National Bank of Serbia

February 2018

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 February *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 8 February 2018.

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

ABBREVIATIONS

bn – billion
bp – basis point
CPI – Consumer Price Index
EBRD – European Bank for Reconstruction and Development
ECB – European Central Bank
EIB – European Investment 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
tn – trillion
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I. Overview

Owing to well-balanced monetary policy measures and full coordination with fiscal policy, in 2017 inflation moved within the target band (3±1.5%) and stood at the 3.0% target in December, which is also the average for the year. Around 70% of the contribution to year-on-year inflation in December came from the prices of food, mainly fruit and vegetables, and excise products, indicating that in 2017 inflation was driven by the increase in the prices of a small number of products and services. Inflationary pressures are still low, as suggested also by low and stable core inflation, which measured 1.3% year-on-year in December, its lowest level since the consumer price index has been used as a measure of inflation.

In 2017, year-on-year inflation moved within the target tolerance band (3±1.5%), standing in December at the 3.0% target, also its average value in 2017.

Developments in the international environment in the period since the November *Report* were marked by improved outlook for global economic growth. This mostly resulted from a more favourable outlook for growth in the euro area, our most important trade partner, which spilled over to economic activity in Central and South-Eastern Europe as well. Global inflation was somewhat higher than in the previous period, but high inflationary pressures are still not expected in most countries. Leading central banks continued to pursue divergent monetary policies, but global financial conditions remain favourable, owing to the still extremely low interest rates and improved outlook for global economic growth. Faster than expected euro area economic growth contributed to the euro's strengthening against the dollar in 2017, after three years of weakening. The period since the November *Report* was also marked by the increase in the global prices of primary commodities, most notably oil.

Developments in the international environment since the November Report were marked by improved outlook for global economic growth, strengthening of the euro against the dollar despite the accommodative monetary policy pursued by the European Central Bank and the continued normalisation of the monetary policy of the Federal Reserve System, and the rise in global oil prices.

Appreciation pressures in the domestic market, present since April, continued during most of the fourth quarter. This was helped by good export performance of the Serbian economy and continued high foreign direct investment inflows. On the other hand, as usual for the season, the fourth quarter saw higher foreign currency demand of enterprises, mostly energy importers. The emergence of depreciation pressures in mid-November was also caused by higher net sale of foreign currency to non-residents, though pressures were mitigated by higher purchases of foreign cash, the rise in foreign currency-indexed bank assets and the increase in foreign currency supply of foreign citizens, mostly tourists.

End-of-period, in the fourth quarter the dinar strengthened by 0.8% against the euro and 2.2% against the dollar, as the euro continued to appreciate vis-à-vis the dollar.

In the period since the November Report, the Executive Board has kept the key policy rate unchanged.

The Executive Board of the National Bank of Serbia has kept the key policy rate on hold at 3.5%, in consideration of the inflation outlook and the movement of its key factors in the coming period, and the effects of past monetary policy easing. As assessed by the Executive Board, inflationary pressures remained low 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 results were considerably more favourable than initially expected. Throughout the year, medium-term inflation expectations of the financial and corporate sectors were anchored within the target band. On the other hand, monetary policy caution in the period observed was mandated by uncertainty in the international commodity market, mainly regarding the movements in oil prices. Caution was also required due to movements in the international financial market caused by diverging monetary policies of the Federal Reserve System and European Central Bank. However, the Executive Board was aware that, owing to improved macroeconomic fundamentals and a favourable outlook in the period ahead, Serbia is now more resilient to potentially adverse effects from the international environment, which is attested by the increase in Serbia's credit rating and the successful conclusion of the eighth review of Serbia's stand-by arrangement with the International Monetary Fund.

In the fourth quarter, growth in lending accelerated, and the share of non-performing loans in total loans plummeted, dropping below the pre-crisis levels.

