September to the July level of 3.2%. Relatively bad weather at the start of the year and in the summer led to expectations that y-o-y inflation would be slightly higher in September than in June. However, the negative impact of the drought on prices turned out to be smaller than estimated. Compared to June, contribution to y-o-y inflation was lower or unchanged in all five price categories. Industrial products excluding food and energy posted the greatest downward movement. In addition to headline inflation, core inflation also slowed down in Q3, to 1.5% y-o-y, indicating that relatively low inflationary pressures weakened further in recent months.[1]

At the quarterly level, the decline in consumer prices by 0.2% came mostly from the prices of **food and non-alcoholic beverages** (-0.3 pp), mainly fruit and vegetables. The prices of **unprocessed food** lost 2.5% (contribution to inflation: -0.3 pp). Specifically, the prices of fruit dropped by 6% (contribution: -0.2 pp) and of vegetables by 6.8% (contribution: -0.3 pp). The increase in the prices of fresh meat by 3.1% worked in the opposite direction (contribution: 0.1 pp), albeit it was

Table III.0.1 **Contribution to y-o-y consumer price growth**
(in pp)

	2017		Difference
	June	Sep.	
Consumer prices (CPI)	3.6	3.2	-0.4
Unprocessed food	1.0	1.0	0.0
Fruit and vegetables	*0.3*	*0.7*	*0.4*
Fresh meat	*0.6*	*0.1*	*-0.4*
Processed food	0.4	0.3	-0.1
Industrial products excluding food and energy	0.7	0.5	-0.2
Energy	0.8	0.8	0.0
Petroleum products	*0.4*	*0.3*	-0.1
Services	0.7	0.6	-0.1

Sources: SORS and NBS calculation.

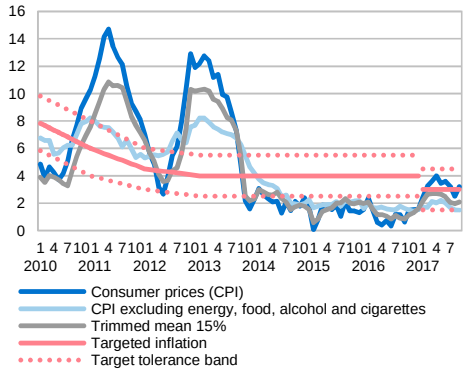
Table III.0.2 **Consumer price growth by component**
(quarterly rates, in %)

	Share in CPI	2016	2017		
		IV	I	II	III
Consumer prices (CPI)	100.0	0.5	2.4	0.5	-0.2
Unprocessed food	11.3	-3.0	11.7	2.9	-2.5
Processed food	20.7	0.0	1.3	0.3	0.1
Industrial products excluding food and energy	28.5	0.6	0.5	0.4	0.4
Energy	15.5	2.8	3.3	-1.3	0.0
Services	24.0	0.8	0.8	1.0	0.1
Core inflation indicators					
CPI excluding energy	84.5	0.0	2.2	0.9	-0.2
CPI excluding energy and unprocessed food	73.2	0.5	0.8	0.6	0.2
CPI excluding energy, food, alcohol and cigarettes	45.3	0.8	0.2	0.7	-0.2
Administered prices	18.8	1.1	1.1	0.0	1.1

Sources: SORS and NBS calculation.

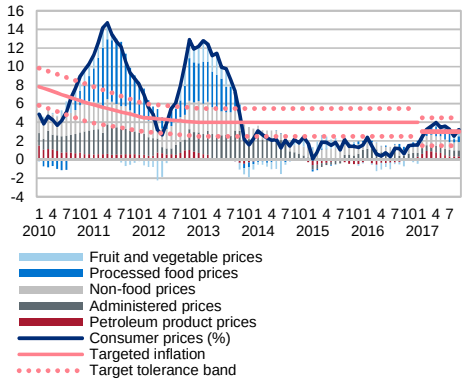
[1] See Text box 1, page 12.

Chart III.0.1 **Price movements**
(y-o-y rates, in %)



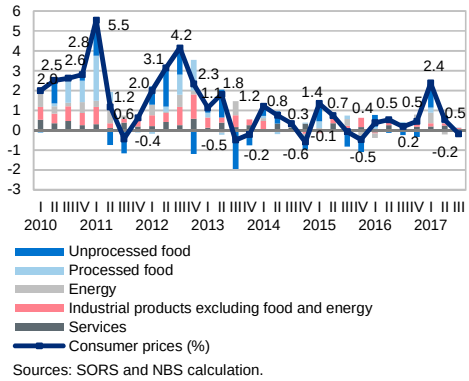
Sources: SORS and NBS calculation.

Chart III.0.2 **Contribution to y-o-y consumer price growth**
(in pp)



Sources: SORS and NBS calculation.

Chart III.0.3 **Contribution to quarterly consumer price growth**
(in pp)



Sources: SORS and NBS calculation.

lower than assumed in the August *Report*, since the prices of primary agricultural commodities in the global market did not rise as expected. Low costs of food production led to only a slight increase in the prices of processed food in Q3 (by 0.1%).

Energy prices stayed the same in Q3, as the impact of the seasonal increase in the prices of solid fuels (mainly firewood) by 4.7% was offset by the decline in petroleum product prices by 1.9%. Although global oil prices have been rising since late August, the strengthening of the euro and dinar vis-à-vis the dollar caused a further fall of petroleum products prices expressed in dinars. In line with our expectations from the previous *Report*, the high base effect has caused a slowdown in the y-o-y growth in **petroleum product prices** since March, to 5.7% in September, contributing to y-o-y inflation with 0.3 pp.

Service prices also remained practically unchanged in Q3. The seasonal increase in travel package prices in July and August was almost entirely neutralised by the September decline (growth by 1.3% in Q3). Rents also rose slightly (0.4%).

In Q3, growth in the **prices of industrial products excluding food and energy** was at the level of the previous quarter, equalling 0.4% (contribution to inflation: 0.1 pp). These prices grew mostly on account of the rise in cigarette prices by 4.3% in July (contribution: 0.2 pp), while the seasonal decline in the prices of clothes and footwear had the opposite effect (contribution: -0.1 pp). A small negative contribution came from lower prices of automobiles, which were also caused by the dinar's appreciation against the euro.

At the quarterly level, **core inflation** (measured by CPI excluding prices of energy, food, alcohol and cigarettes) dropped by 0.2% in Q3, chiefly on account of the seasonal decline in the prices of clothes and footwear. Y-o-y, in Q3 core inflation slowed down to 1.5%, its level from August and September, aided by lower import inflation and the disinflationary pressures still present on the demand side.

Administered prices rose by 1.1% in Q3. The growth was almost entirely driven by the July adjustment of cigarette prices. Y-o-y, administered price growth decelerated to 3.4% (contributing to headline inflation by around 0.7 pp).

Producer and external prices

After dipping in Q2, **industrial producer prices in the domestic market** inched up by 0.3% in Q3, slightly accelerating their y-o-y growth to 3.3% (from 3% in June).

Quarterly growth of producer prices was mostly affected by higher prices in the field of energy production, mainly the production of crude oil and petroleum products. In addition, prices of production of non-durable consumer goods also rose, primarily in the area of production of tobacco products and clothes. In Q3, lower producer prices were recorded in the production of intermediate goods, as a result of lower costs in the production of base metals and metal products, chemical products, and rubber and plastic products. Also, lower costs in the production of electrical equipment drove down the producer prices of durable consumer goods.

Unlike Q2, when they rose slightly (0.4%), the **prices of elements and materials incorporated in construction** fell by 0.8% in Q3. This slowed their y-o-y growth down from 4.8% in June to 2.2% in September.

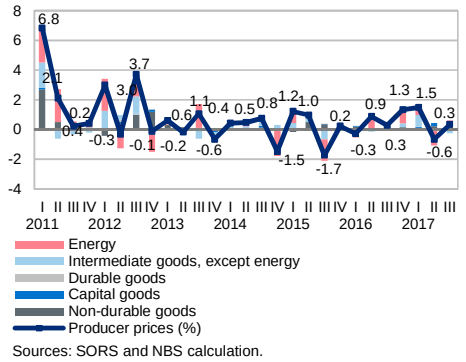
Cost-push pressures on inflation declined in Q3 owing to the continued fall in **external prices** expressed in dinars,[2] which measured 2.1% at the quarterly level. Such a development was mostly caused by the lower global prices of crude oil and food, measured by the FAO index, which edged down by 3.7% and 3.1% respectively, expressed in dinars. Even though global prices of oil and food expressed in dollars rose in Q3, they fell in dinar terms due to the average nominal appreciation of the dinar against the dollar by 9.6% in Q3 (mainly owing to the euro's strengthening against the dollar). External prices dropped also because of the mild decrease in the prices of German exports (used to approximate prices of imported equipment and intermediate goods) by 0.3%, and the dip in consumer prices in the euro area (used to approximate service imports) by 0.2%. The quarterly decline in external prices pushed their y-o-y growth rates to negative territory (-1.2%) in Q3, after a year in positive territory.

Table III.0.3 **Price growth indicators**
(y-o-y rates, in %)

	2016		2017	
	Dec.	March	June	Sep.
Consumer prices	1.6	3.6	3.6	3.2
Domestic industrial producer prices	2.2	3.1	3.0	3.3
Prices of elements and materials incorporated in construction	2.4	7.7	4.8	2.2

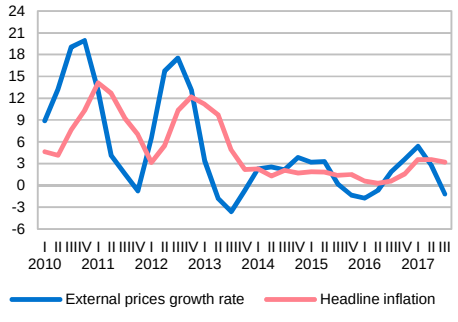
Sources: SORS and NBS calculation.

Chart III.0.4 **Contribution to quarterly producer price growth**
(in pp)



Sources: SORS and NBS calculation.
* Industrial producer prices for the domestic market.

Chart III.0.5 **Domestic inflation and external prices**
(y-o-y rates, in %)



Sources: Destatis, FAO, Bloomberg, Eurostat, SORS and NBS calculation.

[2] The weighted average of the world oil and food price index, euro area consumer prices and export prices of Germany, one of our main trade partners, is used as an indicator of external prices.

Text box 1: Inflation indicators in 2017

In 2017 inflation has moved within the target tolerance band (3.0±1.5%) and stood at 3.2% y-o-y in September. At the beginning of the year inflation was driven by the recovery of the global oil prices initiated in H2 2016, but also by the effects of very cold weather in January and February, which pushed up prices of vegetables and solid fuels much more than usual for the season. Still core inflation remained low and stable, signalling still low inflationary pressures, which is also confirmed by deceleration of headline inflation in the coming months.

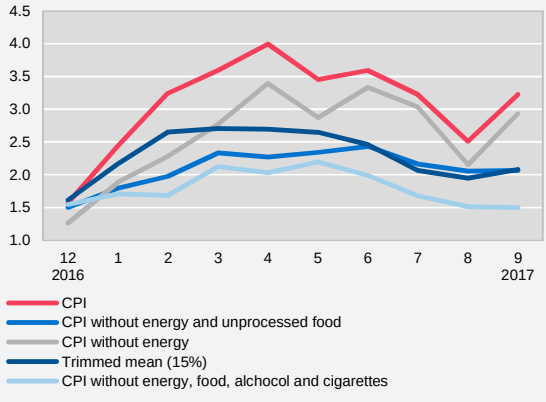
Considering the importance of core inflation, this indicator and its movements in 2017 will be further elaborated in the text below.

Core inflation has an important role in making decisions on monetary policy measures, even when the target for headline inflation is set. The reason is the fact that headline inflation, as a rule, is under a greater influence of the specific factors that are outside the reach of the monetary policy but which increase short-run inflation volatility. Accordingly, monetary policy makers strive to determine a reliable empirical measure of inflation which would also be a reflection of its long-run trend. Therefore, eliminating products subject to stronger short-run price oscillations from the CPI, inflation rates are obtained that are not so much under the influence of such transitory movements. This indicator is called core inflation.

Even though the term "core inflation" has been used by the expert community for many years now, there is still neither a general consensus about the definition, nor is there a uniform calculation method. The NBS monitors several core inflation indicators. The first group of indicators excludes the same product groups, and the exclusion criterion is the price volatility in the past, as well as the presence of a direct or indirect influence of the government. In this way three measures of core inflation have been constructed, and tracked by the NBS since the introduction of the inflation targeting regime: 1. inflation without energy; 2. inflation without energy and unprocessed food; 3. inflation without energy, food, alcohol and cigarettes. In addition to this group of indicators, the strength of inflationary pressures is also assessed by applying the outlier method which removes the products and services that have had the largest monthly, both upward and downward, price changes (the so-called trimmed mean). Unlike the first group of core inflation indicators, in the case of trimmed mean not always the same products are excluded, but the same consumer basket percentage, set in advance, is always eliminated (the NBS uses 15%, while certain central banks use even higher exclusion percentages). In other words, 7.5% of products and services with the sharpest monthly price hikes, i.e. cuts are excluded each, regardless of what these products and services are.

Unlike headline inflation, which was on the rise at the beginning of 2017, core inflation remained low and relatively stable. Core inflation indicators suggest that rising headline inflation early this year, as emphasised in the previous *Reports*, was brought about by food and energy price hikes. Therefore core inflation measured by the CPI change excluding energy, food, alcohol and cigarettes moved around the level of 2% y-o-y, from March until May, to come back to the level of 1.5% y-o-y in August and September, which was also the level at end-2016. Similar conclusions are also indicated by the movement of y-o-y inflation calculated using the trimmed mean method, which dropped from 2.7% in February to 2.1% in September.

Chart O.1.1 **Inflation indicators**
(y-o-y growth rates , in %)



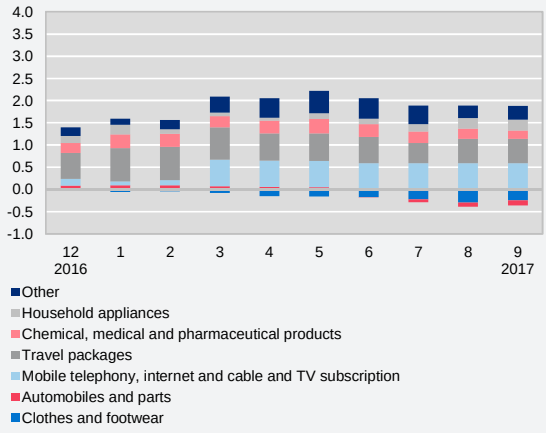
Sources: SORS and NBS calculation.

In September the greatest contribution to the 1.5% y-o-y core inflation rate (measured as the change of CPI after excluding energy, food, alcohol and cigarettes) stemmed from tourist travel packages (0.55 pp), mobile telephony services (0.48 pp) and household appliances (0.25 pp), and the largest negative contribution came from clothes and footwear (0.24 pp) as well as automobiles (0.12 pp). Observing the difference in contribution to y-o-y core inflation relative to end-2016, only a smaller number of

products and services recorded discernible changes. That is the case of mobile telephony services, as their contribution to core inflation increased by 0.48 pp, as a consequence of one mobile operator's hike in prices of these services by around 12% in March. The influence of the above price hikes on core inflation was neutralised almost entirely when the prices of clothes and footwear, as well as automobiles dropped, and their contribution was lower by 0.22 pp and 0.19 pp, respectively, in September relative to end-2016.

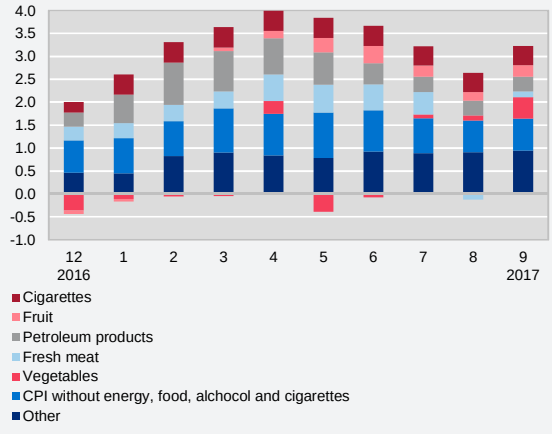
The contribution of core inflation to headline y-o-y inflation in 2017 remained relatively stable, moving from 0.7 pp to 1.0 pp, with a peak in May and a trough at the beginning and end of the reference period. At the same time, the highest contribution to headline inflation stemmed from energy, which increased its contribution in February and March (primarily due to the base effect of petroleum products caused by a hike in global oil price in H2 2016 and a rise of solid fuels prices at the beginning of this year due to the cold weather). After March, the energy contribution to headline inflation has been gradually decreasing due to the high base effect of petroleum products, but in September it remained higher by 0.5 pp, relative to end-2016. The volatility of y-o-y inflation in the reference period was predominantly caused by the prices of vegetables and fruit, as their y-o-y pace changed under the influence of weather conditions. Inflation volatility was also in part a consequence of y-o-y movement of prices of fresh meat – in the period April–July the contribution of these products to overall price hikes increased due to the rise of these prices in the global market. In August the contribution was negative due to the high base from the previous year. The January rise in the prices of cigarettes brought their y-o-y contribution growth to around 0.4 pp, which was kept at that level even after the July price increase of these products.

Chart O.1.2 **Contributions of certain groups of products and services to y-o-y core inflation**
(in pp)



Sources: SORS and NBS calculation

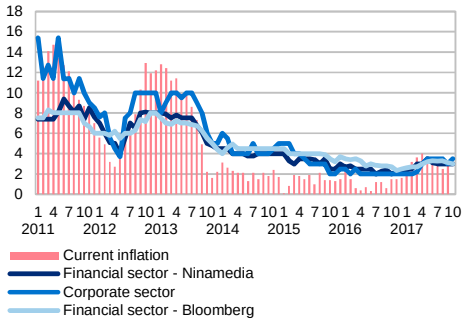
Chart O.1.3 **Contributions of certain groups of products and services to y-o-y inflation**
(in pp)



Sources: SORS and NBS calculation.

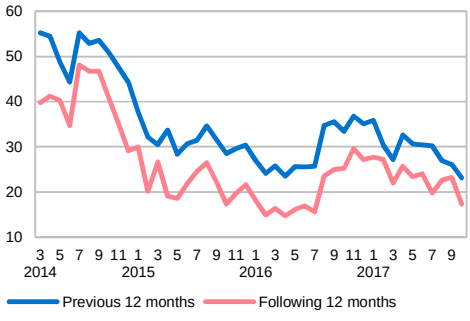
Our short-term projection is that y-o-y inflation will remain stable into Q4 and at end-2017 it will move around the September level.

Chart III.0.6 **Current inflation and one-year ahead inflation expectations***
(y-o-y rates, in %)



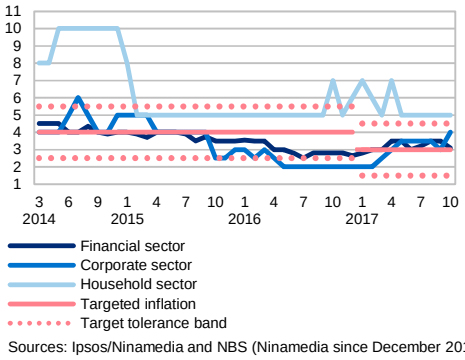
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ninamedia agency since December 2014, and Ipsos and Gallup in the prior period. The survey was not conducted in November 2014.

Chart III.0.7 **Household perceived and expected inflation**
(in index points)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).
* The survey was not conducted in November 2014.

Chart III.0.8 **Two-year ahead inflation expectations***
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).
* The survey was not conducted in November 2014.

Inflation expectations

The results of the inflation expectations surveys conducted by both agencies show that **the financial and corporate sectors expect that inflation will move within the target tolerance band both in the short and medium term**. This indicates that inflationary pressures are still low.

According to the Bloomberg and Ninamedia surveys, in the period since the previous *Report*, **one-year ahead inflation expectations of the financial sector** have moved at a lower level than in the previous period. According to the **Bloomberg** survey, inflation expectations of the financial sector ranged from 3.0% to 3.2%, compared to 3.3% from the previous period. The **Ninamedia**[3] survey indicated that, after the July decline, the expectations of the financial sector have been stable at 3.0%. According to the surveys of both agencies, one-year ahead inflation expectations of the financial sector have been within the NBS target band since October 2013.

One-year ahead expectations of the corporate sector declined in September relative to August by 0.5 pp, and returned to the August level of 3.5% in October. **Inflation expectations of the household sector**, which are usually higher than those of other sectors, remained stable at 5.0%. The results of the qualitative survey[4] suggest that perceived inflation is still higher than expected inflation, which means that a part of the population thinks that in the next year prices will not rise as much as they believe prices rose in the previous year.

Two-year ahead inflation expectations of the financial sector remained at the August level of 3.5% in September, falling to 3.1% in October. Same as short-term expectations, **medium-term expectations of corporates** declined in September by 0.5 pp to 3.0%. In October, expectations of corporates rose to 4.0%. **Two-year ahead inflation expectations of households** have been stable at 5.0% since this May.

Though stable in all sectors, the dispersion of responses was the lowest in the financial sector and the highest among households.

[3] Ninamedia has been conducting a survey on expectations of economic agents since December 2014.

[4] For details on qualitative expectations of households, see Text box 2 of the February 2016 *Inflation Report*, p. 15.

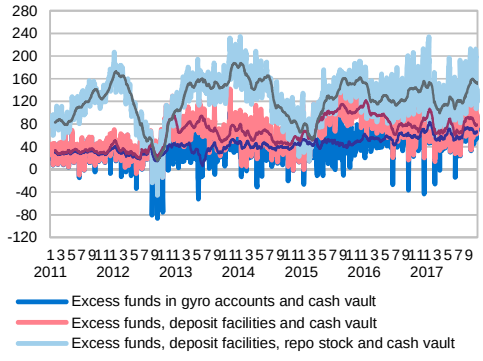
IV Inflation determinants

1. Financial market trends

Monetary policy easing in September and October reflected on interest rates in the interbank money market and the price of dinar government securities. Costs of borrowing of corporates remained the same, while interest rates on loans for financing household consumption rose mildly.

Appreciation pressures continued into Q3. The dinar strengthened, reaching in September its highest value vis-à-vis the euro in the past three years, on the back of factors that included good export performance, high inflow of FDI and foreign investment in dinar government securities, higher non-resident spending on payment cards usual for the summer, and the rise in FX-indexed bank assets. Improving macroeconomic fundamentals contributed to a further decline in the country risk premium, which fell to the lowest point on record.

Chart IV.1.1 **Dinar liquidity**
(daily stock and 30-day moving averages, in RSD bn)



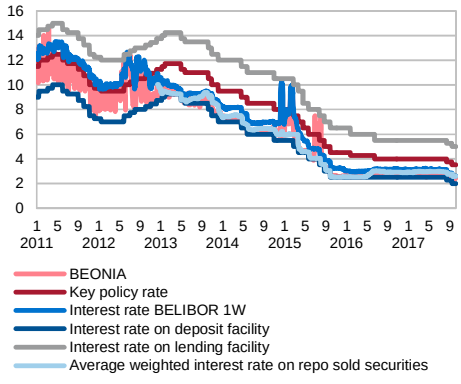
Source: NBS.

Interest rates

Monetary policy easing using the key policy rate drove down the average repo rate.[5] At end-October it measured 2.6%, down by 0.4 pp from end-Q2.

Monetary easing also reflected on **interest rates in the interbank money market**, whose average monthly values dropped by 0.2 pp each in Q3. In September BEONIA averaged 2.6%, while the average daily trading volumes in this market in Q3 (RSD 2.9 bn) were lower by RSD 0.1 bn than in Q2, mainly on account of low volumes in August (RSD 1.8 bn). BELIBOR rates recorded minimum volatility in July and August and declined in September, averaging between 2.8% for the shortest and 3.6% for six-month maturity.