In the period since the November *Report*, the price of dinar private sector lending dropped further, with interest rates on all types of dinar corporate loans reaching new lows in December. The mentioned decline in interest rates on dinar loans, the effects of increased interbank competition, economic growth and recovery in the labour market, a decline in the risk premium, and low interest rates in the euro money market all contributed to an acceleration in lending activity. Despite the write-offs of non-performing loans, which exceeded last year's figures, the year-on-year rise in total loans (excluding the exchange rate effect) sped up to 7.4% in December. Owing to the successful implementation of the NPL Resolution Strategy and the rise in lending activity, the share of non-performing loans in total loans fell below the pre-crisis level.

In 2017, fiscal trends were significantly more favourable than expected – for the first time since 2005, surplus was achieved, at the consolidated level of 1.2% of gross domestic product.

Continued positive fiscal trends in 2017 were mostly driven by the rise in domestic demand and profitability of companies, labour market recovery and more efficient tax collection. Positive fiscal trends were also contributed by the decline in interest expenses in an environment of reduced government's need to borrow and a lower cost of

borrowing, owing to monetary policy easing carried out by the National Bank of Serbia and the decline in the country risk premium. At general government level, 2017 saw a surplus of 1.2% of gross domestic product, for the first time since 2005. In accordance with the Fiscal Strategy for 2018–2020, and the eighth review of the arrangement with the International Monetary Fund, the general government deficit envisaged for the medium run is 0.5% of gross domestic product. This medium-term deficit target will ensure a sustained downward trajectory of public debt in the coming period.

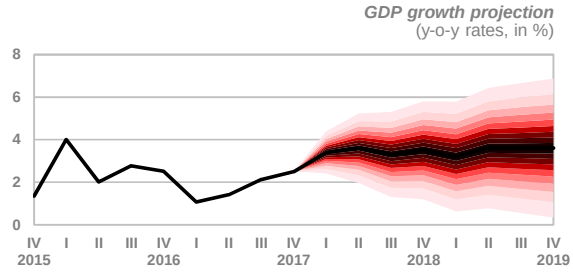
Euro-denominated commodity exports in 2017 continued to record high growth (10.0%), remaining broadly dispersed by product and geographical area, while imports increased (13.4%) mainly on the back of higher industry needs for equipment and intermediate goods.

According to preliminary data, in 2017 the current account deficit equalled 5.7% of gross domestic product. The trade in goods deficit was higher than in 2016, mostly due to greater energy imports, partly due to higher needs of the industry and partly to the rise in global oil prices. In addition, investment growth spurred by the robust inflow of foreign direct investment pushed up equipment imports. Despite contracted exports of agricultural commodities due to a poor agricultural season, in 2017 total commodity exports recorded two-digit growth figures, with the rise in manufacturing exports accelerating further (from 11.6% in 2016 to 13.6% in 2017). At the same time, developments in the financial account were more favourable than in 2016. This resulted from the above increase in net inflows of foreign direct investment by 27.1%, but also from lower outflows with respect to portfolio investment (despite the maturing of the eurobonds issued in the international market in 2012) and, for the first time since 2010, achieved growth in net borrowing of banks abroad. The net inflow of foreign direct investment of 6.6% of gross domestic product, has fully covered the current account deficit for the third consecutive year. This is also expected in the coming period, which will be one of the factors of external sustainability in the medium run.

The gradual waning of supply-side shocks reflected on a pick-up in gross domestic product growth – to 2.5% year-on-year in the fourth quarter.

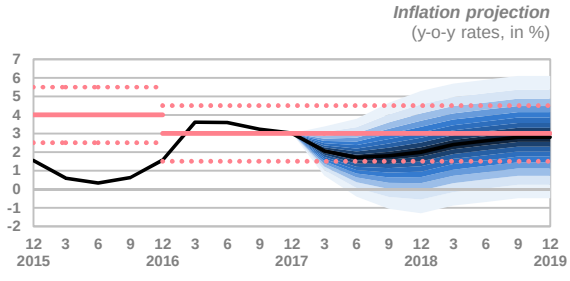
According to the preliminary estimate of the Statistical Office, year-on-year growth in gross domestic product in the fourth quarter of 2017 sped up to 2.5% on the back of stepped-up growth in construction and most service sectors. Manufacturing remained a positive contributor, while agriculture acted as a drag, as expected, because of the poor agricultural season. On the expenditure side, the acceleration in growth of gross domestic product in the fourth quarter was supported by an accelerated rise in private investment and recovery of government investment. Private consumption also gave a positive contribution against the backdrop of labour market recovery. At year level, gross domestic product growth in 2017 measured 1.9% according to the preliminary estimate of the Serbian Statistical Office.

According to our projection, gross domestic product growth will accelerate to around 3.5% in 2018 and 2019.



Owing to stronger domestic macroeconomic fundamentals, implementation of structural reforms and improvement of the investment climate, in prior years Serbia has created the basis for growth acceleration in the medium run. We therefore assess that, after temporarily slowing down in 2017 due to supply-side shocks, gross domestic product growth will speed up to around 3.5% in 2018 and maintain a similar pace in 2019. We expect investment to remain one of the drivers of economic growth, while a growing positive contribution should come from household consumption on account of further labour market recovery. Earlier investment and a more favourable outlook for growth in the euro area and Central and South-Eastern Europe should have a positive impact on further growth in exports. Imports are also expected to continue up, albeit at a slower pace than in 2017, because the continuation of the investment cycle will impact further growth in equipment imports. Risks to the projection of gross domestic product are symmetric and are associated with economic growth in the euro area and other important foreign trade partners, developments in the international primary commodity and financial markets, as well as, to an extent, the success of the agricultural season at home and the pace of recovery in the energy sector.

According to our latest central projection, year-on-year inflation will continue to move within the target tolerance band (3.0±1.5%) until the end of the projection horizon.



Under the February central projection as well, 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). Against the backdrop of low inflationary pressures reflecting the majority of factors from the domestic and international environment and the high base effect of fruit and vegetable prices, and energy prices in the short run, in 2018 inflation will move closer to the lower bound of the target tolerance band. Conversely, we expect gradual recovery of domestic demand, which should lead to a moderate rise in inflation in the medium run and ensure that it continues to move within the target tolerance band. The new medium-term inflation projection is lower than in November, until the end of the projection horizon. *This is due mainly to the smaller than expected rise in consumer prices in the fourth quarter and lower import prices of primary agricultural commodities expressed in dinars, compared to the previous projection.* The risks to the projected inflation path are symmetric and relate primarily to future developments in the global commodity and financial markets, and to a certain degree, to administered price growth.

Looking ahead, monetary policy decisions of the National Bank of Serbia will continue to depend on the assessment of the impact of inflation factors from the domestic and international environment. As the key risks emanate from the international environment, the National Bank of Serbia will continue to closely monitor and assess movements in the international financial market and the market of primary commodities, notably crude oil and primary agricultural commodities, and will assess their impact on economic developments in Serbia. The National Bank of Serbia 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 and stronger resilience to external uncertainties.

Key risks in the coming period emanate from the international environment and, as such, will affect the monetary policy stance.

II. Monetary policy since the November *Report*

Since the November Report, the Executive Board has kept the key policy rate on hold at 3.5%, in consideration of the inflation outlook and the movement of its key factors in the coming period, and the effects of past monetary policy easing.

As assessed by the NBS Executive Board, inflationary pressures remained low due to factors from the domestic and international environment, as indicated also by low core inflation and the inflation expectations of the financial and corporate sectors anchored within the target tolerance band. The NBS Executive Board assessed that, until the end of the projection horizon, i.e. in the next two years, inflation will move within the target band, though it will decline in H1 2018 as a result of the base effect of food and energy prices. Another drag on inflation are low cost-push pressures on account of import prices expressed in dinars, prices of primary agricultural commodities in the domestic market, and the continued decline in the country risk premium. The expected rise in domestic demand will work in the opposite direction, aided by wage and employment growth and the effects of past monetary policy easing.

In this period, monetary policy caution was mandated by movements in the international environment. Uncertainty over the divergence of monetary policies of the leading central banks persisted, which could affect global capital flows towards emerging economies, Serbia included. Also, uncertainty related to the movement of global primary commodity prices, particularly oil prices. However, the Executive Board was aware that, owing to improved macroeconomic fundamentals and a favourable outlook in the period ahead, Serbia is now more resilient to potentially adverse effects from the international environment.