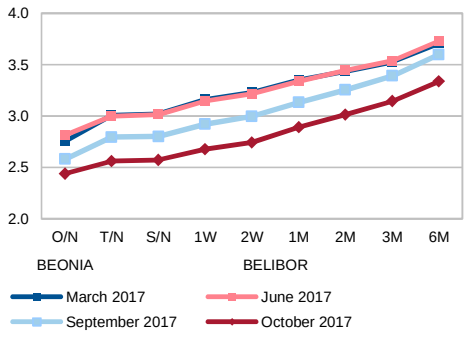
Chart IV.1.2 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

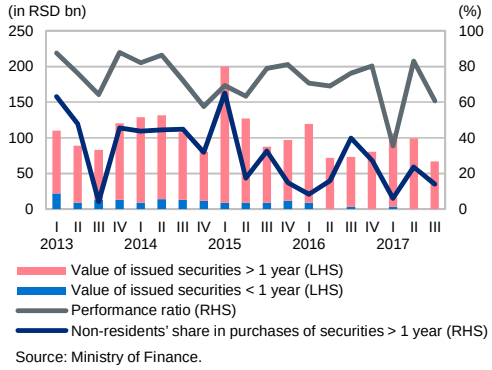
[5] The rate achieved at repo auctions weighted by the amount of sold securities.

Chart IV.1.3 **Yield curve in the interbank money market**
(average values, p.a., in %)



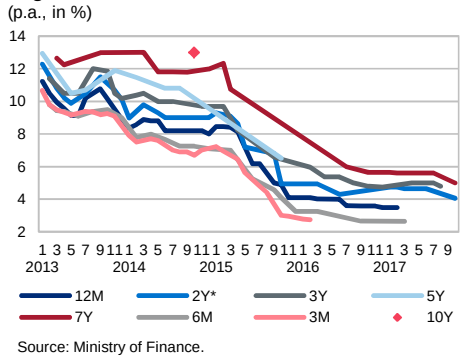
Sources: Thomson Reuters and NBS.

Chart IV.1.4 **Primary market of government dinar securities – performance ratio and foreign investor participation**



Source: Ministry of Finance.

Chart IV.1.5 **Interest rates in the primary market of government securities**
(p.a., in %)



Source: Ministry of Finance.

* Excluding coupon securities with the rate linked to the NBS key policy rate.

The improved fiscal position allowed the government to further cut borrowing in the **primary market of dinar government securities in Q3**, with less frequent auctions and a lower amount of securities offered for sale. At auctions in August, the rate on three-year securities was cut, equalling 4.8% at the end of the month, down by 0.2 pp from May. A notable decline in interest rates was then recorded at auctions in October, when rates on seven-year and two-year securities were reduced by 0.6 pp each, to 5.0% and 4.05%, respectively. All securities offered at the auction of seven-year securities were sold, 70% of which was purchased by non-residents.

No major changes in interest rates occurred at **auctions of euro-denominated government securities** in Q3. The rate on five-year securities was cut by 0.1 pp to 2.6%. Also, rates on two-year securities were trimmed slightly (by 0.05 pp to 1.0%), as were those on three-year securities (by 0.02 pp to 1.85%). Rates on one-year securities (0.55%) were the same as in June, as were the rates on fifteen-year securities (4.2%).

Trading volume in the **secondary market of government securities** in Q3 (RSD 50.8 bn) was similar to that in Q2. Yield rates on shorter maturities mostly remained the same, while rates on maturities over one year declined mildly, ranging in September from 3.4% for the remaining four-month to 5.2% for the remaining 53-month maturity.

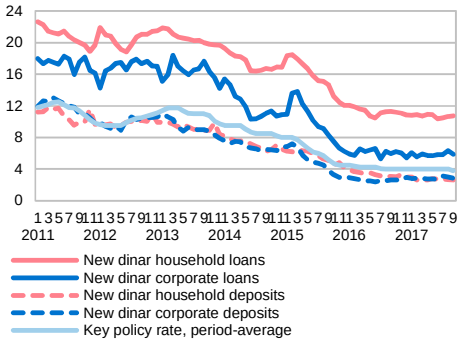
The average **weighted interest rate on new dinar loans to corporates and households** increased by 0.5 pp from June to 8.9% in September. This was due to the growth in the average price of dinar household loans (by 0.4 pp to 10.8%), while the average price of dinar corporate loans (5.9% in September) remained virtually unchanged relative to June. The average price of dinar household loans rose mostly due to the increase in the rates on cash loans to 11.1%, which were 0.5 pp higher than the June minimum. Rates on consumer loans rose (by 1.5 pp to 9.0%), while rates on housing loans fell (by 0.8 pp to 4.9%), as did interest rates on other loans (by 0.6 pp to 9.3%). As regards dinar corporate loans, a decline in rates was recorded for investment loans (by 1.0 pp to 5.7%) and current assets loans (by 0.3 pp to 5.5%), while rates on other loans edged up by 0.5 pp to 6.1%.

The average **weighted interest rate on new euro and euro-indexed loans to corporates and households** remained unchanged from June, measuring 3.1% in September. The average rate on household loans rose by 0.2 pp to 4.0% due to the increase in rates on other loans, which rose by 1.5 pp to 6.5% in September. The price of cash loans (3.3%) stayed the same as in June; the price of

housing loans was mildly adjusted downward (2.95%), while rates on consumer loans were reduced by 0.4 pp to 4.9%. The average weighted rate on corporate loans reached a new low in July and August (2.7%), and came back in September to the June level (3.0%). Rates on current assets loans and investment loans were cut in Q3 by 0.1 pp each, to 2.9% and 3.1% respectively. The same decline was recorded for the rate on import loans (2.2% in September), while other loans were approved at a rate higher by 0.4 pp than in June (3.3%).

In Q3, banks raised their rates on **dinar corporate deposits** slightly (by 0.1 pp to 2.8%), while rates on **deposits in euros** were lowered by the same amount, to 0.3% in September. Rates on household savings were lowered by 0.1 pp each, measuring in September 2.6% on savings in dinars and 0.6% on savings in euros.

Chart IV.1.6 **Interest rates on dinar loans and deposits of corporates and households***
(weighted average values, p.a., in %)



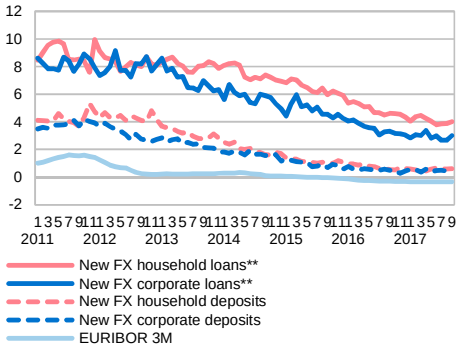
Source: NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

Risk premium

Serbia's risk premium has been hovering around its historic low. Measured by EMBI, it decreased by 23 bp in Q3, and by further 8 bp in October, dropping to 118 bp. On 20 October it reached 114 bp, its lowest value since monitoring of this indicator for Serbia began (April 2005). Risk premia of most other countries in the region recorded similar movements. EMBI Global also fell to its lowest value in three years – losing 20 bp in Q3 and 1 bp in October, arriving at 307 bp.

Serbia's risk premium was affected by domestic, regional and global factors. Of domestic factors, Serbia's risk premium declined predominantly owing to the improvement of macroeconomic fundamentals on the back of the narrowing of imbalances, which also increased Serbia's resilience to potential adverse effects from the international environment.

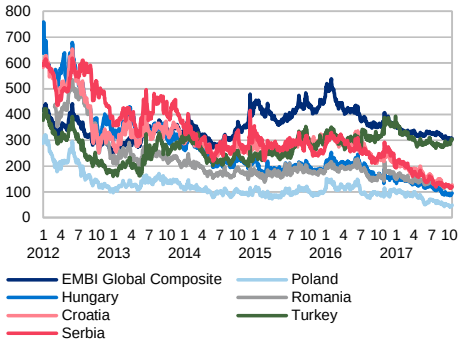
Chart IV.1.7 **Interest rates on FX loans and deposits of corporates and households***
(weighted average values, p.a., in %)



Sources: European Banking Federation and NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.
** Euro and euro-indexed.

Besides domestic factors, Serbia's risk premium declined also due to regional factors. Of these, the most important was certainly the improved growth outlook of countries in the region thanks to the acceleration of euro area economic growth and the optimism concerning its sustainability. Eurobond yields of Serbia and countries in the region fell further in the observed period. It is estimated that the acceleration of economic growth in the euro area will facilitate these countries' adjustment to the expected scale-down of liquidity in the international financial market.

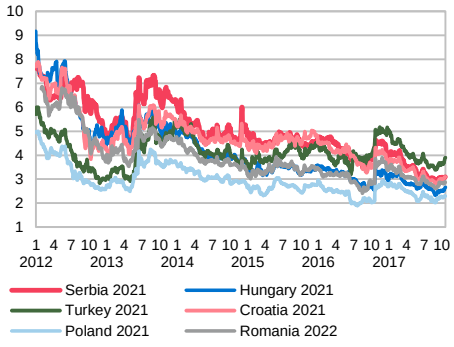
Chart IV.1.8 **Risk premium indicator – EMBI by country**
(daily data, in bp)



Source: JP Morgan.

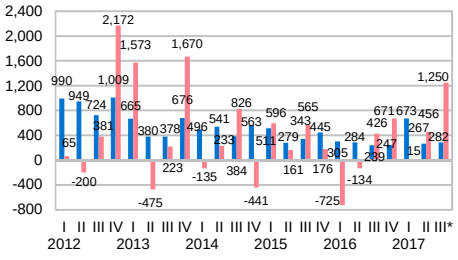
In this period, Serbia's risk premium was also affected by global factors. The acceleration of global economic growth, particularly in the euro area, had a positive

Chart IV.1.9 **Yields on eurobonds of countries in the region**
(in %)



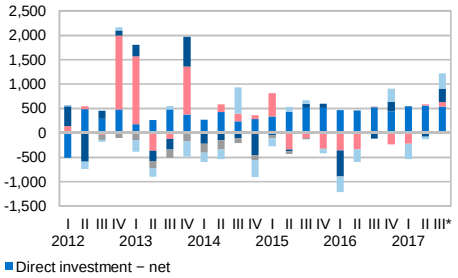
Source: Bloomberg.

Chart IV.1.10 **Current account deficit and net capital inflow**
(in EUR mn)



Sources: SORS and NBS.
* Preliminary data.

Chart IV.1.11 **Structure of the financial account**
(in EUR mn)



Sources: SORS and NBS.
* Preliminary data.

impact, as did the continued implementation of the ECB's monetary stimulus measures. Also, yields on ten-year US Treasuries dropped by early September, primarily due to the slowdown in US economic growth, low inflationary pressures, and some statements of the Fed's officials. However, with the growing expectations that the Fed would raise its policy rate in December after all, yields on ten-year US Treasuries started to go up, narrowing the yield spread relative to Serbia's eurobonds. Optimistic predictions that corporate income tax may soon be lowered, and that economic growth would accelerate, supported the rise in yields on ten-year US Treasuries in October. They reached 2.46%, the highest level in seven months.

Foreign capital inflow

Capital inflow in Q3 was high above the current account deficit, contributing to appreciation pressures in this period. As before, financial account inflow related mostly to FDI, and in Q3 a considerable amount related to higher borrowing of residents, mainly the government. For the second consecutive quarter, an inflow was recorded with respect to portfolio investment.

Net FDI inflow remained high in Q3, equalling EUR 542.0 mn according to preliminary data. Thus, the capital inflow on this account from the start of the year reached EUR 1,639.6 mn. In 2017, investment remained highly diversified by activity. The largest amounts were channelled to manufacturing, construction, real estate business, the financial sector and trade. Around three-quarters of FDI came from EU countries, primarily the Netherlands, Italy and Germany, while around 12% of FDI came from Asian countries, mainly China, Taiwan, Hong Kong and UAE.

Trends in the first nine months of this year attest to the further improvement in the investment environment and favourable perception of foreign investors regarding long-term investment in Serbia, which is confirmed by Serbia's advance in the World Economic Forum's Global Competitiveness Report and the World Bank's Doing Business list.[6] In 2017 we estimate a net FDI inflow of around EUR 2.1 bn, which should fully cover the current account deficit, expected to equal around EUR 1.7 bn (4.6% of GDP).

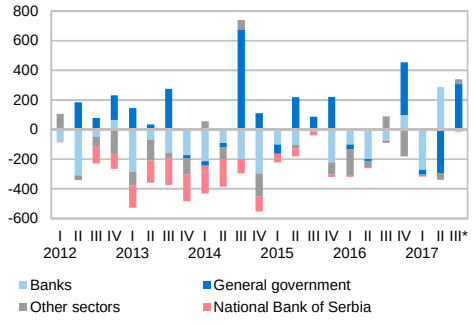
This was the second consecutive quarter that saw an inflow with respect to **portfolio investment**, which

[6] See Text box 3, page 34.

equalled EUR 92.0 mn in Q3. Though the majority of the inflow related to foreign investment in government securities with longer maturities in the primary market, from July, after quite some time, foreign investors have again become net buyers of securities in the secondary market as well. A part of the inflow resulted from the collection of foreign securities owned by residents that became due.

In Q3, residents net borrowed EUR 322.4 mn with respect to **financial loans**, mainly owing to the increase in net borrowing of the government (by EUR 305.9 mn). Of this, the majority related to loans for public enterprise reforms, the RS budget and road infrastructure. Foreign credit liabilities of enterprises also grew, by EUR 33.2 mn, while the rise in bank receivables from abroad slightly exceeded their net foreign borrowing (by EUR 12.6 mn).

Chart IV.1.12 **Financial loans of residents – change in net borrowing**
(in EUR mn)



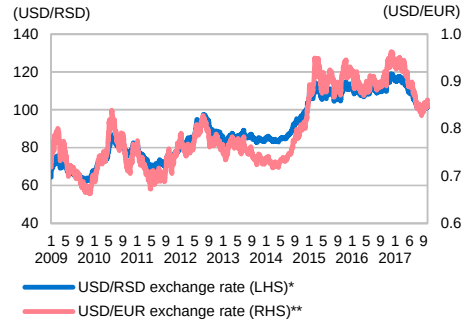
Source: NBS.
* Preliminary data.

Trends in the FX market and exchange rate

Appreciation pressures continued during Q3 – in September the dinar reached its highest value relative to the euro in three years (since October 2014). End-of-period, in Q3, the dinar gained 1.2% against the euro and 4.3% against the dollar, mostly owing to the euro's continued strengthening vis-à-vis the dollar in Q3.

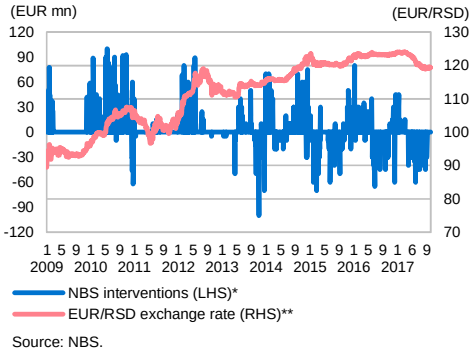
A number of factors contributed to appreciation pressures in Q3. Firstly, foreign investors' interest in the domestic market increased, leading to higher inflow of portfolio investment and FDI. This resulted from favourable economic outlook and strengthening of macroeconomic stability, as indicated by the achieved fiscal surplus of 2.6% of GDP at consolidated level from the start of the year. On the other hand, FX demand of enterprises (measured by the net sale of bank foreign currency to enterprises) was 12% lower relative to Q2, partly owing to improved export performance. At the same time, purchases of foreign cash, though lower than in Q2, were more than enough to cover net FX demand of domestic enterprises and foreign investors during most of the period. During the summer, non-resident spending increased and, on these grounds, receivables under foreign payment cards. Appreciation pressures were supported by an increase in FX-indexed assets of banks,[7] which was also related to FX-indexed corporate lending.

Chart IV.1.13 **Movements in RSD/USD and EUR/USD exchange rates**



Source: NBS.
* USD 1 in RSD.
** USD 1 in EUR.

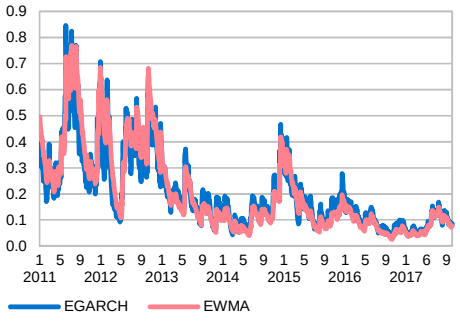
Chart IV.1.14 **Movements in EUR/RSD exchange rate and NBS FX interventions**



Source: NBS.
* + sale; - purchase.
** EUR 1 in RSD.

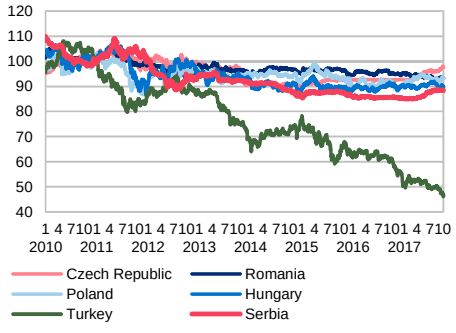
[7] In an effort to match their FX positions, banks increase their FX supply in the market.

Chart IV.1.15 **Short-term volatility of the RSD/EUR exchange rate**
(in %)



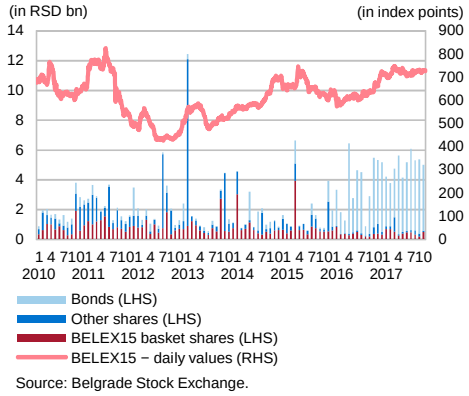
Source: NBS.

Chart IV.1.16 **Movements in exchange rates of national currencies against the euro***
(daily data, 31 December 2010 = 100)



Sources: NBS and websites of central banks.
* Growth indicates appreciation.

Chart IV.1.17 **BELEX15 and Belgrade Stock Exchange turnover**



Source: Belgrade Stock Exchange.

To ease excessive short-term strengthening of the dinar against the euro, the NBS intervened in the IFEM by buying foreign currency in Q3 as well, purchasing a total of EUR 605.0 mn, most of it in August (EUR 290.0 mn). Regardless, measured by EWMA[8] and EGARCH,[9] the dinar was slightly more volatile against the euro than in Q2.

Trading volumes in the IFEM rose in Q3 to a daily average of EUR 30.7 mn, up by EUR 8.8 mn from Q2.[10] The highest volume was recorded in September (EUR 35.0 mn daily average).

The volume of transactions at regular FX swap auctions organised by the NBS increased in Q3. Growth was recorded primarily at three-month auctions, when the NBS bought and sold EUR 65.0 mn (EUR 27.0 mn more than in Q2), while at two-week auctions it bought and sold EUR 85.0 mn (EUR 2.0 mn more than in Q2). The amount of interbank swaps (EUR 26.9 mn) was almost the same as in Q2.

Of the currencies of countries in the region with similar exchange rate regimes, as in Q2, besides the dinar the Czech koruna also strengthened (by 0.8%). Other currencies depreciated against the euro: the Hungarian forint by 0.8%, Romanian lei by 1.0%, Polish zloty by 1.9%, while the Turkish lira lost the most (4.7%).

The dinar exchange rate against the euro was relatively stable in October. The NBS intervened only once early in the month by buying EUR 15.0 mn.

Stock exchange trends

End-of-period, BSE indices BELEX15 and BELEXline rose by 1.3% and 4.0%, respectively in Q3. BELEX15 measured 720.8 index points, while the general index BELEXline measured 1,604.3 index points. Relative to the values at the start of the year, indices rose by 0.6% and 2.2%, respectively.

Despite the lower trading in shares of companies included on the BSE Prime Listing in August, total trading in shares went up by RSD 0.2 bn in Q3 compared to Q2, reaching RSD 1.6 bn. The decline in the prime segment

[8] EWMA – Exponentially Weighted Moving Average.
[9] EGARCH – Exponential General Autoregressive Conditional Heteroskedasticity.
[10] Excluding the NBS.

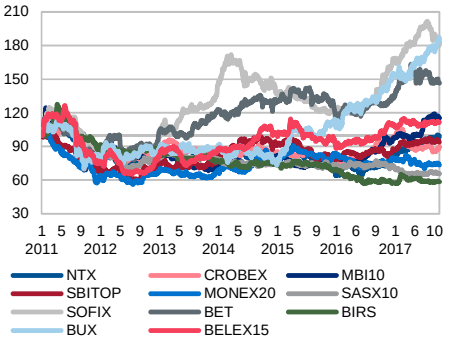
turnover was offset by trading in shares, mostly of the banking sector, in the open market segment. Around 60% of the turnover related to BELEX15 shares. Foreign investors participated in the total turnover by RSD 0.6 bn and net purchased shares in the amount of RSD 0.1 bn at the quarterly level.

The majority of stock exchange turnover during the summer was trading in bonds, all of which related to long-term RS bonds. Total trading in bonds rose by 11% from end-Q2, reaching RSD 15.1 bn. Participation of foreign investors in total trading in bonds came at RSD 34 mn.

BSE market capitalisation came at RSD 539.8 bn at end-September, down by RSD 6.1 bn from end-June. Of this, regulated market capitalisation gained RSD 3.8 bn, and MTP[11] capitalisation lost around RSD 10 bn due to the exclusion of some issuers from this segment. Due to lower market capitalisation, the share of market capitalisation in estimated GDP declined by 0.3 pp relative to Q2, coming at 12.5% in Q3.

Stock exchange indices in the region recorded diverging movements in Q3. The Skopje stock exchange index MBI10 gained the most (17.9%), while the Montenegro stock exchange index MONEX20 recorded the sharpest fall (4.9%).

Chart IV.1.18 **Stock exchange indices across the region**
(in index points, normalised, 31 December 2010 = 100)



Sources: BSE and websites of regional stock exchanges.

2. Money and loans

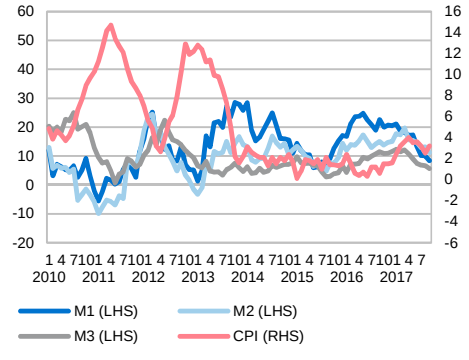
In Q3 monetary aggregates increased, driven by growth in corporate deposits and household FX savings, which reached its new high. Lending continued to recover, with the growing contribution of corporate lending, despite the sizeable NPL write-offs.

Monetary aggregates

In Q3, dinar reserve money rose by 7.3% in nominal terms. This growth was behind the increase in total reserve money, which recorded a 4.6% nominal increase in Q3. Y-o-y, in September, dinar reserve money expanded by 3.1% and total reserve money by 2.5% in real terms.

The largest contribution to the growth of dinar liquidity of banks in Q3 came from NBS's FX purchases in the IFEM

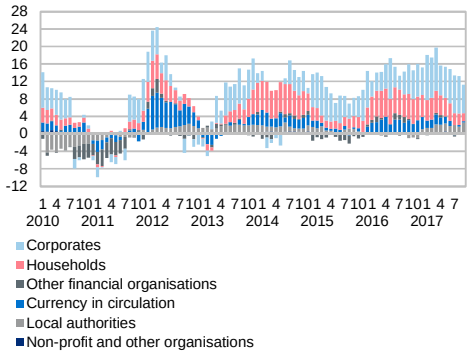
Chart IV.2.1 **Monetary aggregates and CPI**
(y-o-y rates, in %)



Sources: SORS and NBS.

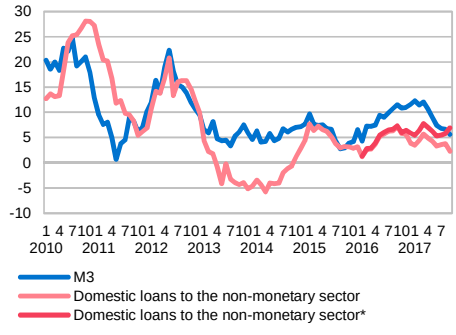
[11] MTP is the multilateral trading platform, set up by the Belgrade Stock Exchange and incorporating currently listed shares of companies not eligible for regulated market listing.

Chart IV.2.2 **Contribution to y-o-y growth in M2, by sector**
(in pp)



Source: NBS.

Chart IV.2.3 **Domestic loans to the non-monetary sector and M3**
(nominal y-o-y rates, in %)



Source: NBS.
* Excluding the effect of NPL write-off in the past year.

Table IV.2.1 **Monetary aggregates**
(real y-o-y rates, in %)

	2016		2017		Share in M3 Sep. 2017 (%)
	Dec.	March	June	Sep.	
M3	9.8	8.2	3.7	2.4	100.0
FX deposits	7.9	4.5	0.1	-0.5	63.3
M2	13.3	15.6	10.6	7.7	36.7
Time and savings dinar deposits	-0.4	20.3	14.7	16.7	9.3
M1	18.6	14.1	9.4	5.0	27.3
Demand deposit	21.1	16.5	11.9	7.3	20.7
Currency in circulation	12.1	7.5	2.1	-1.8	6.7

Source: NBS.

(RSD 79.0 bn) and FX payment transactions with Kosovo and Metohija (RSD 15.9 bn). On the other hand, the government had the greatest impact on the decrease in dinar reserve money in Q3 (RSD 67.6 bn). Thanks to the results of the fiscal consolidation[12], primarily the increase in budget revenue, government dinar deposits with the NBS were RSD 42.2 bn stronger in Q3, despite the FX purchases aimed at settling the FX liabilities. Dinar reserve money declined also due to larger bank investment in repo securities (by RSD 6.5 bn).

Broader monetary aggregates also expanded in Q3, mostly on the back of higher corporate account balances and FX savings of households. Relative to June, in September M1 was higher by 2.4%, M2 by 3.1%, and M3 by 1.6% in real terms.

The increase in in dinar deposits in Q3 was almost solely driven by the rise in corporate deposits – total demand deposits increased by RSD 11.4 bn, and savings and time deposits by RSD 10.2 bn each. In shorter maturities, deposit growth was dispersed among corporates in all sectors, while in longer maturities the main drivers were increases in trade companies' accounts, which corresponds to the growth in activity and credit borrowing in this sector of the economy. On the other hand, deposits of other sectors remained broadly unchanged, while funds in the accounts of households and OFOs decreased mildly. Household dinar savings amounted to RSD 48.7 bn in September.

Household FX savings went further up in Q3 (by EUR 126.0 mn), to almost EUR 9.0 bn in September. This, together with higher amounts in corporate accounts and, to a lesser extent, in accounts of OFOs and non-profit organisations, pushed total FX deposits up by EUR 210.3 mn in Q3.

In y-o-y terms, the growth in monetary aggregates slowed down further. As transaction deposits rose slower than the year before, the deceleration was most pronounced in M1, which gained 5.0% y-o-y in real terms in September. That same month, y-o-y growth of M2 came at 7.7%, and of M3 at 2.4%.

[12] In the first nine months of 2017, the general government recorded a surplus of RSD 82.0 bn.

Loans

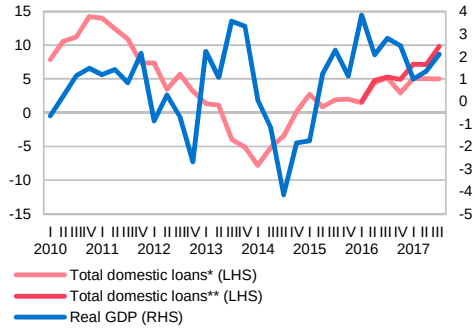
Excluding the exchange rate effect[13], domestic loans increased by 2.2% in Q3, recording growth both in household and corporate segments. In y-o-y terms, domestic loans gained 5.0% in September, with household loans increasing by 11.4% from the year before, and corporate loans by 0.1% – despite sizeable NPL write-offs and sales to persons outside the banking sector. Excluding the effects of NPL write-offs over the last year[14], corporate loans expanded by 6.5% and total loans by 9.8%, in y-o-y terms.

The effect of NPL write-offs intensified at end-Q3, owing to entry into force of the Decision on the Accounting Write-off of Bank Balance Sheet Assets on 30 September. According to this Decision, banks are required to write off all loans whose allowances for impairment equal 100% of their gross book value.

More favourable trends in corporate lending, in place since June, continued into Q3, so that, excluding the exchange rate effect, **corporate loans** went up by 2.4% or RSD 24.2 bn. The growth related mainly to companies (RSD 22.3 bn), but public enterprise borrowing also went up (RSD 1.9 bn). It is worth noting that the growth was recorded despite the sizeable NPL write-offs (RSD 40.5 bn in Q3) and the sale of RSD 5.4 bn of these loans to persons outside the banking sector. Observed by purpose, current assets loans continued to dominate (48.0%), while investment loans made up 31.7% of these receivables. Owing to the recovery of investment lending over the last two and a half years, the maturity of the credit portfolio was extended, and in September loans with original maturity of over two years made up more than 63% of corporate loan receivables.

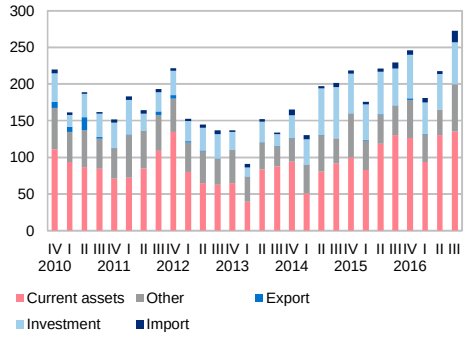
More favourable tendencies are also confirmed by the total amount of new corporate loans in Q3 (RSD 272.6 bn), higher by one fourth when compared to Q2. Current assets loans made up almost one half of new corporate loans in Q3. A relatively high share of investment loans in new loans also held on (21.1%), and thanks to higher amounts approved in August, the share of import loans edged up to 5.7%.

Chart IV.2.4 **Lending activity and GDP**
(y-o-y rates, in %)



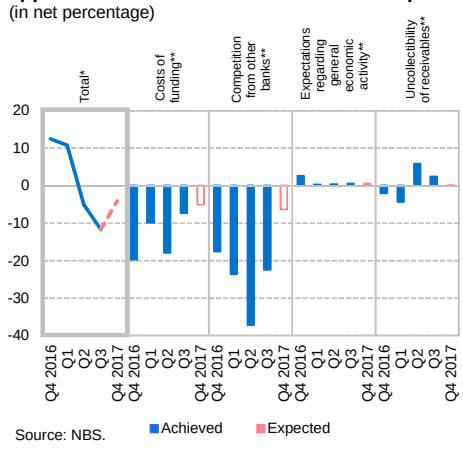
Sources: NBS and SORS.
* Excluding the exchange rate effect.
** Excluding the effect of NPL write-off in the past year.

Chart IV.2.5 **Structure of new corporate loans**
(in RSD bn)



Source: NBS.

Chart IV.2.6 **Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to enterprises**
(in net percentage)



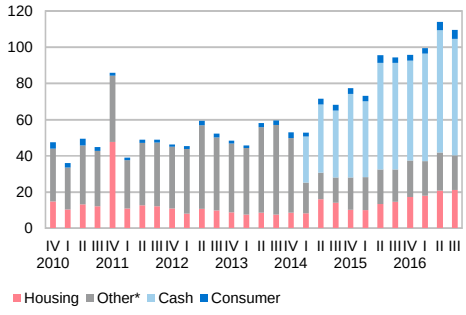
Source: NBS.
* Positive values indicate tightening and negative easing of credit standards relative to the previous quarter.
** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

[13] Calculated at the dinar exchange rate against the euro, Swiss franc and US dollar as at 30 September 2014 (the so-called programme exchange rate for the purpose of monitoring the IMF arrangement), according to the currency composition of loan receivables.

[14] In the past 12 months, concluding with September 2017, banks wrote off RSD 103 bn in NPLs, RSD 79 bn of which were corporate NPLs.

The results of the NBS's Bank Lending Survey from October[15] show that banks, as expected, additionally eased corporate credit standards in Q3. Standards were eased primarily for small and medium-sized enterprises, on the back of interbank competition, cheaper funding sources and higher propensity for risk. Same factors should contribute to further easing of credit standards in Q4 as well. Corporate borrowing terms were more favourable due to lower interest margins and accompanying costs, with the extension of loan maturity and higher maximum loan amount, which is probably why collateral requirements were somewhat stricter. Corporate loan demand continued up and, in banks' view, was primarily led by investment financing and to a lesser extent by current assets financing and debt restructuring. The same factors, with the continued dominant impact of investment, should remain the key drivers of demand growth in Q4 as well.

Chart IV.2.7 **Structure of new household loans**
(in RSD bn)



Source: NBS.
* Until December 2014, the 'Other loans' category included both cash and other loans.

Household lending continued up in Q3 and, excluding the exchange rate effect, increased by 2.4%, or RSD 20.1 bn. The growth was lower compared to the earlier quarters, due to somewhat smaller volume of new loans, but also a sizeable NPL write-off in September (RSD 12.6 bn). While showing some signs of deceleration, cash loans (including refinancing loans) continue to provide the greatest contribution to growth, making up 37.4% of household loans in September. Housing loans also continued to provide impetus to growth, as they climbed by RSD 4.8 bn in Q3, excluding the exchange rate effect. In September, banks also approved dinar housing loans at a rate of 4.9% and repayment term of twenty years. Since the start of the year, housing loans increased by RSD 12.4 bn, which is almost two and a half times more than in the first nine months of 2016.

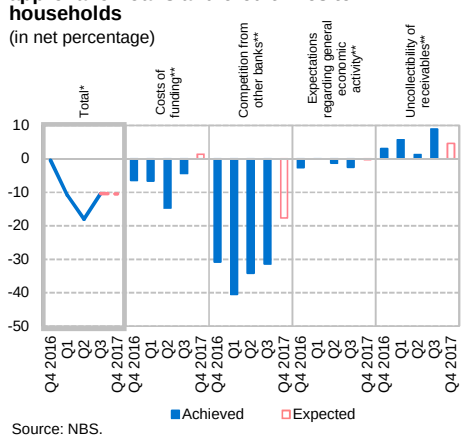
The volume of new household loans in Q3 (RSD 109.6 bn) was by 3.9% lower than in Q2 and by 16.1% higher than in the same period last year. Households still predominantly used dinar cash loans and refinancing loans. During Q3, these loans made up 58.3% of new household loans and 71% of them were agreed with the repayment term of over five years. Consistent with the more favourable trends in the real estate market, housing loans continued to recover. Q3 saw the approval of RSD 21.1 bn in housing loans, which is an increase of 43.3% compared to the same period last year. Although the

[15] The NBS has conducted the Bank Lending Survey since the start of 2014.

major part of this increase refers to new loans, the share of refinanced housing loans also increased. This may be associated with the more favourable terms of borrowing, given a significant fall in interest rates in the past period, i.e. the fall of the average interest rate on euro-indexed loans to its new low in August (2.9%), where it hovered in September too. Credit card borrowing hovered at a similar level as in Q2, while current account overdrafts rose slightly.

The findings of the October Lending Survey show that banks continued to loosen household credit standards in Q3. This was mainly prompted by interbank competition, and to a lesser extent also by cheaper funding sources, increased propensity for risk, more favourable outlook in the real estate market and improved expectations regarding the economic activity. Loan maturities were additionally extended, and banks continued to lower their margins and accompanying costs, with less strict collateral requirements. Demand continued to grow and related primarily to dinar cash loans and refinancing loans, as well as FX-indexed housing loans. Loan demand expanded mostly on the back of refinancing of existing obligations and real estate purchases, as well as owing to the increase in private sector employment and wages and purchases of durable consumer goods. Further easing in credit standards and a rise in demand are expected in Q4 as well.

Chart IV.2.8 **Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to households**
(in net percentage)



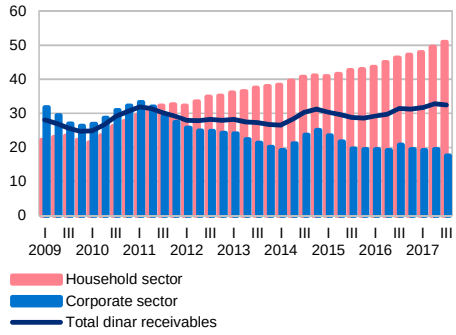
Source: NBS.

* Positive values indicate tightening and negative easing of credit standards relative to the previous quarter.

** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

The **share of dinar receivables** in total **corporate and household** receivables at end-September stood at 32.4%, up by 1.2 pp from end-2016. Households continued to primarily borrow in dinars – during nine months, on average, 71% of new loans were in dinars, which contributed to further dinarisation of household lending, which gained 3.8 pp since the start of the year, reaching 50.8% in September. The share of dinar corporate receivables in September (17.5%) was by 1.9 pp lower than at end-2016, mostly due to the write-off of dinar receivables in September, when this share was reduced by 1.6 pp.

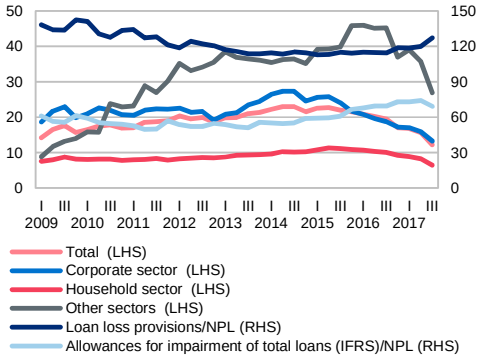
Chart IV.2.9 **Share of dinar in total bank receivables from corporate and household sectors**
(in %)



Source: NBS.

NPL amounts and their share in total loans continued to decrease in Q3 thanks to the successful implementation of the NPL Resolution Strategy. That fall additionally accelerated in September, with the beginning of application of the Decision on the Accounting Write-off

Chart IV.2.10 **NPL share in total loans, gross principle**
(in %)



Source: NBS.

of Bank Balance Sheet Assets. In September only, banks wrote off RSD 53.6 bn worth of NPLs. This led to the reduction in the share of NPLs calculated at a gross principle, by 2.5 pp to 12.2%, the lowest value of this ratio after January 2009. Compared to June, it slid by 3.4 pp and compared to end-2016, by 4.8 pp, supported by intensive NPL resolution activities on the one hand and credit growth on the other. In Q3, the NPL share in the corporate sector dropped by 2.7 pp to 13.2% in September[16], and in the household sector by 1.8 pp to 6.5%.[17] In addition, in September, allowances for impairment to total loans stood at 69.1% of NPLs (which is by 0.4 pp more than one year ago), and regulatory provisions for on-balance sheet exposure at 127.2%, still fully covering the gross NPLs. That month, the capital adequacy ratio stood at 22.5%, indicating high capitalisation of the domestic banking sector.

[16] It includes companies and public enterprises. Looking at companies only, NPL share in total loans stood at 13.4% in September, down by 2.5 pp from June.

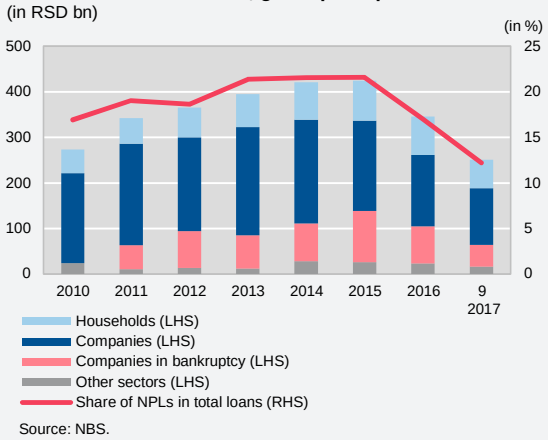
[17] If we include entrepreneurs and private households, that share also decreased, by 1.8 pp to 7.1%.

Text box 2: Lending growth and NPL resolution

In the course of 2017, banks and the NBS continued their NPL resolution efforts, while lending growth accelerated. Knowing that NPLs reduce loans in the short run in accounting terms, the fact that lending growth rates are positive indicates acceleration in lending in 2017. In the first nine months of the year domestic loans rose by 5.6% (excluding the exchange rate effect), with corporate loans going up by 2.7%, and household loans by 9.5%. At the same time, NPL figures continued to decline both in absolute and relative amounts. In the first nine months of 2017, total gross NPLs decreased by RSD 94.4 bn, or 27.3%, with corporates and companies in bankruptcy accounting for 70% of the decrease. This, coupled with lending growth, led to a further decline in the NPL share in total loans, to 12.2% in September, the lowest level after January 2009. The NPL share declined by 4.8 pp from end-2016, and by 10.1 pp from August 2015, when the NPL Resolution Strategy was adopted.

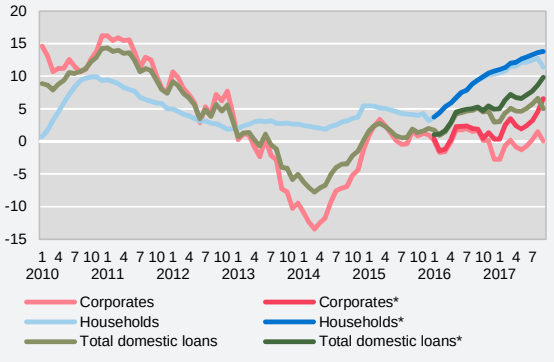
Strengthening bank capacities for NPL resolution and further development of the NPL market are among the key Strategy objectives, and the progress achieved in these areas is also confirmed by the fact that NPLs have mainly been reduced through collection, write-off and sale. Although major write-offs are typical for the end of the year, the first eight months of 2017 saw 12.9 bn -worth of NPL write-offs, double the amount from the same period last year. Effective as of 30 September is the Decision on the Accounting Write-off of Bank Balance Sheet Assets,[1] requiring the write-off of all bank loans whose allowances for impairment equal 100% of their gross book value, so RSD 53.6 bn in NPLs were written off in September only, which is RSD 7.9 bn more than in the whole of 2016. The bulk of that amount referred to corporate loans (RSD 37.8 bn), while household loan write-offs also increased (RSD 12.6 bn).[2] Thus, the effect of NPL write-offs on the shrinking of the loan stock in the short run will additionally intensify.

Chart O.2.1 **NPL structure, gross principle**
(in RSD bn)



Source: NBS.

Chart O.2.2 **Effect of NPL write-offs on lending growth**
(y-o-y growth rates at the programme exchange rate, in %)



Source: NBS.
* Excluding the effect of NPL write-offs over the last year.

The write-off and sale of receivables reduce the stock of loans, resulting in lower and even negative lending growth rates in some periods. Still, the decline of receivables on these grounds essentially differs from the fall caused by the maturing of loans not fully compensated for by new lending. Bearing this in mind, it is justifiable, in addition to the standard approaches in measuring lending growth, to also measure lending growth upon exclusion of specific factors, in this case NPL write-off. In both cases, before and after the exclusion of the write-off effect, growth rates indicate recovery in lending. In the first case, y-o-y growth of total loans accelerated to 5.0% in September, with corporate loans rising by 0.1% and household loans by 11.4% compared to one year ago. Excluding the effect of NPL write-offs during the last year

[1] http://www.nbs.rs/internet/latinica/20/kpb/otpis_bilansne_aktive.pdf.

[2] According to the sector classification used in monetary statistics, the corporate sector includes public enterprises, companies and companies in bankruptcy, and the household sector – households, entrepreneurs, private households with employed persons and registered agricultural producers.

(at end-September, loan write-offs amounted to RSD 102.9 bn, RSD 79.2 bn of which in the corporate and RSD 20.2 bn in the household segment), y-o-y growth in total loans in September reached 9.8%, with corporate loans rising by 6.5% and household loans by 13.8%. The stock of corporate receivables is reduced also through the sale of receivables to persons outside the banking sector. During 2016, RSD 57.1 bn worth of loans were sold to persons outside the banking sector, and in the first nine months of 2017, RSD 14.6 bn more. Still, the exact impact of the sale on lending growth is hard to quantify, given that one part of those receivables had been previously written- off and was outside the banks' balance sheets.

Although NPL resolution currently dampens lending growth, it is expected to yield positive effects in the coming period, since it creates room for new lending, which will, in turn, provide additional boost to economic growth. Namely, the NPL reduction entails also the reduction in loan loss provisions, which frees up potential for new lending, and the lower level of NPLs may also be one of the factors that will encourage the easing of credit standards, as was the case in H2 2016 and Q1 2017.

3. Real estate market

Declining prices of real estate and lower costs of borrowing in Q3 led to higher demand for housing loans, which, together with the higher number of construction permits issued, contributed to a more favourable outlook in the real estate market.

As measured by DOMex,[18] the average price of real estate in Serbia dropped by 1.0% in Q3. Prices declined across all regions, except in Belgrade. The major fall was recorded in the Šumadija and Western Serbia region, by 7.7%, while prices in the Belgrade region went up by 3.6%. Y-o-y, prices of real estate in Serbia edged up slightly in Q3 (by 0.1%).

In Q3, the average price of real estate in Serbia equalled EUR 864.7 per square metre and in the Belgrade region EUR 1,156.4, which means that the ratio of prices in Belgrade and other regions inched up from 1.74 in Q2 to 1.90 in Q3.

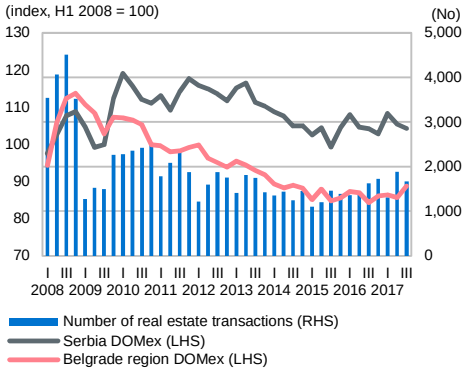
After considerable growth in Q2 (by 44.1%), the number of real estate transactions[19] decreased by 11.5% in Q3, while rising by 2.6% y-o-y. Compared to the quarter before, the turnover contracted in all regions, with the exception of Southern and Eastern Serbia, which saw an increase (12.2%). The number of residential construction permits continued up, rising by 25% in the first two months of Q3 relative to Q2 and by 52.2% y-o-y.

According to the Bank Lending Survey, housing loan demand expanded in Q3. The growth is expected to continue in the period ahead, supported by lower interest rates on housing loans and the more favourable outlook in the real estate market, as well as by employment and wage growth.

4. Aggregate demand

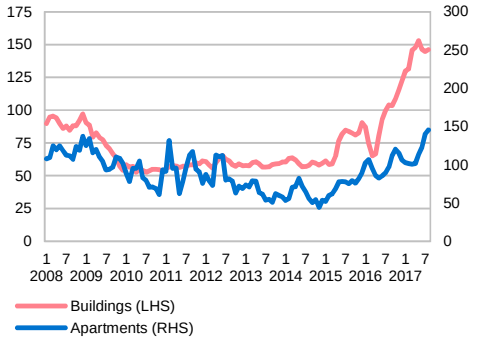
The growth of private investment and household consumption accelerated in Q3, contributing to faster GDP growth (1.1% s-a in Q3 vs. 0.4% s-a in Q2). Owing to favourable foreign trade movements, i.e. continued growth in exports and a decline in imports, net exports were also a positive contributor. Private investment and

Chart IV.3.1 **DOMex and real estate transactions**



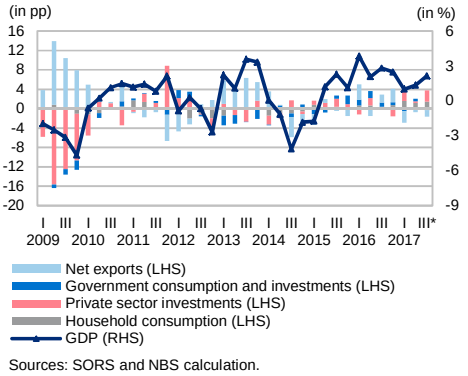
Source: National Mortgage Insurance Corporation.