In the period since the November *Report*, the Executive Board **has kept the key policy rate unchanged (3.5%)**. The Executive Board made such decisions taking into consideration primarily the inflation outlook and its key factors, and the effects of past monetary easing.

The decisions on monetary policy in the period observed were based on the November inflation projection, which predicted that y-o-y inflation would 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). The projection also indicated that inflation would move below the target midpoint in H1 2018, as it would be slowed down by the high base of prices of petroleum products and other commodities, which saw a one-off increase in early 2017. Inflation movement in the medium term will be supported by the gradual recovery in aggregate demand.

As the Executive Board had expected, inflationary pressures remained low on account of most factors from the domestic and international environment. In December 2017, inflation measured 3% y-o-y, the target midpoint of the NBS. Core inflation stood at 1.3%, its lowest level since the CPI is used as a measure of inflation.

Cost-push pressures were low due to import prices expressed in dinars, which further fell y-o-y in Q4. Also, the rise in the prices of primary agricultural commodities in the domestic market was lower than expected in Q4. Inflation expectations of the financial and corporate sectors, which were anchored within the target tolerance band, also pointed to low inflationary pressures.

In addition, fiscal results were more favourable than initially expected, and the risk premium fell to 85 bp, its lowest level on record for Serbia. Besides global factors, the considerable decline in the risk premium was in great part caused by the strengthening of domestic macroeconomic fundamentals. Owing to preserved macroeconomic stability and more favourable outlook

for the period ahead, the country's credit rating was raised in late 2017.

The Executive Board assessed that domestic demand strengthened thanks to the rise in employment and wages, and past monetary easing. Given that the key policy rate is at its lowest level in the inflation targeting regime, and in view of the increased interbank competition, a low country risk premium and low interest rates in the euro money market, lending is on the rise. As supply-side shocks gradually waned, this reflected positively on the acceleration in GDP growth in H2 2017.

The Executive Board expected GDP growth to rise to around 3.5% in 2018 and 2019. Further improvement in 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 will remain one of the drivers of economic growth. In addition, a growing positive contribution should come from household consumption on account of further labour market recovery.

Besides domestic demand, the Executive Board assessed that external demand would recover further as well. More favourable growth prospects of the euro area and Central and South-Eastern Europe, along with effects of earlier investment, should positively impact the continued export growth.

The Executive Board made monetary policy decisions in consideration of the uncertainty in the international commodity and financial markets, which has mandated caution for some time already. Uncertainties in the international financial market continued to stem largely from the diverging monetary policies of leading central banks, the Fed and the ECB, and could affect capital flows to emerging economies, Serbia included. As expected, the Fed continued with monetary policy normalisation. In October, it began to decrease its reinvestment in repayments of principal on securities purchased in quantitative easing, and in December it raised the federal funds rate, for the third time in 2017. In Q4, there were expectations that, due to improved economic outlook for the euro area, the ECB might decide to discontinue the quantitative easing programme after September. In addition, uncertainty surrounded the movements of global prices of primary commodities, particularly global oil prices, which were on the rise from mid-2017. Still, the Executive Board pointed out that the resilience of the Serbian economy to potential adverse effects from the international environment has increased, owing to the strengthening of domestic macroeconomic fundamentals and a more favourable outlook for the period ahead.

Relying on the February inflation projection, **the Executive Board did not change the rate in February either.**

At its December meeting, the Executive Board decided to **keep the inflation target of 3% with the target tolerance band of ±1.5 pp in 2019 and 2020**. The primary reasons for this are the expected further convergence of total and administered prices towards EU prices, and the anticipated rise in global primary commodity prices and euro area inflation. The movement of inflation within the new, lower target band, the further improvement in the macroeconomic performance and outlook of the country, and anchored inflation expectations show that the lowering of the inflation target in November 2016 from 4.0±1.5 pp to 3.0±1.5 pp starting from 2017 was the right decision. The inflation target reflects the commitment of the central bank to maintain the achieved low inflation and its stability in the medium term, while leaving sufficient room for further adjustment of relative prices.