Chart IV.3.2 **Indices of the number of issued construction permits**
(3M averages s-a, 2016 = 100)



Sources: SORS and NBS calculation.

Chart IV.4.1 **Contributions to y-o-y GDP growth rate – expenditure side***

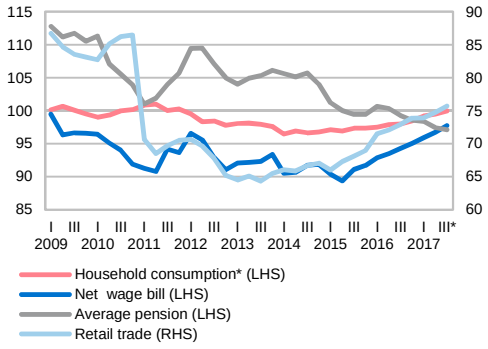


Sources: SORS and NBS calculation.
* NBS estimate.

[18] The DOMex is published by the National Mortgage Insurance Corporation and relates only to real estate purchased by insured loans.

[19] The number of real estate transactions and apartment prices per square meter also relate only to the real estate purchased by insured loans.

Chart IV.4.2 **Household consumption**
(s-a data, H1 2008 = 100)



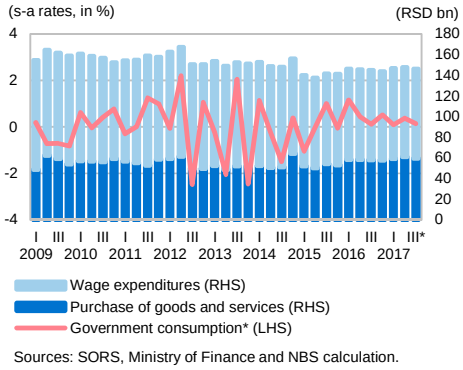
Sources: SORS and NBS calculation.
* NBS estimate.

Table IV.4.1 **Movement in main indicators and sources of household consumption**
(real y-o-y growth rates in %)

	2016	2017		
	Q4	Q1	Q2	Q3
Household consumption	**1.0**	**2.0**	**1.6**	**2.0***
Indicators				
Retail trade	6.7	3.7	3.4	3.7
Catering turnover	6.6	10.7	5.7	8.3**
Number of domestic tourists	10.9	2.7	10.1	7.6
tourists	9.4	-0.6	10.8	7.5
Consumer goods imports (BEC classification), nominal	3.1	5.8	-0.6	2.2
Sources				
Total wage bill	3.6	3.4	3.5	3.6
Bill of total social transfers	-5.2	-1.6	-2.4	-5.7
Pension bill	-0.9	-2.3	-2.9	-2.3
Net inflow of remittances, nominal	-15.5	8.3	4.1	0.6
New cash loans, nominal	20.0	41.9	14.7	9.6

* NBS estimate.
** July-August.
Sources: SORS and NBS calculation.

Chart IV.4.3 **Government consumption**
(in real terms)



Sources: SORS, Ministry of Finance and NBS calculation.
* NBS estimate.

household consumption are estimated to have been the key drivers of y-o-y GDP growth in Q3, which according to the preliminary estimates of the Serbian Statistical Office reached 2.1%.

According to the NBS's estimate, GDP growth in 2017 should measure around 2% under the influence of domestic demand, primarily household consumption and private investment. On the other hand, a negative contribution is expected from net exports, largely due to increased energy imports at the start of this year because of cold weather and expectedly lower exports of agricultural products resulting from an underperforming agricultural season.

Domestic demand

Thanks to the continued recovery in the labour market and favourable monetary conditions, **household consumption** is estimated to have expanded further in Q3 (0.5% s-a), giving a positive contribution to GDP growth (0.4 pp). Persistent growth is indicated primarily by positive movements in some service sectors (trade and food and accommodation services), whose activity indicators posted a further rise in Q3. Retail trade gained 1.3% s-a, catering 4.5% s-a, while the number of tourist arrivals and overnight stays increased by 2.0% s-a and 0.3% s-a, respectively. In y-o-y terms, household consumption remained on an upward path in Q3 (2.0%) growing somewhat faster than in Q2 and giving a positive contribution to GDP growth (1.4 pp).

The rise in formal employment in Q3 was more pronounced than the fall in the average net wage, so the real net wage bill increased (1.0% s-a). In addition, new consumer loans continued up, while the net remittances inflow in Q3 was close to its level from the same period last year.

Reversing the upward movement from Q2, **final government consumption** is estimated to have stagnated in Q3. On the one hand, this reflected the continued rightsizing of public sector employment and lower wage expenditures on that account. On the other hand, while expenditures for the purchase of goods and services continued up, they did so at a slower pace than in H1. In y-o-y terms, final government consumption grew slower than in the quarter before (0.6% in Q3 vs. 1.6% in Q2) and gave a positive contribution to GDP (0.1 pp).

Continued improvement of the business environment, evidenced by Serbia's further progress in international competitiveness lists, reflected positively on fixed investment, which remained on an upward path. **Private investment** is estimated to have edged up by 3.1% s-a in Q3, adding 0.5 pp to GDP. Such movements are signalled primarily by the growth in domestic production of capital goods (2.5% s-a) and construction indicators. The value of the works performed increased by 6.3% y-o-y in Q3, and the number of construction permits issued, along with the formal employment in construction, continued up as well. Private investment accelerated in y-o-y terms in Q3 (8.9%), giving a positive impetus to GDP growth (1.5 pp).

The rise in private investment is signalled also by the movements in their main funding sources. Apart from own funds generated by higher profitability of companies, the FDI inflow remained high and widely dispersed by projects and geographical areas. A part of investment was financed by investment loans, which kept a relatively high share (around 21%) in total new loans.

According to our estimate, **government investment** was also on the rise (3.9% s-a), giving a positive 0.1 pp contribution to GDP movements. This resulted from continued implementation of infrastructure projects, as shown by further growth of capital expenditures in the budget. In y-o-y terms, government investment declined in Q3 (by 11.2%), giving a 0.4 pp negative contribution to GDP.

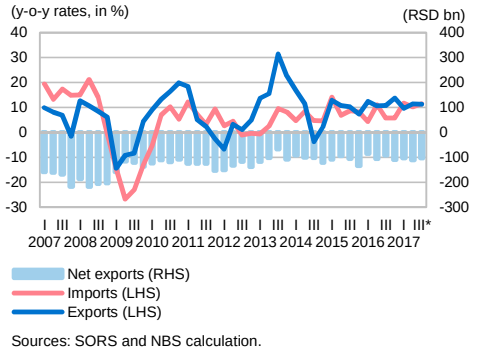
A negative impetus to GDP movements in Q3 came also from declining **inventories** (0.6 pp), mainly due to the fact that agricultural inventories were lower than usual for this period of the year.

Table IV.4.2 **Investment indicators**

	2016		2017		
	III	IV	I	II	III
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Industrial inventories	5.9	-0.3	5.3	2.7	0.8
Industrial production capital goods	-3.1	3.6	9.6	-2.4	2.5
Exports of equipment*	0.3	5.6	-2.5	3.9	3.0
Imports of equipment*	-1.5	1.1	-0.2	7.2	-4.1
Inventories of capital goods	1.6	-1.5	3.3	7.8	-0.3
Industrial production of intermediate goods	-1.3	0.0	6.0	5.2	-0.5
Exports of intermediate goods*	1.1	8.6	8.6	5.3	1.3
Imports of intermediate goods*	1.1	7.1	4.5	3.9	1.5
Inventories of intermediate goods	4.6	2.4	3.4	5.9	1.8
Industrial production of construction materials	0.4	0.1	0.8	-0.8	0.1
Inventories of construction materials	2.5	4.9	3.1	1.7	-1.6
Government investment**	-1.0	-8.1	-9.3	8.0	3.9

Source: SORS and NBS calculation.
* Exports and imports are denominated in euros.
** Government investment spending is deflated by the industrial producer price index.

Chart IV.4.4 **Exports and imports of goods and services***
(in previous-year constant prices, ref. 2010)



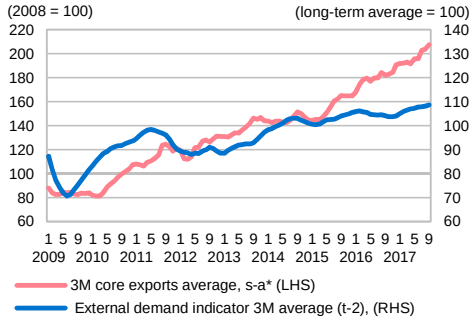
Sources: SORS and NBS calculation.
* NBS estimate.

Net external demand

Dispersed growth in goods and services exports continued into Q3 (0.9% s-a), while their imports contracted (0.2% s-a), contrary to H1. This led to a positive 0.7 pp contribution of net exports to GDP growth. Strong external demand, whose leading indicator[20] edged up by 2.8% s-a in Q3, continued to provide a positive boost to domestic exports growth. Exports benefited also from the expansion of production capacities on the back of investment from earlier years.

[20] The leading indicator of external demand for Serbian exports was construed based on movements in the European Sentiment Indicator (ESI). It includes Serbia's 21 most important foreign trade partners – their shares in Serbian exports being used as weights.

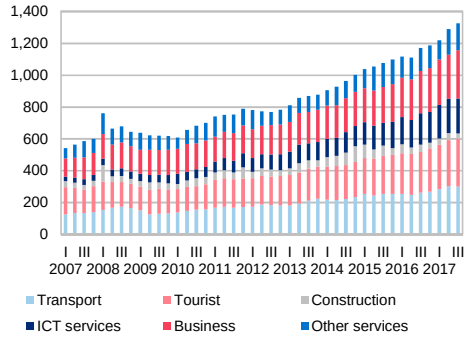
Chart IV.4.5 **Movements in external demand and core exports indicators**



Sources: European Commission, SORS and NBS.

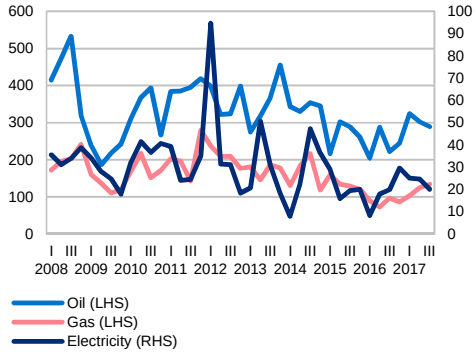
* Excluding agriculture, energy products, motor vehicles and base metals.

Chart IV.4.6 **Exports of services**
(s-a data, in EUR mn)



Sources: SORS and NBS calculation.

Chart IV.4.7 **Energy imports**
(s-a data, in EUR mn)



Sources: SORS and NBS calculation.

In Q3, euro-denominated commodity exports edged up by 1.9% s-a, reflecting continued positive trends in manufacturing which posted exports growth in more than a half of its branches. The greatest positive boost to commodity exports growth came from rubber and plastic products, with an additional contribution of traditional export branches, such as chemical and pharmaceutical industries and manufacturing of paper products. In addition, Q3 also saw the recovery of petroleum product exports, on the back of higher prices, as well as the growing demand in the neighbouring countries.

On the other hand, exports of base metals shrunk in Q3 (6.4% s-a), partly reflecting a high base from Q2. Nevertheless, in the first nine months of 2017, base metals exports increased by around 50% in y-o-y terms, as a result of investment in the Smederevo Steel Plant after privatization. Also, motor vehicles exports continued down, due to the contraction in Fiat exports by around 17% y-o-y in the first nine months. This fall was offset by exports of other companies in this branch of industry, which increased by around 20.6% in the same period.

The fall in exports was also recorded for agricultural commodities. A poor agricultural season this year slowed down corn exports to around 220,000 tons in Q3, still at the multi-year average for this period. Total corn exports in the period October 2016 – September 2017 amounted to over 2.5 million tons, the second best export result so far. The poor season reflected also on exports of wheat which remained close to the Q2 level quantity-wise (around 150,000 tons). This was below the expectations, given that new yields in Q3 usually push exports up.

Apart from commodity exports, services exports also kept growing in Q3, gaining 2.7% s-a. The greatest impetus came from the rebound in exports of business services (2.0 pp), while a positive, though somewhat lower, contribution continued also from exports of tourist and information and communication services (0.8 pp and 0.1 pp, respectively). On the other hand, exports of transport and construction services, which posted an increase in H1, turned downward in Q3. In y- o-y terms, services exports continued up in Q3 (11.3%), with a positive contribution of all types of services except for those in construction.

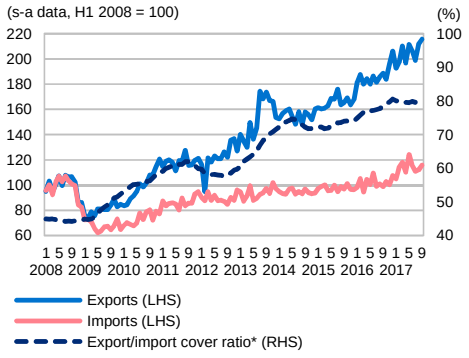
Euro-denominated commodity imports which expanded in H1, pushed, among other, by one-off factors such as cold weather, decreased in Q3 (3.3% s-a), in line with our expectations. Imports of intermediate goods went down, which can in part be explained by the use of inventories

created in H1. Equipment imports declined to a somewhat lesser extent, while imports of consumer goods stagnated.

Observed by economic destination of the EU, imports of capital and non-durable consumer goods contracted, while imports of energy and intermediate goods went up. The rise in oil and natural gas imports may be associated with the continued growth in manufacturing, while lower electricity imports came as a consequence of further recovery in domestic production.

Rising commodity exports coupled with a decline in imports had a positive bearing on Serbia's external position indicators in Q3. According to s-a data, in September this year commodity exports were 115.6% and imports 15.8% above their pre-crisis levels[21]. That same month, the export/import cover ratio increased to 79.7%, measured by a 12-month moving average, which was a 1.2 pp increase compared to the same period last year.

Chart IV.4.8 **Commodity trade in euros**



Sources: SORS and NBS calculation.
* 12-month moving average.

[21] H1 2008.

Text box 3: Competitive position of Serbia improved as a result of a more favourable macroeconomic and business environment

An economy's competitive position to a large extent depends on the structural factors such as the stage of institutional development, the state of infrastructure, market efficiency and the macroeconomic environment. The **Global Competitiveness Report** of the World Economic Forum lays out the most detailed overview of the structural factors and their annual developments. The Report measures competitiveness against twelve pillars used for calculating the Global Competitiveness Index – GCI for each individual country. The twelve competitiveness pillars are organised into three subindexes – basic requirements, efficiency enhancers, and innovation and sophistication factors, and the weight given to each individual subindex depends on each economy's stage of development. Since Serbia belongs to the group of medium stage of development economies as measured by GDP per capita, the largest influence on the competitiveness index is exerted by the pillars belonging to the efficiency enhancers subindex (50%), followed by the basic requirements subindex (40%), while innovation and sophistication factors account for a 10% share in the index computation.

In the Report of the World Economic Forum for 2017 Serbia was ranked 78th among 137 countries, which is progress by twelve positions relative to the 2016 Report. The GCI[1] score for Serbia in 2017 was 4.14, up by 0.17 points compared to the previous year, with an increase in index scores on all twelve competitiveness pillars. The greatest improvement, by as much as 31 positions (0.49 points), was recorded on the macroeconomic environment pillar, owing to the preservation of low and stable inflation, a reduction of budget deficit, an increasing share of national savings in GDP and a more favourable country credit rating. In the last Report, Serbia kept the same, first position, as in the previous two years, on the inflation indicator, which is the position shared with 35 other countries. Furthermore, progress by nine ranks (0.15 points) was also registered on the pillar financial market development, as a result of upgraded rank on the soundness of banks indicator (by 11 ranks), on account of adequate macroprudential policy, which contributed to the preservation of financial stability. Moreover, the adoption of reform laws and other regulatory solutions in the areas of insurance, payment services and the protection of consumers of financial services, whereby the business ambience has been improved, contributed to strengthening of the competitive position on the legal rights index (by 19 ranks) and availability of financial services (by eight ranks).

Concerning the other competitiveness pillars, the greatest progress was registered on the business sophistication pillar (0.29 points), where better ranked indicators include the willingness to delegate authority, state of cluster development and local supplier quality. In addition, the improved business environment is also reflected in an enhanced competitive position on pillars: goods market efficiency, higher education and training and labour market efficiency, while continued implementation of infrastructure projects raised the quality of transport and electricity infrastructure and enabled progress on the infrastructure pillar.

Table O.3.1 **Global Competitiveness Index for Serbia**

	2015	2016	2017	Change in 2017	
				size	direction
Global Competitiveness Index	**3.89**	**3.97**	**4.14**	**0.17**	↗
Basic requirements (40%)	***4.15***	***4.33***	***4.54***	***0.20***	↗
1st pillar: Institutions	3.24	3.31	3.42	0.11	↗
2nd pillar: Infrastructure	3.87	3.94	4.09	0.15	↗
3rd pillar: Macroeconomic environment	3.60	4.12	4.61	0.49	↗
4th pillar: Health and primary education	5.87	5.97	6.02	0.05	↗
Efficiency enhancers (50%)	***3.85***	***3.85***	***3.99***	***0.14***	↗
5th pillar: Higher education and training	4.27	4.40	4.55	0.16	↗
6th pillar: Goods market efficiency	3.74	3.78	3.96	0.17	↗
7th pillar: Labor market efficiency	3.72	3.84	3.96	0.12	↗
8th pillar: Financial market development	3.23	3.41	3.56	0.15	↗
9th pillar: Technological readiness	4.47	4.05	4.19	0.14	↗
10th pillar: Market size	3.70	3.63	3.72	0.09	↗
Innovation and sophistication factors (10%)	***3.02***	***3.10***	***3.31***	***0.22***	↗
11th pillar: Business sophistication	3.14	3.22	3.52	0.29	↗
12th pillar: Innovatione	2.90	2.97	3.11	0.14	↗

Source: World Economic Forum.

In addition to the World Economic Forum, the **World Bank** also tracks and assesses the quality of the business environment of a country in the international environment in the **Doing Business Report**. This Report measures the ease of doing business in ten areas (starting a business, dealing with construction permits, getting electricity, registering property, getting

[1] In theory the index measures scores on a 1-to-7 scale.

credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency), the result being the distance to frontier (DTF) score[2] – based on which a country's ranking in the international landscape is calculated.

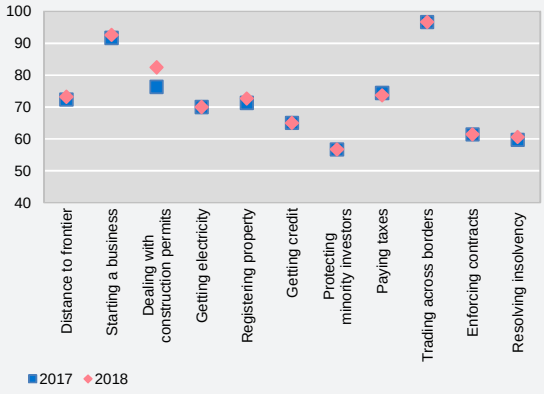
According to the results of the latest, **Doing Business 2018 Report**, **Serbia** improved its competitive position by four ranks in the past year, and is currently **43rd on the list of 190 economies**. The greatest progress was made in the area of issuing construction permits, where Serbia moved from the 186th position in the 2015 Report to the 10th position in the latest, 2018 Report and approached the frontier, from score 37.6% to score 82.4%. This is a result of amendments to the Law on Planning and Construction and the adoption of the relevant bylaws which introduced electronic issuance of construction permits, leading to a decrease in the number of procedures, shorter duration of the process and lower costs.

The Report states that Serbia also improved the regulatory framework for starting a business, owing to the reduction of administrative tax for signature verification, which lowered the costs of starting a business, and increased register efficiency, thus reducing the time required for starting a business from 7 to 5.5 days. Furthermore, the regulatory framework for property registration has also been improved, as a result of enhanced land cadastre reliability on account of introducing a geographic information system. The area of enforcing contracts was also reformed owing to the adoption of the new Law on Enforcement and Security, which, inter alia, expands and additionally specifies the authority and responsibility of public bailiffs and court competence during the enforcement proceedings.

In addition to the reforms singled out in the Report, Serbia proceeded with improving the business environment in other areas of business and reduced the distance to frontier in the area of resolving insolvency. The distance to frontier was retained in four areas, and it slightly increased only in the paying taxes area.

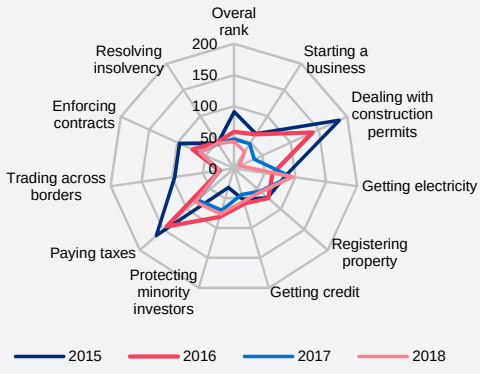
Serbia recorded a visible progress on both international competitiveness lists in the past three years, i.e. in the period 2015–2017, confirming that the undertaken measures in structural reforms and macroeconomic stabilisation yielded results.

Chart O.3.1 **Serbia's distance to frontier score**
(frontier = 100)



Source: http://www.doingbusiness.org/.

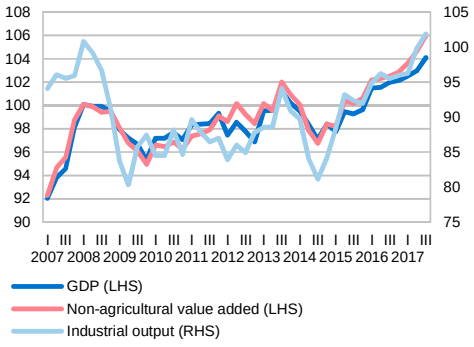
Chart O.3.2 **Business environment indicators**
(rank, "-" signifies improvement)



Source: http://www.doingbusiness.org/.

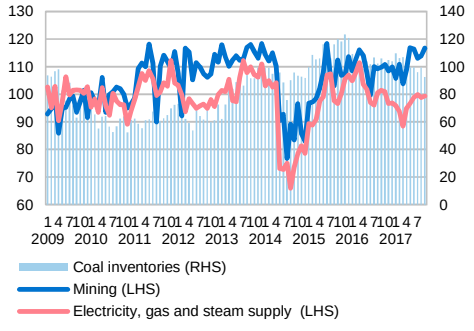
[2] This score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier.

Chart IV.5.1 **Economic activity indicators**
(s-a, H1 2008 = 100)



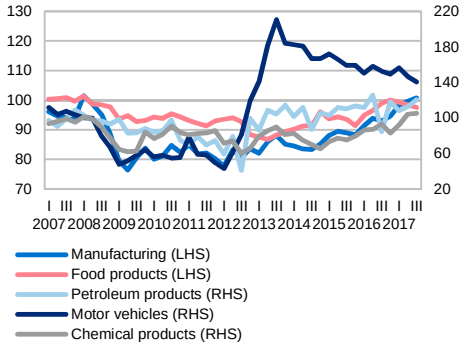
Sources: SORS and NBS calculation.

Chart IV.5.2 **Physical volume of production in energy and mining**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Chart IV.5.3 **Physical volume of production by branch of manufacturing**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

5. Economic activity

The positive effects of investment from the previous period and growing external demand continued to boost growth of manufacturing. That, coupled with further expansion of services sectors, pushed by domestic demand, and the recovery of construction, contributed to 1.1% GDP growth s-a in Q3. At a y-o-y level, GDP growth accelerated to 2.1% according to the preliminary estimate of the Serbian Statistical Office. In addition to good manufacturing performance, sustained recovery in mining and energy also contributed to this. In 2017 GDP growth should be driven by manufacturing, services sectors and construction to a smaller extent. The negative contribution will come from agriculture, in line with earlier expectations.

The positive effects of investment from the previous period and high external demand continued to boost growth of manufacturing, which was the main driver of 1.1% GDP growth s-a into Q3. The recovery commenced in Q2 kept on in the sectors of mining, and electricity, gas and steam supply, while the continued rise of domestic demand largely contributed to a further expansion of activity in most services sectors. In addition, Q3 also saw the commencement of recovery in construction, consistent with the NBS expectations. Similar as in H1, the negative contribution to GDP trend in Q3 also stemmed from agriculture, which was under the influence of extremely unfavourable weather at the beginning and in the middle of the year. Generally, further economic growth in Q3 led to its additional s-a increase above the pre-crisis level[22] – 4.1% measured by GDP and 6.0% measured by NAVA.

GDP growth accelerated to 2.1% y-o-y in Q3, according to the preliminary estimate of the Serbian Statistical Office. The NBS estimates such a development to be a result of additional growth acceleration in manufacturing, initiated recovery in construction and further rebound of the mining and energy complex. The positive contribution kept coming from services sectors to a similar extent as in Q2. On the other hand, negative trends persisted in agriculture, consistent with the previous expectations.

The physical volume of industrial production in Q3 kept expanding (2.0% s-a), with a positive contribution coming from all three sectors. The physical volume of

[22] H1 2008 level.

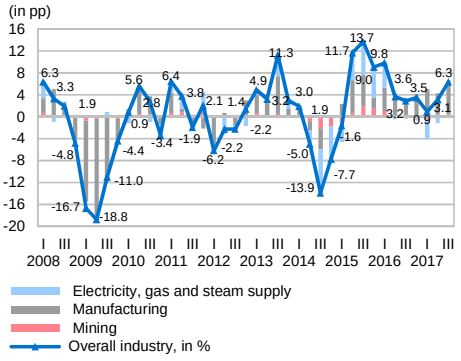
production in **manufacturing** increased by 1.2% s-a in Q3, with a positive contribution to overall industry of 0.9 pp. The physical volume of production increased in the production of petroleum products, metal products, and machinery and equipment. Furthermore, growth also continued in primarily export-oriented branches, such as the production of rubber and plastic products, as well as paper products, and in the chemical industry. On the other hand, the physical volume of production of motor vehicles and food products continued to contract. The production of base metals and tobacco products also decreased relative to Q2. At a y-o-y level, the growth in the physical volume of manufacturing accelerated in Q3 (7.8%) relative to Q2 (5.1%) and was achieved in two thirds of areas, with the positive contribution to the higher physical volume of total industrial production of 5.7 pp.

In addition to manufacturing, the physical volume of production in Q3 also rose in **mining** (0.5% s-a), on the back of a more intensified exploitation of coal and metal ores. Continued recovery was also recorded in the sector of **electricity, gas and steam supply** with a 2.6% increase in the physical volume of production s-a. At a y-o-y level, the physical volume of production in mining grew by 5.3% in Q3 and gave a positive contribution to the expansion of the physical volume of overall industry from 0.4 pp, while y-o-y growth in the volume of physical production was recorded in the sector of electricity, gas and steam supply (0.6%) for the first time since the beginning of the year.

In line with the NBS previous expectations, the construction sector recovered in Q3, and its activity is estimated to have grown by 2.4% s-a, as indicated by the production expansion and reduced inventories of construction materials, rising formal employment in the construction sector and the continued increase in the number of issued construction permits.

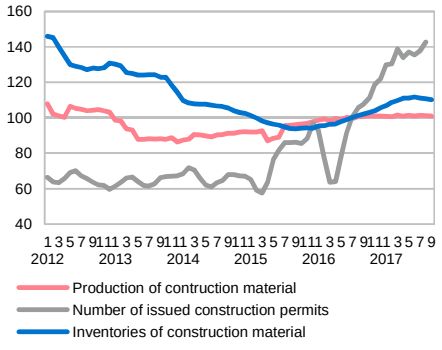
Services sectors kept recording positive developments in Q3, and their joint contribution to GDP growth is estimated at 0.3 pp. Further recovery of the trade sector is indicated by retail trade turnover, for which Q3 was the 10th consecutive quarter of growth (1.3% s-a). Favourable developments also continued in the sector of accommodation and food services, indicated primarily by a climbing number of tourist arrivals (2.0% s-a) and overnight stays (0.3% s-a) and the real growth of turnover in catering (4.5% s-a) in Q3.

Chart IV.5.4 **Contributions to y-o-y growth of the physical volume of industrial production**



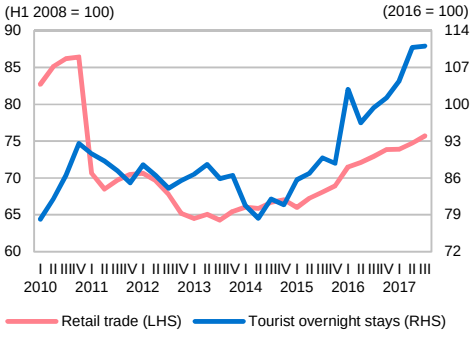
Sources: SORS and NBS calculation.

Chart IV.5.5. **Construction activity indicators**
(3M averages s-a, 2016 = 100)



Sources: SORS and NBS calculation.

Chart IV.5.6 **Service sector indicators**
(s-a data)



Sources: SORS and NBS calculation.

Table IV.5.1 **Contributions to quarterly GDP growth**
(in pp)

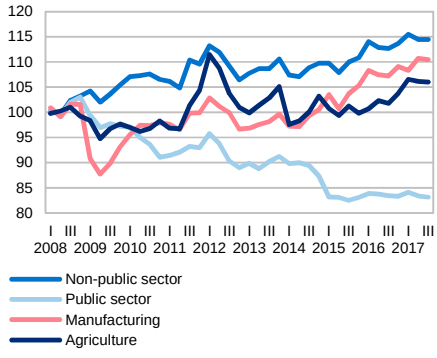
	2016		2017		
	Q3	Q4	Q1	Q2	Q3*
GDP (s-a, in %)	**0.4**	**0.2**	**0.4**	**0.4**	**1.1**
Agriculture	0.4	-0.3	-0.4	-0.3	-0.1
Industry	-0.1	-0.1	0.4	0.4	0.7
Construction	0.0	0.0	0.0	0.0	0.1
Services	0.2	0.2	0.2	0.4	0.3
Net taxes	0.0	0.1	0.1	0.0	0.0

Sources: SORS and NBS calculation.
* NBS estimate.

Pursuant to earlier expectations, a negative contribution to GDP (0.8 pp) is expected from **agriculture**. The preliminary estimate of the Serbian Statistical Office is that, among crops, corn production recorded the sharpest decrease (45.5%), as it was exposed to negative effects of the drought the most. On the other hand, industrial plants recorded a somewhat lower fall in production (sugar beet 6.3%, sunflower 13%, soya 20%), which, in addition to a less negative influence of unfavourable weather conditions, was also a result of larger surface areas under these crops. According to the same source, the production also decreased in fruit production – the production of plums dropped by close to 30%, and of other significant fruits (apples, raspberries, sour cherries) by 6–7%.

In line with the developments achieved so far in this year, GDP growth in 2017 should be pushed by manufacturing and services sectors and to a lesser extent by construction. A positive incentive to manufacturing growth should continue to originate from sustained FDI performance and further growth of external demand, while a more intense activity in services sectors should be led by the growing household consumption.

Chart IV.6.1 **Real net wage**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

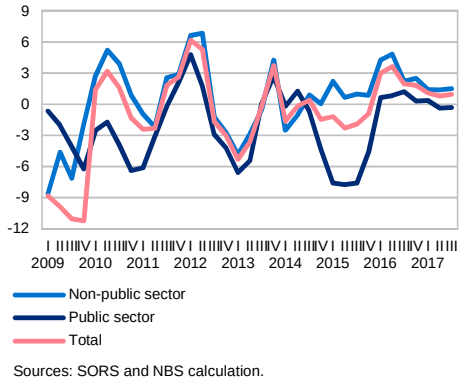
6. Labour market developments

The formal labour market developments remained positive in Q3, with a further increase in employment and a decrease in unemployment. The real net wage growth also continued at a y-o-y level, primarily driven by the positive private sector developments. Productivity in total industry kept the upward trend in Q3, and cost competitiveness also continued to pick up.

Wages and labour productivity

After a rise in H1, the real net wage fell in Q3 (0.4% s-a), due to persistent lowering of the public sector wages and the stagnation of the private sector real net wage. In y-o-y terms, the real net wage was held up in Q3 (1.0%), spurred by a higher private sector wage (1.5%), while it continued to fall down in the public sector (0.3%). The gap between the average public and private sector wages in September amounted to 4.1%, and at a y-o-y level the gap was additionally narrowed by 2.4 pp.

Chart IV.6.2 **Real net wage**
(y-o-y growth, in %)



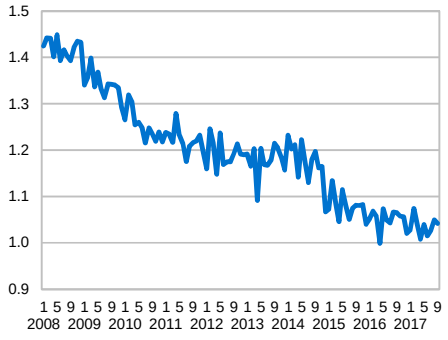
Sources: SORS and NBS calculation.

Economic sectors recorded a lower real net wage in Q3, while the real estate and financial sectors registered the sharpest s-a wage decreases. On the other hand, a higher wage was observed in the sectors of professional, scientific, and innovation activities and information and communications, as well as the health and social protection sector.

Total wage bill increased in Q3 (1.0% s-a), as the formal employment growth was more pronounced than the average wage decrease. In y-o-y terms, the wage bill, driven by the positive developments in the private sector, continued to trend upwards into Q3 (3.6%), while it stayed on the downward path in the public sector due to further staff rightsizing. The average nominal net wage in the Republic of Serbia in Q3 stood at RSD 47,844, up by 3.9% relative to the same period the year before.

In Q3 **productivity in total industry was also held up** (0.7% s-a), owing to faster growth in the physical volume of production relative to the employment increase, which, coupled with the gross real wage stagnation, led to the decrease in the unit labour costs in industry (0.8% s-a) and **improvement of cost competitiveness**.

Chart IV.6.3 **Ratio of average nominal net wage in public and non-public sector**



Sources: SORS and NBS calculation.

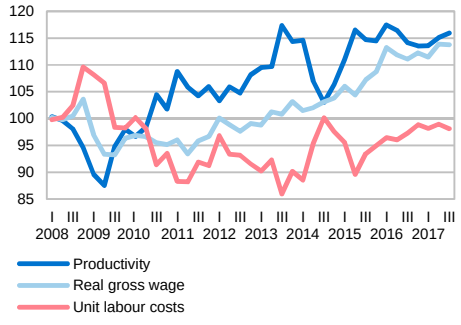
Employment

Sustained expansion of economic activity in Q3 contributes to a further increase in formal employment. According to the Statistical Office data obtained from the Compulsory Social Insurance Central Register, the number of people in work was higher in September than in June by 1.0%, and the number of people employed by legal entities and the number of private entrepreneurs and their employees kept rising. On the other hand, the number of individual agricultural producers fell down. Employment was higher at end-Q3 relative to the same period the year before by 3.1%.

The formal employment growth was driven by higher employment in the private sector, in Q3 as well, and manufacturing, trade, auxiliary services and construction recorded the sharpest increase. In addition, employment was on the rise in most other economic sectors, as well, with the exception of the public administration which saw the declining trend.

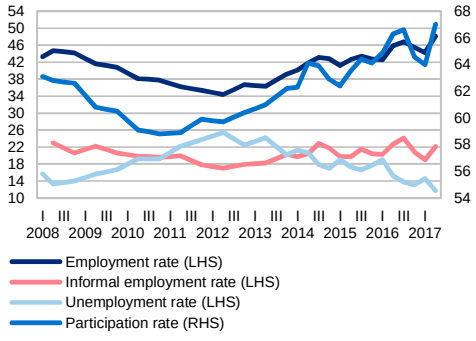
Companies' growing labour demand, implementation of active labour market policy as well as the effect of seasonal factors contributed to a further unemployment reduction. According to the National Employment Service, unemployment kept falling into Q3 to reach 622,971 people in September, down by 22,455 relative to June. The growth of activity in manufacturing and some services sectors favourably affected the reduction of unemployment among the following occupational groups: mechanical engineering and metal processing, electrical engineering and trade, catering and tourism, while unemployment was also reduced in occupations related to agriculture and construction, on account of increased seasonal needs.

Chart IV.6.4 **Movements in productivity, real gross wage and unit labour costs in industry**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Chart IV.6.5 **Labour market indicators according to the Labour Force Survey**
(in %)



Source: SORS.

Table IV.6.1 **Movements in formal employment and unemployment**
(quarterly growth rates, end-of-period)

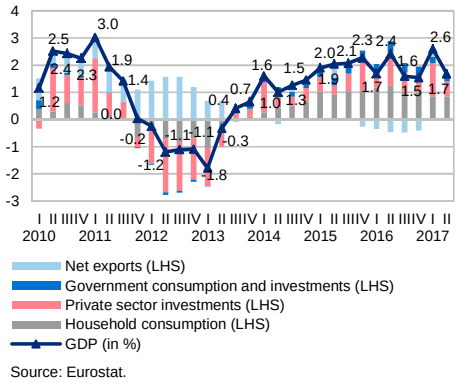
	2016	2017		
	Q4	Q1	Q2	Q3
Total number of formally employed	0.1	0.5	1.4	1.0
Employed with legal persons	-0.1	0.5	1.3	1.2
Entrepreneurs and their employees	0.8	1.1	2.7	1.0
Individual farmers	0.2	-1.1	-1.5	-2.2
Unemployed persons	2.4	-1.9	-6.2	-3.5
First-time job seekers	0.9	-2.6	-5.1	-3.3
Used to be employed	3.1	-1.5	-6.7	-3.6

Sources: SORS and National Employment Service.

The results of the Labour Force Survey, which covers the informal segment of the labour market, as well, also indicate a further labour market rebound. According to those results, Q2 saw a continued rise in employment and the reduction in unemployment, with the concurrent increase in the participation rate (to 67%). The employment rate was higher by 2.2 pp than in the same period the year before and it stood at 48.1%. Employment went up in the sectors of industry, services and construction, while it went down in agriculture. The same period also saw a contraction of informal employment (by 0.6 pp), to 22.1%.

The unemployment rate was cut by 3.4 pp in Q2 relative to the same period the year before and it stood at 11.8%, the lowest level since 2014, i.e. since comparable data are available. The unemployment drop affected all age groups, and the youth (15–24) unemployment rate was reduced to the level below 30%. The long-term unemployment rate was also cut, from 10.2% in Q2 2016, to 7.4% in Q2 2017.

Chart IV.7.1 **Contributions to y-o-y GDP growth rate of the euro area**
(in pp)



Source: Eurostat.

7. International environment

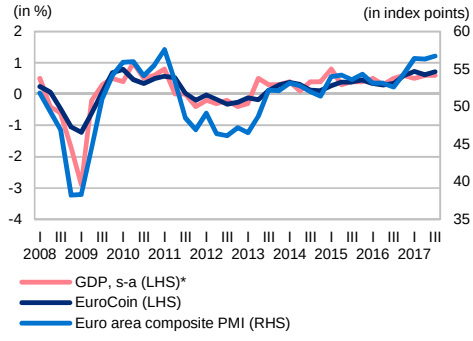
Global economic developments in the year to date were better than previously expected. This led to an upward revision of GDP growth in both advanced economies (euro area, Japan) and in emerging ones (Central and South Eastern Europe, Russia). Growth in the euro area and other European economies, recorded in H1, kept its pace in Q3, led mainly by domestic demand.

Although global economic recovery picked up the pace, there are no convincing signs of inflation growth in most countries. Due to the appreciation of the euro, the inflation projection for the euro area has been slightly revised down for 2018 and 2019. At its October meeting, the ECB decided to continue with monthly net asset purchases of EUR 60.0 bn until the end of the year and then cut them to EUR 30.0 bn until September 2018 or beyond that point, if necessary. The Fed, on the other hand, in addition to unwinding its balance sheet since October, is expected to make a decision on a new interest rate hike in December. It is uncertain how the monetary policy measures of leading central banks will reflect on currency movements. At the same time, uncertainties still persist regarding movements in the global prices of oil.

Economic activity

Economic activity in the **euro area** continued up in Q2, with **GDP growth** of 0.7% s-a. Economic growth was recorded in most euro area countries, which indicates that it has become sustainable. The main driver of growth is still domestic demand, primarily investments which are thriving under looser monetary conditions, as well as the need for equipment upgrade, high capacity utilisation and better profitability of corporates. Private consumption also continued to increase amid brighter monetary conditions, as well as favourable labour market trends and further boost in consumer confidence.

Chart IV.7.2 **Movements in GDP and economic activity indicators of the euro area**
(quarterly rates)

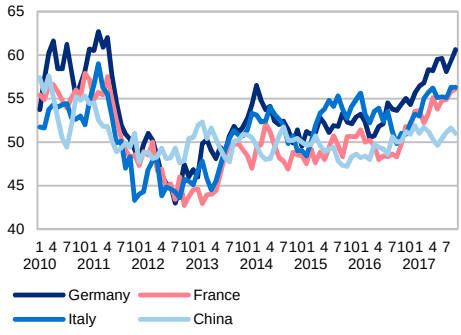


Sources: Eurostat, Markit Group and Banca d'Italia.
* Eurostat's preliminary flash estimate for Q3 2017.

Economic activity in the most advanced euro area economies continued up in Q2, though at a somewhat slower pace in Germany and Italy, while growth in France picked up slightly relative to Q1. Growth in Germany was led by private consumption, due to higher disposable income which resulted from favourable developments in the labour market and relatively low energy prices. Similarly, though to a lesser extent, favourable labour market developments in Italy helped private consumption continue on the upward path.

As confirmed by the Eurostat flash estimate, GDP growth in the euro area measured 0.6% s-a in Q3, as indicated by the movements in a large number of leading indicators. On average, the PMI Composite index in Q3 (56.0 points[23]) stayed close to the six-year maximum recorded in Q2 (56.6 points), with industry and the service sectors posting high index values. Also, the Economic Sentiment Indicator rose further in Q3 and on average measured 112.4 points, its highest quarterly level in ten years, with broad dispersion among member countries.

Chart IV.7.3 **PMI Manufacturing for selected countries**
(in index points)

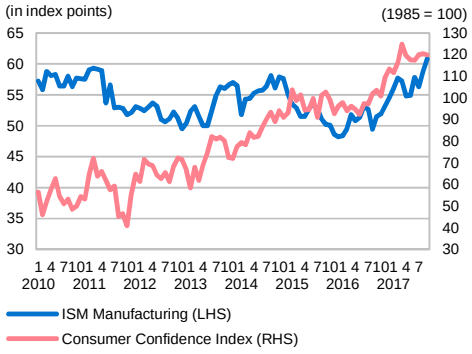


Source: Markit Group.

Good economic results in the year to date had a prevailing influence on the upward revision of euro area GDP growth to 2.2% in 2017, according to the ECB's September forecast and the October Consensus Forecast, or to 2.1%, according to the IMF's October report. GDP growth was revised up by 0.1 pp for 2018 as well – to 1.9%, according to the IMF, and 1.8%, according to the Consensus Forecast, while the ECB kept its growth forecast unchanged at 1.8% since June. In addition to domestic demand, which is likely to remain driven by factors that are currently supporting growth, a positive contribution to GDP growth going forward is also expected from net exports, as a result of brighter

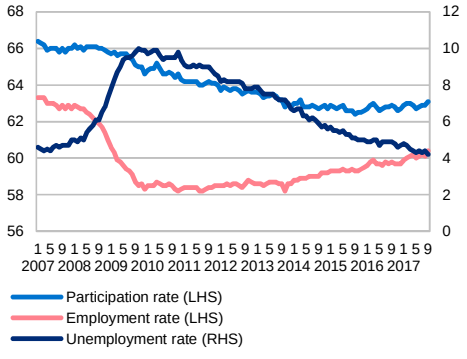
[22] Index value above 50 points indicates expansiveness, and below 50 a decline in economic activity.

Chart IV.7.4 **Leading economic indicators in the USA**



Source: Institute for Supply Management, Conference Board.

Chart IV.7.5 **USA labour market**
(monthly rates, in %)



Source: Bureau of Labor Statistics.

Table IV.7.1 **Economic growth estimate by country**
(in %)

	Consensus Forecast October 2017		IMF October 2017	
	2017	2018	2017	2018
Poland	4.1	3.5	3.8	3.3
Czech Republic	4.2	3.1	3.5	2.6
Hungary	3.8	3.4	3.2	3.4
Albania	3.8	4.0	3.7	4.1
Bulgaria	3.6	3.4	3.6	3.2
Bosnia and Herzegovina	2.8	3.1	3.0	3.5
Macedonia	2.2	3.3	3.2	3.4
Romania	5.5	3.9	5.5	4.4
Slovenia	4.4	3.3	4.0	2.5
Croatia	2.9	2.7	2.9	2.7

Sources: Consensus Forecast and IMF.

prospects for global growth and more vigorous external demand. Risks that might rein in the euro area's economic growth in the coming period are mostly associated with the slower pace of implementation of structural reforms, high NPL levels in some countries, the euro gaining on the dollar and geopolitical tensions that might impede global growth.

After somewhat slower growth at the start of the year (0.3% s-a), **GDP in the USA** rose 0.8% s-a in Q2, on the back of accelerated growth in private consumption and recovery of investments, and to a lesser degree, the positive contribution of net exports. According to the preliminary estimate of the US Bureau of Economic Analysis, GDP growth in Q3 decelerated slightly to 0.7% s-a, which is most likely associated with short-term negative effects of the hurricanes that battered the south of the country. The major positive contribution in Q3 still came from private consumption owing to high consumer confidence (around 20% on average above the long-term trend, measured by the Consumer Confidence Index) and positive tendencies in the labour market, as indicated by the rise in employment and decline in unemployment to 4.2%, its lowest since early 2001.

Owing to the pick-up in Q2, GDP growth forecast for the USA in 2017 was revised up by 0.1 pp to 2.2% according to the IMF, the same as the Consensus Forecast October projection, whereas for 2018 both sources predict a slight acceleration of GDP growth (2.3% according to the IMF and 2.4% according to the Consensus Forecast). High consumer and business confidence, as well as the still favourable financial conditions, are likely to be the main drivers of growth in the current and following year.

The prolonged positive tendencies in the labour market and fiscal incentives in some countries were still the main contributors to private consumption growth in Q2. Private consumption remained the main driver of **GDP growth** in **Central European countries** as well. Another boost to growth came from investments which began to recover since the start of the year thanks to greater reliance on EU funds. All countries in the region recorded relatively high GDP growth in Q2 (more than 3% y-o-y), with Poland and the Czech Republic boasting the highest figures (4.4% and 3.4% y-o-y, respectively). Favourable trends in H1 resulted in an upward revision of growth for the entire region. Hence, according to the October Consensus Forecast, growth is expected to measure 4.0% in 2017 and 3.4% in 2018.