III. Inflation movements

In 2017, y-o-y inflation moved within the target tolerance band (3±1.5%) and stood at the 3.0% target in December, which is also the average for the year. Around 70% of the contribution to y-o-y inflation in December came from the prices of food, mainly fruit and vegetables, and excise products. This indicates that in 2017 inflation was driven by the increase in the prices of a small number of products and services. Low and stable core inflation, which measured 1.3% y-o-y in December, and the anchored inflation expectations of the financial and corporate sectors suggest that inflationary pressures are still low.

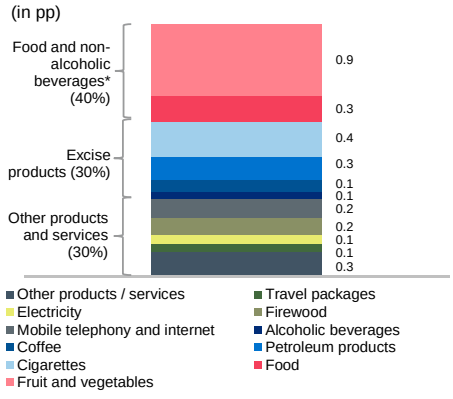
The Q4 consumer price growth of 0.2% was lower than expected in the November Inflation Report, primarily due to the lower than estimated growth in energy prices. Y-o-y, inflation slowed down in Q4, as a result of the lower contribution of the prices of fresh meat, and the base effect of electricity prices.

Inflation movements in Q4

Owing to well-balanced monetary policy measures and full coordination with fiscal policy, in 2017 inflation moved within the target tolerance band (3±1.5%) and stood at the 3.0% target in December, which is also the average for the year. In December, the greatest contribution to y-o-y inflation came from the prices of food (1.2 pp), primarily fruit and vegetables (0.9 pp), due to adverse weather conditions in 2017, and the fact that these prices were extremely low in H2 2016. Excise products contributed to y-o-y inflation by 0.9 pp in December (cigarettes by 0.4 pp and petroleum products by 0.3 pp). The contribution of all other products and services combined came at 0.9 pp, which indicates that in 2017 inflation was driven by the increase in the prices of a small number of products, and that inflationary pressures stayed low.

At quarterly level, after falling by 0.2% in Q3, inflation bounced back at the same rate in Q4. The entire increase occurred in October, while November and December saw no changes in consumer prices, on average. Consumer price growth was mildly below our expectations in the November *Inflation Report*, primarily due to the lower than assumed growth in energy prices. In Q4, y-o-y inflation slowed down further, as a result of a lower contribution of the prices of fresh meat, and the base effect of electricity prices.

Chart III.0.1 **Contributions to y-o-y inflation in December 2017**
(in pp)



Sources: SORS and NBS calculation.
* Coffee is excluded from calculation.

Table III.0.1 **Consumer price growth by component**
(quarterly rates, in %)

	Share in CPI	2017			
		I	II	III	IV
Consumer prices (CPI)	100.0	2.4	0.5	-0.2	0.2
Unprocessed food	11.3	11.7	2.9	-2.5	-3.1
Processed food	20.7	1.3	0.3	0.1	0.2
Industrial products excluding food and energy	28.5	0.5	0.4	0.4	0.7
Energy	15.5	3.3	-1.3	0.0	1.8
Services	24.0	0.8	1.0	0.1	0.3
Core inflation indicators					
CPI excluding energy	84.5	2.2	0.9	-0.2	0.0
CPI excluding energy and unprocessed food	73.2	0.8	0.6	0.2	0.4
CPI excluding energy, food, alcohol and cigarettes	45.3	0.2	0.7	-0.2	0.6
Administered prices	18.8	1.1	0.0	1.1	0.6

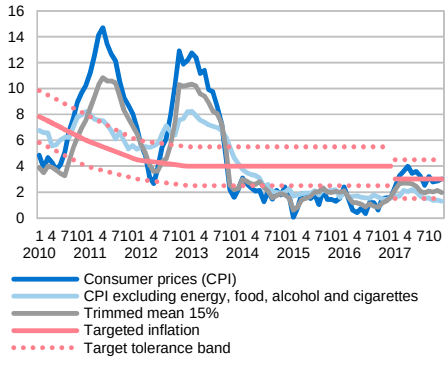
Sources: SORS and NBS calculation.