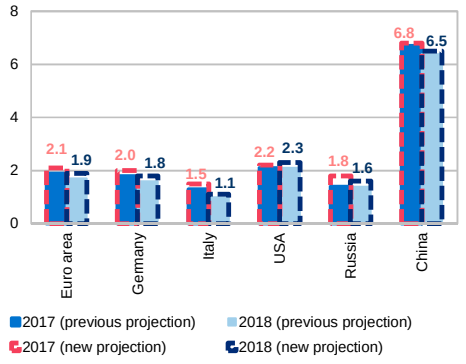
Similarly to Central Europe, robust private consumption and investment growth were the main fillip to **GDP**

growth in Q2 in **South Eastern European countries** as well. The highest growth, as in the prior period, was recorded by Romania (5.9% y-o-y), owing to a surge in private consumption. As for the region as a whole, the October Consensus Forecast expects growth of 4.2% in 2017, up by 0.4 pp on July, while the forecast for 2018 has been revised up by 0.2 pp to 3.5%.

The recovery in the price of oil, monetary easing and the gradual restoration of business confidence helped **Russia's GDP to continue up**, accelerating to 2.5% y-o-y in Q2 (0.5% y-o-y in Q1). The largest positive contribution came from investments in government infrastructure projects in energy and transportation, and, to a lesser degree, from private consumption whose growth encouraged a further recovery in the labour market and lower inflation. According to the IMF October forecast, GDP growth in 2017 (1.8%) and 2018 (1.6%) was revised up relative to July, by 0.4 pp and 0.2 pp respectively, while the October Consensus Forecast expects somewhat milder growth in 2017 (1.7%) and slightly higher in 2018 (1.8%).

After rising 6.9% y-o-y in H1, China's GDP growth in Q3 decelerated slightly to 6.8% y-o-y, as indicated by the slower growth in industrial production and retail trade relative to Q2, as well as the weaker performance of the external sector. However, the results achieved in H1, which were better than expected, prompted the IMF to revise the expected GDP growth up by 0.1 pp in 2017 (to 6.8%) and in 2018 (to 6.5%).

Chart IV.7.6 **Revisions of real GDP growth forecasts for 2017 and 2018 by the IMF**
(in %)



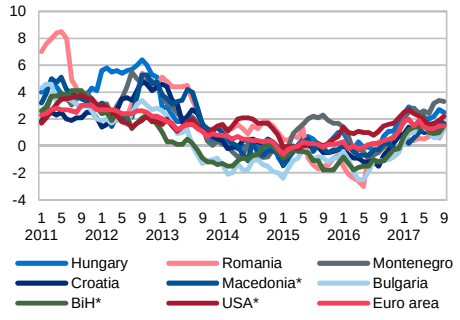
Sources: IMF WEO (October 2017) and IMF WEO Update (July 2017).

Inflation movements

Faster global economic growth has not yet produced more evident inflationary pressures. Relatively low inflation is still present in the majority of countries. Low inflationary pressures are also indicated by low core inflation due to the still moderate growth in wages and low pressures on the demand side.

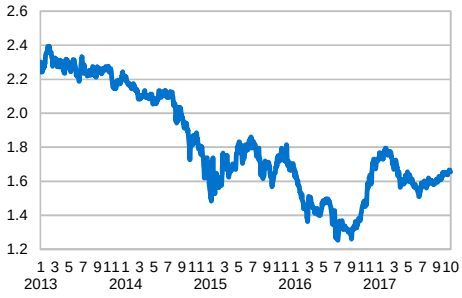
In the wake of the rising energy prices, inflation in the **euro area** edged up to 1.5% y-o-y in August (from 1.3% in July) and remained there in September as well. Inflation is still below the target in Italy and Germany, Serbia's key foreign trade partners. Given the movements in oil futures, the ECB expects inflation to be temporarily lowered at the end of the year, mostly due to the base effect from energy prices. In the medium run, inflation is expected to rise gradually induced by monetary policy measures, extended economic growth, gradual absorption of economic slack and rising wages. However, considering the euro's robust growth since the start of the

Chart IV.7.7 **HICP across selected countries**
(y-o-y rates, in %)



Sources: Eurostat, Bureau of Labor Statistics and statistical offices of selected countries.
* CPI.

Chart IV .7.8 **Long-term inflation expectations in the euro area**
(in %)



Source: Thomson Reuters.

year, the ECB revised down its inflation projection in September relative to June: from 1.3% to 1.2% for 2018, and from 1.6% to 1.5%, for 2019, while the projection for 2017 remained unchanged (1.5%). On that occasion, an assessment was made that trends in the euro exchange rate are a source of uncertainty for medium-term inflation movements.

Inflation expectations of professional forecasters[24] remained at a somewhat higher level, unchanged in October relative to July – 1.4% in 2018 and 1.6% in 2019. Only long-term inflation expectations were changed – they increased from 1.8% to 1.9% for 2022. These inflation expectations, obtained through a survey, are still higher than long-term market expectations which perked up from 1.6% in August to 1.67% in October.[25]

Inflationary pressures were moderate across most **Central and Eastern European countries**. Inflation in Bulgaria and Bosnia and Herzegovina was lower in Q3 than in a quarter earlier – average y-o-y inflation in Bulgaria was 0.9% compared to 1.4% in Q2, and in Bosnia and Herzegovina 1.1% compared to 1.5%. The situation was different in Montenegro (3.3%, compared to 2.5%) and Hungary (2.5%, compared to 2.1%). Although inflation was on the rise in Croatia and Romania, it remained relatively low (1.6% and 1.3% y-o-y in September). Most analysts do not anticipate inflation in countries across the region to accelerate greatly in the coming period. The same goes for Russia now that its inflation dropped to 3.0% y-o-y in September which is not only below the inflation target (4.0%), but also its lowest level in modern history. On the other hand, inflation in Turkey is still relatively high. Headline inflation in September rose to 11.2% y-o-y and core inflation to 10.9%.

US y-o-y inflation rose during Q3 and reached 2.2% in September (from 1.6% in June). This is the highest inflation rate since April 2017 and is chiefly attributable to the hike in energy prices, which increased 10.1% y-o-y. The prices of petroleum products rose largely due to the disrupted production in refineries located in the Gulf of Mexico, caused by the hurricanes. At the same time, for five months in a row, core inflation was stable at 1.7% y-o-y, its lowest level in two years.

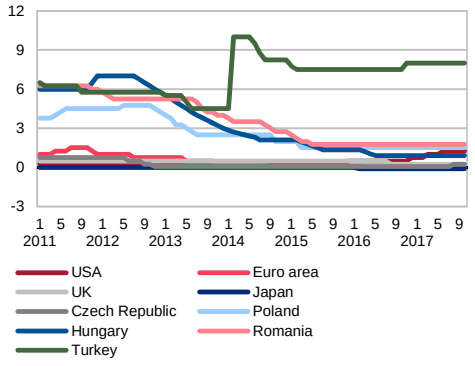
[24] ECB Survey of Professional Forecasters (SPF).

[25] The five-year, five-year breakeven forward.

Monetary policy

Most central banks in advanced countries have kept their interest rates at historically low levels, and some of them still use unconventional measures. According to the majority of analysts, such monetary policy measures are adequate given that economic growth remains largely induced by low interest rates and still has not led to faster inflation dynamics. Keeping the key rate at 0% and the deposit facility rate below 0%, in its October meeting the **ECB** decided to continue with monthly net asset purchases of EUR 60.0 bn until the end of the year and then cut them to EUR 30.0 bn until September 2018. If necessary, the ECB underlined it would increase the asset purchase programme in terms of size and/or duration. It also stated that once the net asset purchases programme is completed it will reinvest the principal payments from maturing securities over an extended period of time. Moreover, the ECB will continue with main refinancing operations and three-month longer-term refinancing operations (LTROs) as fixed-rate tender procedures with full allotment for as long as it is necessary, and no sooner than the end of the latest required reserves maintenance period in 2019. According to the ECB, this will help maintain the favourable financing terms which are still needed for inflation to return to the target.

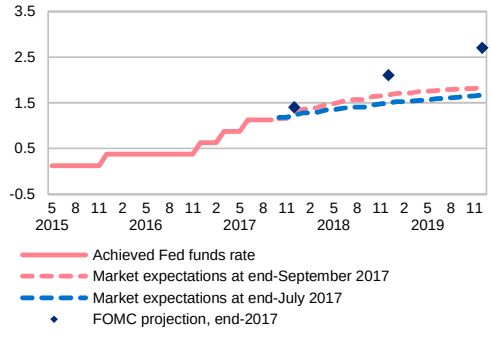
Chart IV.7.9 **Policy rates across selected countries**
(p.a., in %)



Sources: Central banks of selected countries.

During Q3, the **Fed** did not change its interest rate target range (1.00%–1.25%), but it did start unwinding its balance sheet in October, in accordance with earlier announcements. It also signalled the possibility of an interest rate hike in December in view of the increasing economic activity and further strengthening of the labour market. Market expectations that the Fed would once again raise the interest rate before the end of 2017 were inflated after the September meeting to over 80%, exceeding 90% after the October meeting. Previously, these expectations had fallen below 40% due to the slowdown in economic growth and weak inflationary pressures. As for 2018, the Fed expects three additional hikes, as indicated by the interest rate projection median of 2.1%. The Fed lowered its expectations only for 2019 – to two instead of three increases, as was expected in June. Market expectations are higher than three months ago, though still below the median interest rate projection of the FOMC members.

Chart IV.7.10. **Achieved and expected Fed funds rate***
(p.a., in %)



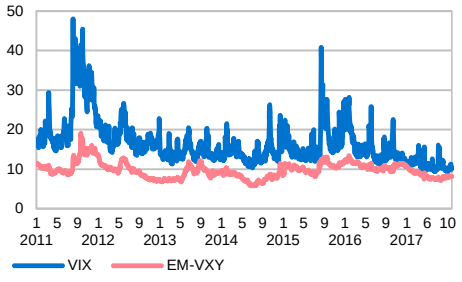
Sources: Bloomberg and Fed.
* Futures-based market expectations.

The bulk of central banks in the majority of **Central and Eastern European** countries did not change their interest rates that stand at their historic lows. Exceptions are the central banks of the Czech Republic and Russia. Early in August, for the first time since February 2008, the central bank of the Czech Republic raised its interest rate by 20 bp to 0.25%. It also raised its lending facility rate by 25 bp to 0.5%, while the deposit facility rate was kept on hold (0.05%). Before that, starting in April, it stopped intervening in the FX market to curb its currency appreciation over the target level. In contrast to that, the Russian central bank lowered its interest rate further in September and October, by a total of 0.75 pp, to 8.25%. A sharp fall in inflationary pressures enabled it to announce the possibility of further rate cuts at upcoming meetings. The Romanian central bank kept its interest rate on hold (1.75%), though it narrowed the interest rate corridor from ±1.5 pp to ±1.25 pp. The Hungarian central bank also kept its interest rate unchanged (0.90%), but it trimmed the rate on overnight deposit facilities from -0.05% to -0.15%, as well as the maximum amount of three-month deposits which banks may place with the central bank. The central bank of Turkey did not raise its interest rate (8.0%), but it announced that it would pursue a tight monetary policy in the coming period until it achieves lower inflation. Analysts expect that the central banks of Romania and Poland might launch a cycle of interest rate hikes.

Financial and commodity markets

Besides the impact of expectations in terms of monetary policy measures of leading central banks, another factor greatly affecting the trends in the international financial market in Q3 was geopolitical friction. Still, movements stabilised around the end of the quarter and in October, supported by the optimism triggered by the acceleration of global growth. Hence, the implicit measure of **financial market volatility** (VIX) rose to 16% in mid-August only to decline to around 10% by the middle of September and hover close to that level until the end of October. As in the prior quarter, it dipped below 10% in several instances, which had not occurred since January 2007. Moreover, the EM-VXY index – which tracks volatility in emerging market currencies – continued to move at a relatively low level of around 8%.

Chart IV.7.11 **Implied volatility of the global financial market***
(in %)



Source: Bloomberg.
* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM-VXY (JPMorgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

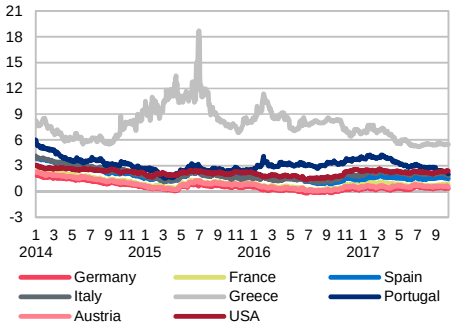
The price of gold was also on the rise in August, approaching last year's maximum. In addition to geopolitical tensions, another impact on the price of gold came from the dampened expectations of market participants as to the prospects of the Fed raising its interest rate in December. As these expectations rose, the price of gold declined, though it still ended the quarter at

a level 3.3% higher than in Q2. The price of gold continued to decline in October (1.0%). The impact of these factors is also reflected in the movement of the yields on ten-year US Treasuries, which first declined and came close to 2% early in September, the lowest level since last November. Moreover, the spread between US and German government securities was also reduced, whereas the previous period saw the widest spread since the euro was introduced. As expectations increased that the Fed would indeed raise its interest rate in December, the yields on ten-year US bonds began to grow and equalled 2.4% at end-October.

Unlike previous periods, when the **dollar** mostly grew stronger amid geopolitical tensions, in Q3 it continued to weaken. This was prompted by the prevailing concern in anticipation of the Fed's September meeting – namely, the fear of a slowdown in the US economy and of the Fed's caution in making the decision on new interest rate hikes. In contrast to that, optimism regarding the euro area growth, as well as announcements by ECB officials that a reduction in monetary stimulus will most likely be considered in autumn, was conducive to the appreciation of the euro. Therefore, the **euro gained** an additional 3.3% **against the dollar** in Q3. It began to weaken relative to the dollar at end-September, following the Fed's meeting, amid expectations of an increase in the federal funds rate in December. During October, the euro lost 1.4%, however, since the beginning of the year it gained 9.4% on the dollar.

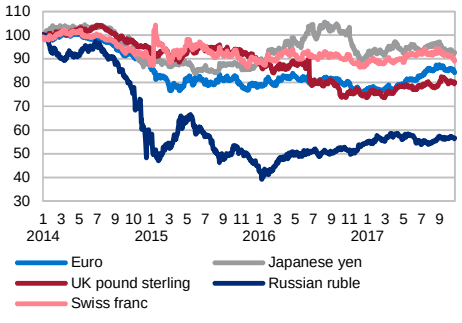
Unlike in the previous two quarters, **global oil prices** rose 17.2% in Q3. Ranging from USD 47 to USD 59 per barrel, the rise in the price of oil in Q3 (by 3.2%) was nevertheless significantly smaller than in Q2. Early in the quarter, the increase was largely triggered by the markets' reaction to reports on a decline in daily oil output and the number of well completions in the USA. In addition, lifting the price was again the market's response following the meeting of OPEC countries and other major oil producers in Saint Petersburg, where it was agreed that Nigeria would join the agreement on capping production. The price of oil was relatively stable throughout August, moving at around USD 51 per barrel. It rose again in September, mainly due to the production being disrupted by the hurricane in the Gulf of Mexico, and afterwards the disruptions in distribution because of the Florida hurricane. The increase in the price of oil was also under the impact of forecasts by relevant institutions regarding the further rise in global oil demand in 2018 which will be driven by global economic growth. Hence, the end of September saw the Brent oil price reach its quarterly maximum of USD 59 per barrel, its highest level since July 2015. Though it dipped in early October, the global

Chart IV.7.12 **Yield on 10-year bonds of selected countries**
(daily data, in %)



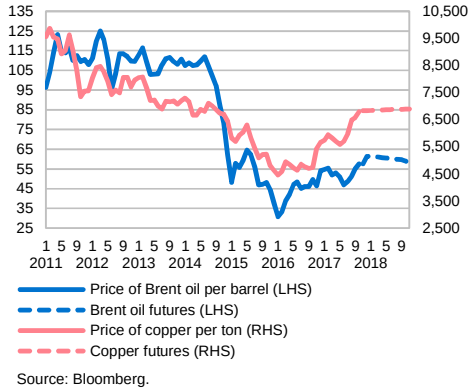
Source: Bloomberg.

Chart IV.7.13 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



Source: IMF.
* Growth indicates appreciation.

Chart IV.7.14 **Oil and copper price movements**
(average monthly prices, in USD)

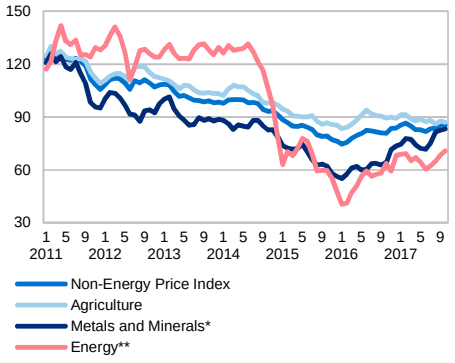


Source: Bloomberg.

oil price perked up to USD 61 per barrel by the end of the month under the impact of expectations that the agreement to cap production, reached between the OPEC countries and other major producers, would be extended after March 2018. Geopolitical tensions in Iraq were also reflected through volatility in the oil market.

Based on the World Bank primary commodities' price indices, the **prices of metals** also rose, after recording a fall in the previous quarter. They rose 15.3% in Q3 and were 31.6% higher than a year ago owing to more faster-paced global economic growth.

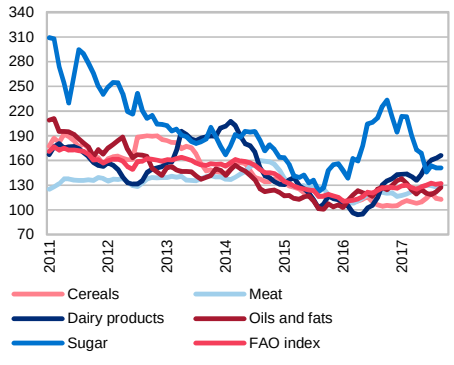
Chart IV.7.15 **Primary Commodity Prices Index**
(2010 = 100)



Source: World Bank.
* Copper, aluminium, iron ore, lead, nickel, zinc, steal and tin.
** Crude oil, natural gas and coal.

Measured by the FAO index, growth in **world food prices** continued up in Q3 (1.7%), though more slowly than a quarter before (2.1%). Compared to Q3 2016, food prices rose 4.3%. The largest hike was recorded in the prices of dairy products, both at the quarterly (7.3%) and the annual level (27.4%). Besides robust global demand, especially in Asia, this was induced by the still restricted supply from Australia, New Zealand and the EU. The price of vegetable oil rose significantly in Q3 (6.0%), but remained almost unchanged relative to a year ago (-0.1%). A significant rise in the price of olive oil in the European market is attributable to the subdued production in Italy, Greece and Spain precipitated by adverse weather conditions. Though sugar prices also rose in Q3 (3.5%), they are still as much as 33.0% below last year's. Estimates are that the halted fall in the prices of sugar in Q3 is temporary and that pressure towards the decline of the already low prices will arise from the surplus in the global sugar market in conditions of a moderate rise in consumption.

Chart IV.7.16 **World food price index**
(in real terms, 2002–2004 = 100)



Sources: FAO, UN.

On the other hand, unlike in Q2, when they posted a rise, the prices of meat and cereals declined in Q3 by 1.4% each, though they are still higher than a year ago, by 5.8% and 8.0% respectively. The fall in the price of meat in Q3 was largely driven by the price of pork which slumped in the wake of increased supply from Brazil. As for cereals, high global production in the 2017/2018 season and record inventories are the factors behind the declining price. The good harvest in South America affected the price of corn, while wheat yields in Russia, which significantly exceeded expectations, pushed global production to what is perhaps a record level and limited the increase in prices.

V Inflation projection

Under the November central projection as well, y-o-y inflation will continue to move within the target tolerance band of 3.0±1.5% until the end of the projection horizon (in the next two years). In H1 2018, inflation will be slowed by the high base for prices of petroleum products and other products that recorded a one-off hike early this year, causing inflation to move below the target midpoint. Rising prices of primary agricultural commodities and aggregate demand will work in the opposite direction. The risks to the projected inflation path are symmetric and relate primarily to future developments in the international commodity and financial markets and, to a degree, administered price growth.

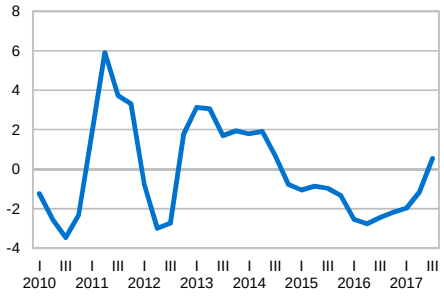
Under our new projection, GDP growth is likely to reach around 2% in 2017 and accelerate to around 3.5% in 2018 and 2019. Further improvement of the business environment, a high and project-diversified FDI inflow, implementation of infrastructure projects and past monetary policy easing are likely to lend a further impetus to private investment which should, in the current and the next two years, be one of the main drivers of economic growth, which we consider to be sustainable. In addition, a growing positive contribution will come from household consumption on account of further labour market recovery. Earlier investment and a more favourable outlook for euro area growth, including in the region of Central and South-Eastern Europe, should have a positive impact on further growth in exports. The risks to the projection for this year are judged to be mildly asymmetric downward and pertain primarily to the outcome of this year's agricultural season and the pace of recovery of the mining and energy sectors. Given that the downside risks to the projection this year are due to supply-side shocks, whose effects on economic activity will wane with the normalisation of conditions, risks are asymmetric upward for the next year on the same grounds.

The medium-term inflation projection aims to show the expected inflation movements (CPI), the main factors behind such movements and the underlying risks. It is expressed both as a range for the CPI and as a central projection rate. The projection assumes an active monetary policy which seeks to keep inflation within the target tolerance band in the medium run and thus fulfil its principal role as defined by the current monetary policy framework.

Initial conditions

Moving within the target tolerance band since early 2017, inflation measured 3.2% y-o-y in September. Compared to our expectations stated in the previous *Report*, inflation was lower as the drought effects on fruit and vegetable prices were weaker than estimated. Inflation decelerated in Q3 chiefly due to the expected slowdown in y-o-y growth in energy and food prices, reflecting the base effect of prices of petroleum products and meat. In addition to headline inflation, core inflation slowed as well, to 1.5% y-o-y in Q3, signalling a further reduction in inflationary pressures. Subdued inflationary pressures are also reflected in inflation expectations of financial and corporate sectors which are anchored within the target tolerance band of 3.0±1.5%.

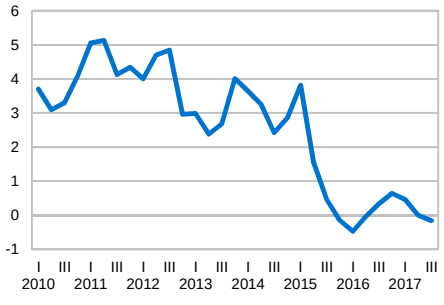
Chart V.0.1 **Monetary conditions index***
(in %)



Source: NBS.

* The monetary conditions index is a combined indicator of the gap of the real interest rate and the gap of the real FX exchange rate. Value >0 indicates restrictive monetary conditions, and value <0 indicates non-expansionary monetary conditions.

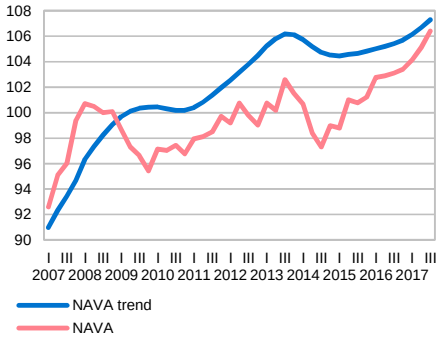
Chart V.0.2 **Real interest rate**
(in %)



Source: NBS.

Note: Real interest rate is derived as the difference between one-week BELIBOR and one-year ahead inflation expectations of the financial sector measured by Bloomberg.

Chart V.0.3 **Output gap**
(Q3 2008 = 100)



Sources: SORS and NBS calculation.

Appreciation pressures continued into Q3. End-of-period, the dinar gained 1.2% against the euro and 4.3% against the dollar. The dinar strengthened on account of increased interest of foreign investors in Serbia and FDI and portfolio investment inflows owing to stronger macroeconomic fundamentals at home and the country risk premium falling to its lowest level on record for Serbia. Though lower than in Q2, foreign cash purchases were more than sufficient to cover the reduced net demand of domestic enterprises in the major part of the period, including FX demand of foreign investors. During the summer months, non-resident spending increased and, on these grounds, receivables on foreign payment cards as well. Appreciation pressures were also fuelled by the rise in currency-indexed bank assets, linked to currency-indexed corporate lending as well. To ease excessive short-term strengthening of the dinar against the euro, in Q3 the NBS intervened in the IFEM buying EUR 605.0 mn, most of it in August. In the course of October, the dinar exchange rate against the euro was relatively stable, with the NBS intervening to purchase additional EUR 15.0 mn.

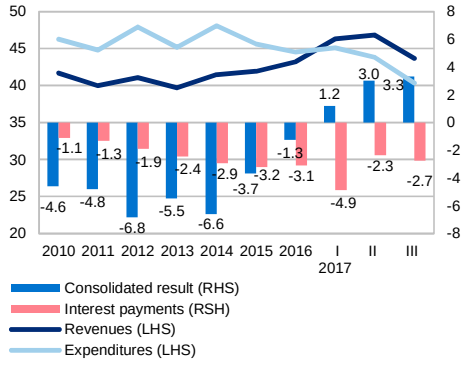
The Monetary Conditions Index, showing a combined impact of the real interest rate gap and the real exchange rate gap, moved slightly above the neutral level in Q3, mainly on account of the nominal appreciation of the dinar. Monetary policy easing through the key policy rate worked in the opposite direction.

GDP grew 1.1% s-a in Q3, led mainly by the continued positive trends in manufacturing driven by the effects of continued activation of investment and elevated external demand. Besides, a continued rise in domestic demand contributed to further growth in most service sectors. Acceleration of manufacturing and further recovery of the mining-energy complex exerted the strongest impact on faster y-o-y GDP growth, which measured 2.1% in Q3 according to the estimate of the Serbian Statistical Office.

Positive fiscal trends continued into Q3. Since early 2017, the general government surplus came at RSD 82 bn (2.6% of GDP), vs. a RSD 4.3 bn deficit in the same period last year. The quantitative criterion under the seventh review of the arrangement with the IMF envisaged a balanced fiscal result of the general government for the period observed, and a deficit of up to 1.1% of GDP in 2017 as a whole. Excluding interest expenses, the general government surplus came at 5.8% of GDP. In y-o-y terms, total revenue increased by 3.9% in real terms as at end-

September, resulting mainly from rising receipts on profit tax, stemming from higher profitability of enterprises last year, higher allocated social insurance contributions reflecting labour market recovery, and rising VAT receipts on account of the economic upturn and improved collection. At the same time, expenditures fell by 2.3% in real y-o-y terms, in response to smaller interest repayments. At end-September, central government public debt equalled EUR 24.1 bn, by over EUR 700 mn less than at end-2016. Its share in projected GDP amounted to 64.6%, vs. 71.9% at end-2016.

Chart V.0.4 **Fiscal trends**
(in % of GDP)



Source: Ministry of Finance.

Inflation projection assumptions

External assumptions

Owing to favourable economic trends since early 2017, the assumption for euro area's GDP growth was again revised upward in the current projection, by 0.3 pp to 2.2% in 2017, and by 0.1 pp to 1.8% in 2018.[26] Growth of 1.7% is envisaged for 2019. Domestic demand, notably private consumption should remain the main driver of growth, led by favourable trends in the labour market, eased monetary conditions and a further rise in consumer confidence. Favourable monetary conditions, along with improved profitability of companies, should further prop up investment, necessary for the modernisation of equipment and high utilisation of current capacities. To an extent, a positive impetus to GDP growth should also come from external demand, as a result of a more favourable global growth outlook.

Inflation in the euro area is expected to rise gradually in the medium run, spurred by monetary policy measures, continued economic growth, gradual absorption of economic slack and rising wages. However, owing to significant appreciation of the euro since early 2017, in September the ECB revised down its inflation projection by 0.1 pp relative to June – to 1.2% in 2018 and 1.5% in 2019, while keeping it unchanged (1.5%) for 2017. At the same time, the ECB assessed that movements in the euro exchange rate represent a source of uncertainty for medium-term inflation. Inflation expectations of professional forecasters remained at a somewhat higher level – they stayed unchanged in October relative to July – 1.4% in 2018 and 1.6% in 2019. The assumption for euro area inflation (according to Consensus Forecast) was revised slightly down from the August projection to 1.3% in 2018. In 2019, inflation is expected to rise to 1.5%.

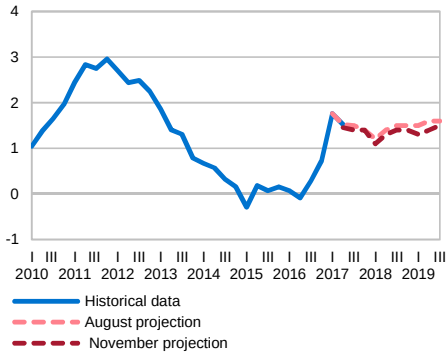
Table V.0.1 **Projection assumptions**

	2017		2018		2019
External assumptions	Aug.	Nov.	Aug.	Nov.	Nov.
Euro area inflation (annual average)	1.5%	1.5%	1.4%	1.3%	1.5%
3M EURIBOR (year-end)	-0.3%	-0.3%	-0.1%	-0.3%	0.0%
Euro area GDP growth	1.9%	2.2%	1.7%	1.8%	1.7%
International prices of primary agricult. commodities (Q4 to Q4)*	15.6%	11.0%	9.4%	10.8%	4.6%
Brent oil price per barrel (year-end, USD)	53	61	53	58	57
Internal assumptions					
Administered prices (Dec. to Dec.)	4.3%	3.1%	4.0%	4.1%	4.0%
Trends					
Appreciation trend of the real exchange rate (average)	0.5%	0.5%	0.6%	0.5%	0.6%
Real interest rate trend (average)	0.9%	0.8%	0.5%	0.6%	0.6%

Source: NBS, Bloomberg.
* Composite index of soybean, wheat and corn prices.

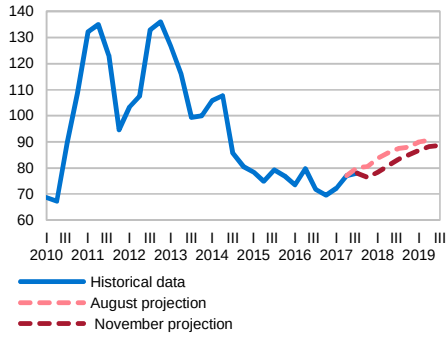
[26] The assumption for euro area's GDP growth in 2017 and 2018 is consistent with the October Consensus Forecast.

Chart V.0.5 **Assumption for euro area inflation**
(y-o-y growth, in %)



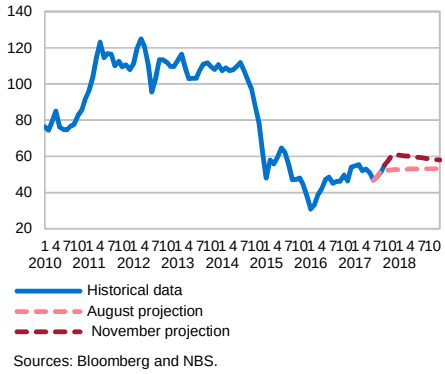
Sources: Consensus Forecast and NBS estimate.

Chart V.0.6 **Assumption for international prices of primary agricultural commodities**
(Q4 2013 = 100)



Sources: BSE, CBOT and NBS.

Chart V.0.7 **Assumption for Brent oil prices**
(USD/barrel)



Sources: Bloomberg and NBS.

Trends in the international financial market will still depend largely on monetary policies of the leading central banks. In October, the Fed began with gradual unwinding of its balance sheet and will probably further raise its funds rate in December. The Fed did not change its June expectations about another three rate hikes for 2018, but reduced them from three to two hikes for 2019. At end-September, market expectations for 2018 and 2019 were somewhat higher than at end-July, but remained significantly below the Fed's expectations. Market expectations increased on the back of optimism that the corporate income tax could be lowered soon and that economic growth would accelerate. The euro area is also likely to experience the continuation of economic growth, though not through expansionary fiscal policy, but monetary accommodation instead. The ECB will continue to implement the QE programme, though slowing down the pace of liquidity expansion as of early 2018 and reducing monthly net purchases of securities from current EUR 60 bn to EUR 30 bn. This stimulus programme will continue until September 2018, with the possibility to increase its volumes and/or duration if needed. The ECB also communicated that after ending net asset purchases it would reinvest the principal of securities due under this programme over an extended period. As assessed by the ECB, the continuation of the QE programme would contribute to the preservation of favourable funding conditions, which are still needed to help inflation return to the target. Three-month EURIBOR futures, used to approximate the euro area interest rate, are also indicative of favourable terms of funding in the coming period. According to these futures, three-month EURIBOR is likely to be negative until the end of the projection horizon. This benchmark euro area interest rate will enter positive territory in early 2020 and not mid-2019 as the market expected according to futures three months ago.

A Q3 fall in prices of global primary agricultural commodities led to their lower estimated growth in 2017 (11.0%) than expected in the previous projection (15.6%). According to futures prices, 2018 is likely to see somewhat higher growth in prices of primary agricultural commodities (10.8%) than in the previous projection (9.4%), and growth of around 5% in 2019. Despite the fact that the current agricultural season at the global level is much better than expected, demand is expected to outstrip supply owing primarily to global economic recovery.

Global oil prices moved up again from September, largely due to production shocks caused by the hurricane that hit the Gulf of Mexico. Prices went up also on the back of forecasts of relevant institutions about a further rise in global oil demand – at end-September, Brent oil prices reached their three-month peak of USD 59 per barrel, this being their highest level from July 2015. Though declining in early October, global oil prices picked up to over USD 60 per barrel until the end of that month, under the impact of market expectations that the OPEC agreement with other major producers to cap production would be extended after March 2018. According to oil futures, Brent oil prices will be relatively stable and reach around USD 61 per barrel by late this year, and around USD 58 and USD 57 per barrel in December 2018 and 2019 respectively.

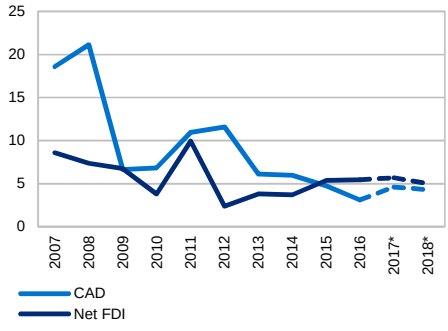
Internal assumptions

Though declining in the global market in Q3, primary agricultural commodity prices increased somewhat in the domestic market (1.7%), which may be associated with the results of the domestic agricultural season. Prices at home are likely to mirror their counterparts in the world, given their connectedness. They are thus expected to rise in the current year, as well as next year, though at a somewhat more moderate pace.

The projection assumes further gradual closing of the output gap[27]. The gap opened in 2008 as a result of the spillover of the global financial crisis to Serbia. However, for more than two years, the gap has displayed a closing tendency, notably due to the recovery of employment and wages in the private sector, as well as growth in external demand. This projection also includes the announced one-off assistance for pensioners worth RSD 5,000 (0.2% of GDP) in 2017, the announced public sector wage growth in 2018, a rise in pensions of 5% and the minimum labour cost of around 10%, which taken together makes up around 1.2% of GDP.

Under the new projection, administered price growth is assumed to reach 3.1% in 2017, adding 0.6 pp to inflation, which is lower than the August projection due to the lower than assumed electricity price adjustment in October and the absence of the assumed adjustment of natural gas prices in Q4. More than a half of administered price growth this year is due to the cigarette price hike in January and July. Administered prices are assumed to record a similar rise in 2018 and 2019 (close to 4.0%).

Chart V.0.8 **Current account deficit and net FDI inflow**
(in % of GDP)



Source: NBS.
* NBS projection.

[27] The output gap is calculated based on NAVA. The NAVA trend estimated by the Kalman filter is used as an approximation of potential output.

After falling to its lowest level on record for Serbia in July, the risk premium declined further in August, equalling around 130 bp on average. It continued to move around this level in the months that followed. In October, it touched its historical low of 114 bp. Given the expected preservation of positive macroeconomic trends in the coming period, the country risk premium should remain relatively stable on account of domestic factors, whilst international factors may have a more volatile impact, which is currently hard to assess. In addition, the expected continuation in export growth, along with FDIs, which will continue to be more than sufficient to cover the current account deficit, will contribute further to relatively stable trends in the FX market in the coming period.

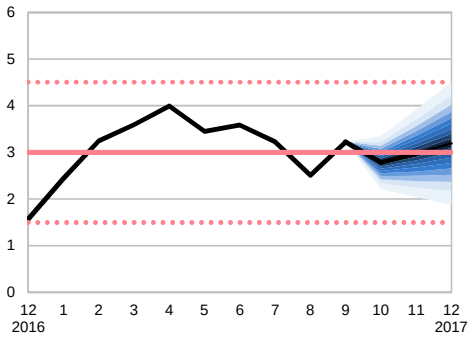
The projection operates on the assumption that inflation expectations will continue to move around the target midpoint in the period ahead, i.e. that they will remain anchored. We also assumed an appreciation trend of the real exchange rate, which is typical for transition economies.

Projection

Inflation projection

Under our new central projection as well, y-o-y inflation will continue to move within the target tolerance band of 3.0±1.5% until the end of the projection horizon. Inflation will move around its current level until the end of this year. It will decline as of early 2018 once this year's one-off price hikes of some products and services drop out of the y-o-y comparison.

Chart V.0.9 **Short-term inflation projection**
(y-o-y rates, in %)



Source: NBS.

Short-term inflation projection

Under the central short-term inflation projection, **y-o-y inflation** will be stable in Q4, moving around the September level at the year-end. A rise in contributions to y-o-y inflation is expected from fruit and vegetable prices, while a fall is likely from energy, mostly due to the base effect for petroleum products and electricity.

In **quarterly terms**, inflation will be under the strongest impact of rising energy prices on account of the October electricity price hike and the seasonal rise in coal and firewood prices. A positive boost is also expected from the seasonal rise in prices of fresh vegetables and processed food. The seasonal drop in prices of fresh meat and fresh fruits will work in the opposite direction.

Y-o-y, core inflation (CPI change excluding the prices of food, energy, alcohol and cigarettes) will be low and stable in Q4, on the back of low imported inflation, also reflecting the effects of dinar's appreciation against the euro this year.

Medium-term inflation projection

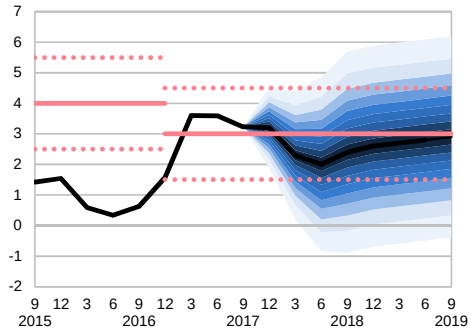
Y-o-y inflation is expected to continue to move within the target tolerance band (3.0±1.5%) until the end of the projection horizon, i.e. in the next two years. In H1 2018, inflation will be slowed by the high base for prices of petroleum products and other products that recorded a one-off hike early this year, causing inflation to move below the target midpoint. On the other hand, a more inflationary effect will originate from a gradual rise in aggregate demand in Serbia and prices of primary agricultural commodities.

Under our projection, in 2018 and 2019 domestic demand will continue to recover, along with weakening disinflationary pressures in respect of a negative output gap. The narrowing in the gap will be supported by NBS past monetary policy easing, ECB's monetary accommodation, and as of early 2018 the announced rise in public sector wages and pensions and the minimum labour cost. At the same time, ECB's monetary accommodation contributes to economic growth in Serbia through elevated external demand, i.e. higher demand for our exports, as well as through low interest rates on euro-indexed loans, which encourage lending and, by extension, economic activity.

We estimate that the costs of food production inputs (measured by the RMCP gap[28]) in Q3 moved around the neutral level, only to exceed that level in October. In the coming period, we expect their gradual rise above the neutral level. Though the current agricultural season in the world was better than expected, notably in terms of the main crops (corn, wheat, soya), their growth will be determined by growing demand against the backdrop of a better global growth outlook. As a result and given the correlation of these prices with those of primary agricultural commodities in the domestic market, we expect a rise in food production costs in 2018, though lesser than assumed in the previous projection.

In terms of inflation components, y-o-y growth in **prices of food products** will slow down in the coming period,

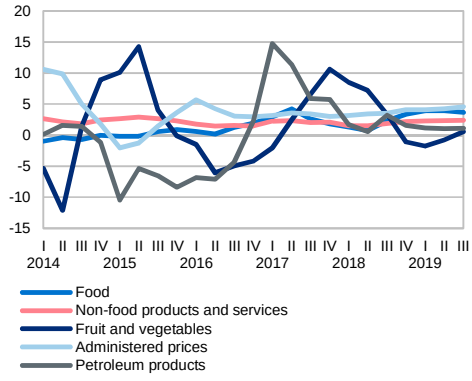
Chart V.0.10 **Inflation projection**
(y-o-y, in %)



Source: NBS.

The fan chart depicts probability of various inflation outcomes in the next eight quarters. Central projection is within the darkest central band and the probability that inflation would lie in it is 10%. Each following shade includes 10% probability, which means that outturns of inflation somewhere within the entire fan chart are expected with probability of 90%. In other words, the probability that inflation in the next eight quarters would lie somewhere outside the band in the chart is 10%.

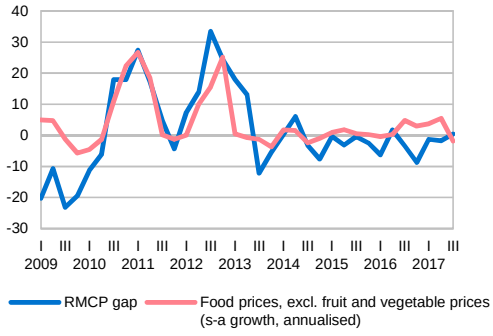
Chart V.0.11 **Projection of inflation components**
(average y-o-y rate, in %)



Source: NBS.

[28] Real marginal costs of processed food producers (RMCP) are calculated as the ratio of primary agricultural commodity prices and food prices. A negative RMCP gap opens when these costs fall below the trend level.

Chart V.0.12 **Impact of RMCP on food prices**
(in %)



Source: NBS.

particularly in H1 2018 due to the high base for pork prices. Thereafter, food inflation is expected to rise moderately, on account of the projected rise in prices of primary agricultural commodities and the weakening disinflationary pressures from domestic demand. Until the year-end, y-o-y **non-food inflation** will move around the current level, but is expected to decelerate in H1 2018, reflecting a lower rise in import prices. Until the end of the projection horizon, it is expected to move around the current level, on account of the recovery of domestic demand. **Fruit and vegetable prices** recorded a y-o-y rise this year, due to unfavourable weather conditions and their trending low last year. However, responding to the high base, y-o-y growth in fruit and vegetable prices is expected to slow significantly early next year. These prices are likely to decline in y-o-y terms with the onset of the new agricultural season. Despite the recent hike in global oil prices, we estimate that y-o-y growth in **petroleum product prices** will continue to slow in early 2018, on account of the high base effect.

Uncertainties surrounding the inflation projection relate primarily to further movements in global commodity and financial markets and, consequently, to prices of petroleum products and food at home, including, to an extent, administered price growth.

In accordance with the latest available information from the futures market, we assume that global oil prices will be relatively stable until the end of the projection horizon. However, as these prices are highly volatile and under the impact of a number of factors, both on the supply- and demand-side, their actual movement may deviate from the assumed path. The prices of primary agricultural commodities in the global market are expected to rise both this and next year, on account of elevated demand in emerging economies. However, as in the case of oil, they may depart from the projected path, both upside and downside. Given the impact of these prices on those in the domestic market, inflation may depart from the projection on these grounds in both directions.

Risks to the projection are also associated with developments in global financial markets, primarily in light of the expected further normalisation of the Fed's monetary policy. In Q3 the Fed did not change the target range for the fed funds rate, but is likely to raise it further in December. In October, it began to gradually decrease its reinvestment of principal payments it receives from securities purchased as part of the QE programme. This could reduce portfolio investment in

emerging economies, Serbia included, possibly leading to depreciation pressures. The ECB's monetary accommodation works in the opposite direction given that the ECB will implement the QE programme at least until September next year, by reducing the current amounts from EUR 60 bn per month to EUR 30 bn as of early 2018. If necessary, as it has announced, the ECB will increase the volumes and/or duration of this stimulus programme.

The projection operates on the assumption that administered prices will grow at a rate of around 4.0% in the next two years. For the projection purposes only, we assumed an electricity price hike of 4% in both years. Absent this increase, y-o-y inflation would fall short of the projected trajectory by around 0.2 pp.

On balance, the risks to the projected inflation path are judged to be symmetric.

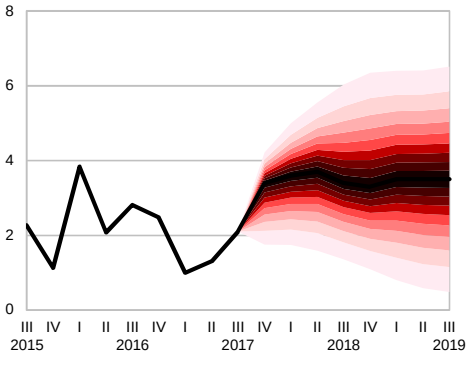
Looking ahead, monetary policy decisions of the NBS will continue to depend on the Executive Board's assessment of the intensity of the (dis)inflationary impact of inflation factors. This means that the NBS will continue to closely monitor and assess movements and trends in the domestic market and in the international environment, including both the international financial market and the market of primary commodities. The NBS will as so far use all available instruments to make sure inflation remains low and stable over the medium term which, together with the preservation of financial stability, will contribute to sustainable economic growth.

GDP projection

During H1, GDP growth turned slower (1.2% y-o-y) under the sway of temporary supply-side factors. As they gradually waned, Q3 saw acceleration of growth to 2.1% y-o-y. Under our new projection, GDP growth should accelerate further until the end of the year and reach around 2% in 2017. The negative effect of supply-side factors in H1, which largely reflected on the contraction in agriculture and the energy sectors, is the key reason for the downward revision of GDP growth for 2017, from 3% in the August *Report* to around 2% in the November *Report*.

Domestic demand continued to lend an impetus to GDP growth in the year so far, with similar movements expected until the year-end. Important contributors include further improvement of the business environment, a high and project-diversified FDI inflow, implementation

Chart V.0.13 **GDP growth projection**
(y-o-y rates, in %)

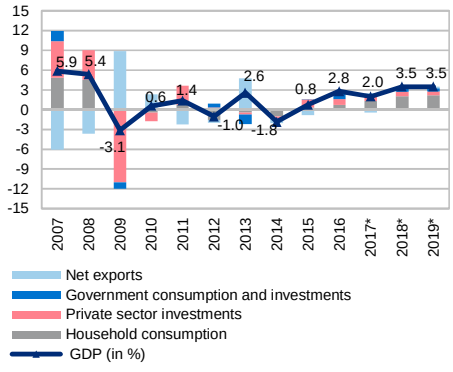


Source: NBS.

of infrastructure projects and past monetary policy easing, which positively reflects on investment. In addition, the continuation of favourable labour market trends has a positive impact on growth in household consumption.

In 2017, GDP growth will also be propped up by rising exports of goods and services, owing to elevated external demand and the expansion of production capacities on the back of investment from prior years. However, the contribution of net exports this year will probably be negative due to higher energy imports from early 2017 caused by cold weather and the expectedly lower exports of agricultural commodities due to a poor agricultural season.

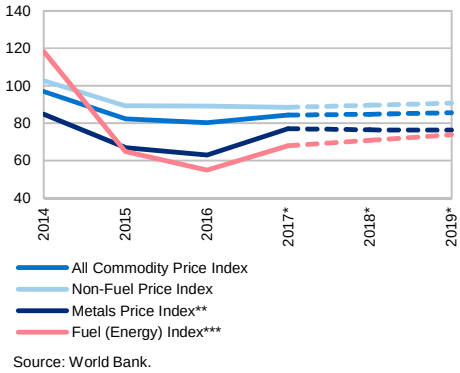
Chart V.0.14 **Contributions to real GDP growth**
(in pp)



Sources: SORS and NBS calculation.
* NBS estimate.

On the production side, a positive contribution to GDP growth is expected from the continuation of favourable trends in manufacturing, on account of continued activation of investment and further growth in the euro area. As it was expected, the recovery of household consumption spilled over to rising activity in most service sectors in the year so far. To a lesser extent, a positive contribution is also expected from construction, which witnessed anticipated recovery in Q3. On the other hand, the drop in agricultural production will doubtless be higher than expected as the unfavourable weather conditions prevailing in the major part of the agricultural season led to lower yields of all important crops.

Chart V.0.15 **Projection of movement in primary commodity prices**
(2010 = 100)



Source: World Bank.
* World Bank projection.
** Copper, alluminium, irone ore, lead, nickel, zink, steal and tin.
*** Crude oil, natural gas and coal.

According to our estimate, GDP will accelerate in 2018 and 2019 mainly on account of faster growth in household consumption on the back of an expected further rise in real disposable income. In addition to a continued rise in employment, a contribution is also likely to come from the growth in the minimum wage and public sector wages and pensions (with fiscal room opened in the prior period), and the expected preservation of price stability. Investment – supported by the continued upgrade of the business environment and favourable terms of borrowing – is likely to support GDP growth, to a similar degree as in 2017.

Exports are expected to increase further, given the positive outlook for growth in external demand. Reflecting more robust domestic demand, imports are likely to go up as well – both of equipment and intermediate goods for corporate needs, and consumer goods to meet the rising household consumption. A positive contribution of net exports to GDP growth in 2018 and 2019 is therefore expected to be relatively small.

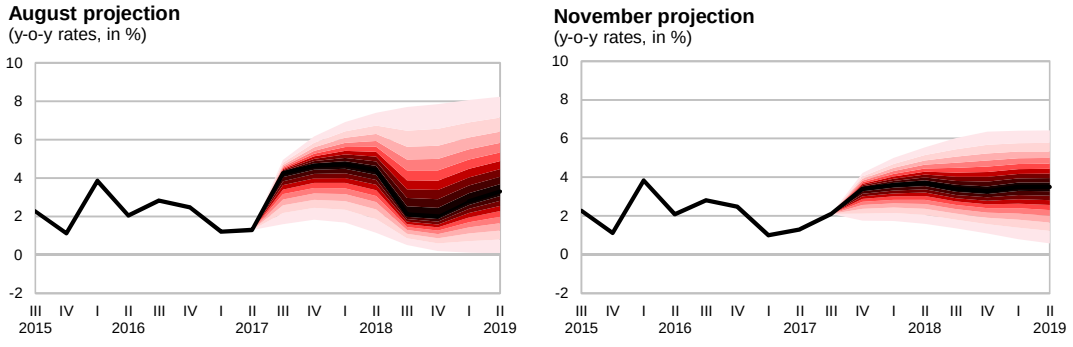
On the production side, the expected further rise in investment and household consumption should continue to lend a positive impetus to manufacturing and service sectors in the medium term as well, these sectors being the main assumed drivers of GDP growth. A positive contribution is also expected from construction, and from the recovery of agriculture and the mining and energy sectors, whose contraction in 2017 was due to one-off factors.

The risks to the projection for this year are mildly asymmetric downward and are primarily associated with performance in the agricultural, mining and energy sectors. Risks are judged to be symmetric in respect of the pace of euro area growth and developments in the global market of primary commodities (oil, base metals and cereals) and the international financial market. Given that the downward risks to the projection this year are driven by supply-side shocks, whose effects on economic activity will wane once the conditions normalise, risks are mildly asymmetric upward for next year on the same grounds.

The recovery in the mining and energy sectors began in Q2, but unfolded at a weaker pace because of the bad hydrological situation during summer. Though growth is expected to continue in these sectors until the year-end, it may be lower than projected, which would lead to a somewhat lower than expected contribution of the industry to GDP growth.

Given the significant improvement in the investment climate in the past several years, the exports boasting a wide production and geographic diversification, and the

Chart V.0.16 **Current vs. previous GDP growth projection**



Source: NBS.

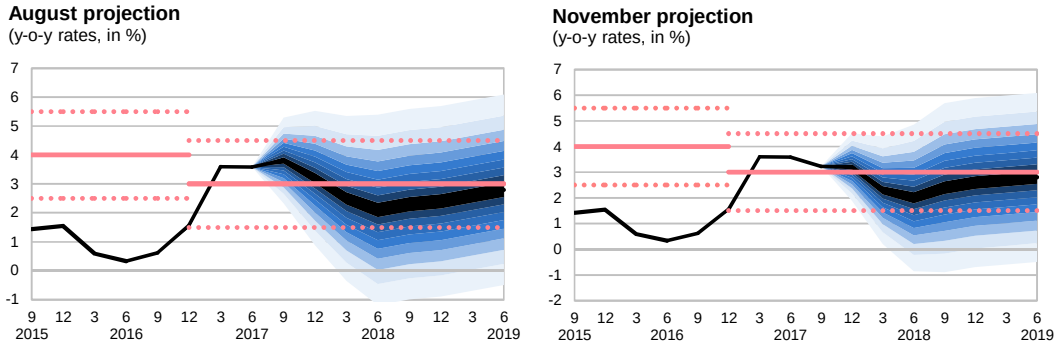
continued goods performance of the majority of sectors that were not influenced by negative supply-side factors, we believe that the foundation has been created for acceleration of economic growth on sustainable grounds in the medium run. The pace of acceleration of economic growth in the period ahead will depend on the pace of euro area growth, whose assessments during the year were continuously revised upward. Faster euro area growth should also reflect on a more favourable growth outlook in Central and South-Eastern Europe, with which Serbia also has significant trade links. On these grounds, through more robust external demand and higher investment, GDP growth in Serbia could also step up. On the other hand, the strengthening of geopolitical tensions could slow down, to an extent, the growth in the euro area and the surrounding countries, and affect the trends in Serbia in the same direction.

In addition, GDP growth will be under the sway of developments in global markets of primary commodities, notably oil. A potential oil price hike could trigger a reduction in the real disposal income in net exporters, including Serbia, and consequently lead to somewhat lower GDP growth. In contrast, falling oil prices would positively affect the real disposable income of households and business costs of corporates, and thus fuel GDP growth. The prices of cereals and base metals, Serbia being their net exporter, are also important for the country's GDP growth. A rise in these prices in the world market would provide a positive, and their fall a negative contribution to Serbia's GDP.

Comparison and outcome of inflation projections

The new medium-term inflation projection is lower than in August, both until the end of this and for H1

Chart V.0.17 **Current vs. previous inflation projection**

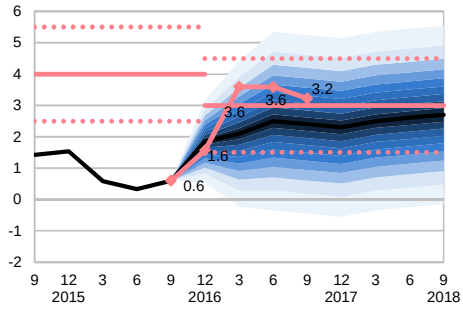


Source: NBS.

next year. Until the end of the projection horizon, we expect inflation to move around the levels assumed in the August projection. The lower projection is due mainly to the lower than expected rise in consumer prices in Q3 and lower import prices compared to the previous projection, reflecting, among other, the nominal appreciation of the dinar. In addition, the assumed administered price growth is lower this year than in the August inflation projection.

In the past year inflation has been moving within the range projected in November 2016, but above the central projection. Such outturn was due mainly to faster than expected growth in petroleum product prices, taking place after the recovery of global oil prices, as well as a higher than expected increase in fruit and vegetable prices early in the year due to the exceptionally cold weather.

Chart V.0.18 **Achievement of November 2016 inflation projection**
(y-o-y rates, in %)



Source: NBS.

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Q1 2017	Q2 2017	Q3 2017
EXTERNAL LIQUIDITY INDICATORS (in %)															
FX reserves/imports of goods and services (in months)	6.1	9.0	7.5	5.4	9.7	8.4	8.8	7.7	7.6	6.6	6.6	6.2	5.8	5.6	5.9[2]
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.8	237.4	268.7	294.1	260.7	245.4	245.6	248.3	
FX reserves /GDP	23.3	36.9	32.7	24.2	34.6	33.6	36.1	34.5	32.7	29.7	31.0	29.5	28.3	27.9	30.1
Debt repayment/GDP	5.0	10.3	10.3	10.7	12.8	12.0	12.4	13.0	13.4	14.2	12.1	12.8	9.9	11.4	8.4[2]
Debt repayment/exports of goods and services	19.8	36.2	37.5	37.5	48.8	37.5	37.3	36.0	33.0	32.7	25.9	25.5	17.8	20.2	16.2[2]
EXTERNAL SOLVENCY INDICATORS (in %)															
External debt/GDP	59.3	58.5	59.0	62.3	72.7	79.0	72.2	80.9	74.8	77.1	78.3	76.5	76.1	73.3	
Short-term debt/GDP	13.2	13.9	13.1	14.9	15.7	17.6	12.0	14.5	12.2	10.1	11.9	12.0	11.5	11.2	
External debt/exports of goods and services	234.9	205.7	214.3	218.9	276.9	247.1	216.5	223.6	184.0	177.7	167.8	152.4	146.8	138.5	
FINANCIAL RISK EXPOSURE INDICATORS (in %)															
FX reserves/M1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	330.4	278.1	250.2	207.3	208.4	198.2	210.6
FX reserves/reserve money	169.8	179.5	173.8	140.7	190.5	196.4	207.6	197.9	199.9	196.6	193.7	196.6	209.6	207.5	215.5
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP	70.8	77.4	80.1	82.6	69.0	79.8	82.7	89.8	92.6	97.7	103.1	106.8	120.7	120.9	110.6[2]
MEMORANDUM: (in EUR million)															
GDP[1]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	33,491	34,617	7,847	8,754	9,517[2]
External debt	12,520	14,291	17,382	20,982	22,272	23,509	24,123	25,645	25,644	25,679	26,234	26,493	26,125	25,425	
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,727	4,041	4,441	778	998	804[2]
Central bank foreign exchange reserves	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,730	9,670	10,636
Short-term debt[3]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	679	530	695	
Current account balance	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,577	-1,075[4]	-673	-267	-282[2]

CREDIT RATING (change of rating and outlook)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	July/May	Feb.	July	March/ Dec.	Dec.	Nov.	March	Aug.	July	Jan.	Dec.	Jan./March /June/Dec.	March
S&P	BB- /stable	BB- /positive	BB- /stable	BB- /negative	BB- /stable		BB /stable	BB- /negative				BB- /positive	
Fitch	BB- /stable			BB- /negative		BB- /stable		BB- /negative		B+ /stable	B+ /positive	BB-/stable	
Moody's									B1 /stable			B1 /positive	Ba3 /stable

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) - ratio of end-of-period foreign exchange reserves to average monthly imports of goods and services during period under review.

Foreign exchange reserves/short-term debt (in %) - ratio of foreign exchange reserves to stock of short-term debt at remaining maturity at end-of-period.

Foreign exchange reserves/GDP (in %) - ratio of end-of-period foreign exchange reserves to GDP.

Debt repayment/GDP (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to GDP during period under review.

Debt repayment/exports (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to exports of goods and services during period under review.

External debt/GDP – ratio of end-of-period outstanding debt to GDP.

Short-term debt/GDP – ratio of end-of-period short-term debt at remaining maturity to GDP.

External debt/exports (in %) – ratio of end-of-period outstanding debt to annual value of exports of goods and services.

Foreign exchange reserves/M1(in %) - ratio of foreign exchange reserves to money supply at end-of-period.

(Exports + imports)/GDP (in %) - ratio of value of exports and imports of goods and services to GDP during period under review.

[1] According to ESA 2010.
[2] NBS estimate.
[3] At original maturity.
[4] Completed revision of the balance of payments for 2016 in accordance with a change in official data sources.

Notes:

1. Data are subject to corrections in line with the official data sources.

2. Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to BPM5.

3. As of 1 January 2010 the Serbian Statistical Office applies the general trade system of registration of exports and imports which is a broader concept and includes all goods entering/exiting country's economic territory, apart from goods in transit. Statistical Office has published comparable data for 2007, 2008 and 2009. Previous years are disseminated using the special trade system. Trade with Montenegro is registered within relevant transactions as of 2003.

4. In September 2010, the methodology of external debt statistics was changed – public sector external debt now includes liabilities under SDR allocation (EUR 472.1mn) used in December 2009. Private sector external debt excludes loans concluded before 20 December 2000 in respect of which no payments are made (EUR 968.3 mn, of which EUR 418.5 mn relates to domestic banks and EUR 549.8 mn to domestic enterprises).

5. Foreign debt repayment does not include: short-term debt repayment and advance debt repayment.

Table B
Key macroeconomic indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Q1 2017	Q2 2017	Q3 2017
Real GDP growth (in %)[1]	5.5	4.9	5.9	5.4	-3.1	0.6	1.4	-1.0	2.6	-1.8	0.8	2.8	1.0	1.3	2.1
Consumer prices (in %, relative to the same month a year earlier)[2]	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	2.2	1.7	1.5	1.6	3.6	3.6	3.2
NBS foreign exchange reserves (in EUR million)	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,730	9,670	10,636
Exports (in EUR million)[3]	5,329	6,948	8,110	9,583	8,043	9,515	11,145	11,469	13,937	14,451	15,631	17,385	4,383	4,934	4.961[6]
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.2	11.2	10.4	12.7	12.3[6]
Imports (in EUR million)[3]	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,899	19,597	5,087	5,651	5,563[6]
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	4.4	3.7	14.4	12.3	14,3[6]
Current account balance[3]															
(in EUR million)	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,577	-1075[8]	-673	-267	-282[6]
as % of GDP	-8.4	-9.6	-18.6	-21.2	-6.6	-6.8	-10.9	-11.6	-6.1	-6.0	-4.7	-3.1	-8.6	-3.0	-3,0[6]
Unemployment according to the Survey (in %)	20.8	20.9	18.1	13.6	16.1	19.2	23.0	23.9	22.1	19,2[7]	17.7	15.3	14.6	11.8	
Wages (average for the period, in EUR)	209.7	260.0	347.1	400.5	337.4	330.1	372.5	364.5	388.6	379.3	368.0	374.1	366.6	398.2	399.9
RS budget deficit/surplus (in % of GDP)[4]	0.5	-1.7	-1.6	-1.7	-3.2	-3.4	-4.0	-5.9	-5.2	-6.3	-2.8	-0.2	0.7	2.4	2.9
Consolidated fiscal result (in % of GDP)[4]	1.2	-1.5	-1.9	-2.6	-4.4	-4.6	-4.8	-6.8	-5.5	-6.6	-3.7	-1.3	1.2	3.0	3.3
RS public debt, (central government, in % of GDP)	50.2	35.9	29.9	28.3	32.8	41.8	45.4	56.2	59.6	70.4	74.7	71.9	68.1	64.6	64.6
RSD/USD exchange rate (period average)	66.87	67.03	58.39	55.76	67.47	77.91	73.34	88.12	85.17	88.54	108.85	111.29	116.18	111.53	101.94
RSD/USD exchange rate (end of period)	72.22	59.98	53.73	62.90	66.73	79.28	80.87	86.18	83.13	99.46	111.25	117.14	116.13	105.65	101.33
RSD/EUR exchange rate (period average)	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	113.14	117.31	120.73	123.12	123.88	122.86	119.76
RSD/EUR exchange rate (end of period)	85.50	79.00	79.24	88.60	95.89	105.50	104.64	113.72	114.64	120.96	121.63	123.47	123.97	120.85	119.37
MEMORANDUM:															
GDP (in EUR million)[5]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	33,491	34,617	7,847	8,754	9,517 [6]

[1] At constant prices of previous year.

[2] Retail prices until 2006.

[3] Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to BPM5. Due to the break in the series for 2007, exports and imports growth rates are not shown. As of 1 January 2010, the Serbian Statistical Office applies the general trade system of registration of exports and imports which is a broader concept and includes all goods entering/exiting country's economic territory, apart from goods in transit. The Statistical Office has published comparable data for 2007, 2008 and 2009. Previous years are disseminated using the special trade system. Trade with Montenegro is registered within relevant transactions as of 2003.

[4] Includes below-the-line items (payment of called guarantees, bank recapitalisations and debt takeover) in line with IMF methodology, as of 2008 on RS budget level and as of 2005 on consolidated level.

[5] According to ESA 2010.

[6] NBS estimate.

[7] Revised data for 2014 and 2015 according to the new methodology of Labour Force

[8] Completed revision of the balance of payments for 2016 in accordance with a change in official data sources.

Notes:

1. Data are subject to corrections in line with official data sources.
2. Source for the data on unemployment: Labour Force Survey, Statistical Office.
3. Source for public debt: MoF.

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Executive Board meetings and changes in the key policy rate

2016

Date	Key policy rate (p.a, in %)	Change (in basis points)
12 January	4.50	0
11 February	4.25	-25
17 March	4.25	0
7 April	4.25	0
17 May	4.25	0
9 June	4.25	0
7 July	4.00	-25
11 August	4.00	0
8 September	4.00	0
13 October	4.00	0
10 November	4.00	0
8 December	4.00	0

2017

Date	Key policy rate (p.a, in %)	Change (in basis points)
12 January	4.00	0
14 February	4.00	0
14 March	4.00	0
11 April	4.00	0
12 May	4.00	0
8 June	4.00	0
10 July	4.00	0
10 August	4.00	0
7 September	3.75	-25
9 October	3.50	-25
9 November	3.50	0
7 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 7 September 2017

At its meeting today, the NBS Executive Board decided to lower the key policy rate to 3.75 per cent.

In making the decision, the Executive Board was guided by the lower current inflation as well as the reduced medium-term August inflation projection compared to the May projection, both for this and for the next year.

Low and stable core inflation at the level of around 2% year-on-year, which went down to 1.7% in July, as well as inflation expectations of the financial and corporate sectors which are within the target tolerance band, suggest that inflationary pressures remain low. Fiscal developments have also been significantly more favourable than expected since the beginning of the year, with achieved surplus of around 2.1% of GDP at consolidated level in the first half of the year. Furthermore, relative to the lower August projection, inflationary pressures were additionally reduced based on the lower import prices expressed in dinars and decreased country risk premium, which reached its lowest level since it has been monitored for Serbia.

The Executive Board expects inflation to remain within the tolerance band of 3.0%±1.5 pp in the period ahead. In addition to the above, factors that will also slow down inflation will be the high base of petroleum product prices and the drop out of this year's one-off price hikes of certain products and services from the y-o-y calculation as of early 2018. For this reason, inflation will move below its current level. In the medium term, a gradual increase in the global prices of primary agricultural commodities and aggregate demand in Serbia will work in the opposite direction.

The NBS Executive Board assessed that movements in the international commodity and financial markets are still fraught with uncertainties, which mandates caution in the conduct of monetary policy. Uncertainties surround global primary commodity prices, particularly oil prices. In the international financial market, uncertainties stem largely from the diverging monetary policies of the leading central banks, the Fed and ECB, which may impact capital flows to emerging economies. However, inflation in the international environment is still low and has slowed down further in recent months, as the effects of energy price hikes wore off. In addition, despite the economic recovery, there are no signals of a rise of inflationary pressures on the demand side or that the leading central banks might tighten their monetary policies faster than they had previously announced.

By lowering the key policy rate amid low inflationary pressures, the NBS provides additional support to credit activity and economic growth.

The next rate-setting meeting will be held on 9 October.

Press release from Executive Board meeting held on 9 October 2017

At its meeting today, the NBS Executive decided to cut the key policy rate to 3.5%.

In making the decision, the NBS Executive Board was guided by the medium-term inflation projection and movements in key inflation factors.

Since early 2017, y-o-y inflation has been moving within the target tolerance band, falling to 2.5% in August. Core inflation declined further – to 1.5% y-o-y, as well as both one- and two-year ahead inflation expectations, which signals the persistently low inflationary pressures. In addition, the negative effects of the drought on food prices were weaker than expected. Compared to the August projection, other factors working towards lower inflation are subdued dinar import prices and the fact that the country risk premium fell to its lowest level on record for Serbia. Furthermore, fiscal movements are more favourable than expected, as confirmed by the consolidated surplus of around 2% of GDP in the period of eight months.

The NBS Executive Board expects inflation to remain within the target tolerance band of 3.0%±1.5 pp in the period ahead. In addition to the above factors, inflation will be slowed down by the high base from the prices of petroleum products and, as of early 2018, by the drop-out of this year's one-off price hikes of certain products and services from the y-o-y calculation. A gradual increase in the global prices of primary agricultural commodities and aggregate demand in Serbia will work in the opposite direction over the medium run.

The Executive Board stated that developments in the international commodity and financial markets are still fraught with uncertainty. Uncertainties also surround global primary commodity prices, as attested by the volatility of oil prices during September. Uncertainties in the international financial market continue to stem largely from the diverging monetary policies of leading central banks, the Fed and the ECB, which may affect capital flows to emerging economies. However, despite the global economic recovery, for the time being there are no signals of a rise in inflationary pressures on the demand side or that leading central banks might tighten their monetary policies faster than previously announced. In addition, the Executive Board emphasises that today, owing to a favourable macroeconomic outlook, Serbia is more resilient to potentially adverse effects from the international environment.

By further lowering the key policy rate amid low inflationary pressures, the NBS provides additional support to credit activity and economic growth.

The next rate-setting meeting of the Executive Board will be held on 9 November.

Press release from Executive Board meeting held on 9 November 2017

At today's meeting, the NBS Executive Board decided to keep the key policy rate on hold, at 3.5%.

In making such decision, the Executive Board was guided by the new, November inflation projection and the movement in its key factors, the expected effects of past monetary policy easing, better economic performance in the third quarter and improved outlook.

As assessed by the Executive Board, inflationary pressures remain low, as indicated by the slowdown in headline and core inflation over the past months, as well as the inflation expectations of the financial and corporate sectors that are anchored within the NBS target band. The drought effects on food prices were weaker than expected. Lower import prices also impacted the slowdown in inflation. Further, since early 2017, fiscal trends have been much more favourable than expected. Risk premium fell to its lowest on record for Serbia, reflecting, in addition to global factors, stronger macroeconomic fundamentals at home.

The Executive Board expects inflation to continue to move within the target tolerance band of 3.0±1.5% in the coming period, and to be at a lower level in the first half of 2018 due to the high base effect from the prices of petroleum products and other products that underwent one-off price hikes early in the year. The expected rise in the prices of primary agricultural products and aggregate demand will act in the opposite direction.

At today's meeting, the Executive Board adopted the November Inflation Report which will be presented to the public on Wednesday, 15 November, when monetary policy decisions and the underlying macroeconomic developments will be discussed in more detail.

The next rate-setting meeting will be held on 7 December.

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