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

	2017		Difference
	September	December	
Consumer prices (CPI)	3.2	3.0	-0.2
Unprocessed food	1.0	0.9	-0.1
Fruit and vegetables	*0.7*	*0.9*	*0.1*
Fresh meat	*0.1*	*0.0*	*-0.1*
Processed food	0.3	0.4	0.0
Industrial products excluding food and energy	0.5	0.6	0.1
Energy	0.7	0.6	-0.1
Petroleum products	*0.3*	*0.3*	0.0
Services	0.6	0.5	-0.1

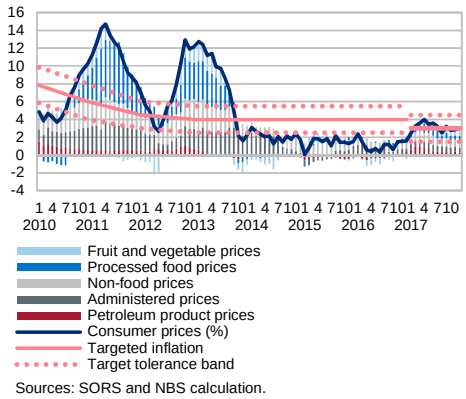
Sources: SORS and NBS calculation.

Chart III.0.2 **Price movements**
(y-o-y rates, in %)



Sources: SORS and NBS calculation.

Chart III.0.3 **Contribution to y-o-y consumer price growth**
(in pp)



Sources: SORS and NBS calculation.

Similar as in Q3, **prices of food and non-alcoholic beverages** gave a negative contribution to inflation in Q4 (0.3 pp), mainly because of the decline in the prices of unprocessed foods. Within unprocessed foods, prices of fresh meat and fruit declined, as expected for the season (contribution to inflation: -0.3 pp each), while vegetable prices grew (contribution: 0.3 pp). The prices of processed food increased only slightly (0.2%), given that the impact of the increase in the prices of cereals and milk and dairy products was largely offset by the lower prices of sugar and confectionery.

Consistent with the expectations stated in the previous *Report*, **energy prices** provided the strongest positive contribution to inflation in Q4 (0.3 pp). The electricity price hike by 2.1% in October contributed 0.1 pp to headline inflation. Also, solid fuel prices exhibited seasonal growth (2.7%). In addition, rising global prices of crude oil in Q4 (18.2%) reflected on higher prices of **petroleum products**, though their growth (1.8%, contribution to inflation: 0.1 pp) was dampened by the dinar's appreciation against the dollar.

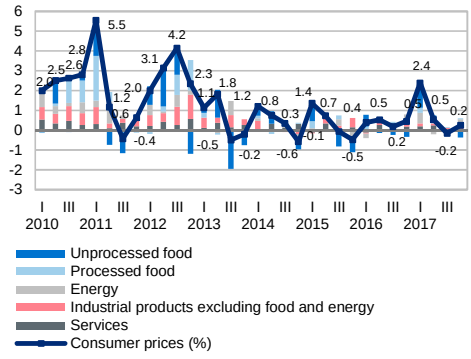
Seasonally expected growth in the prices of clothes and footwear was the key driver of the somewhat faster rise in the **prices of industrial products excluding food and energy** in Q4 (0.7%, contribution to inflation: 0.2 pp) relative to the previous quarter. Within this product group, prices of furniture, pharmaceutical products and alcoholic beverages also rose, whereas lower prices of products related to recreation and culture worked in the opposite direction.

Service prices edged up only slightly in Q4 (0.3%, contribution to inflation: 0.1 pp), as a result of a mild increase in the prices of travel packages and rents (by 0.2% each), while the decline in the prices of apartment maintenance and repair services acted in the opposite direction.

After dropping in Q3 (0.2%), **core inflation** (measured by CPI excluding prices of energy, food, alcohol and cigarettes) measured 0.6% in Q4, chiefly on account of the seasonal increase in the prices of clothes and footwear. Y-o-y, core inflation slowed down to 1.4% in October, where it remained in November. In December it fell to 1.3%.

Administered price growth by 0.6% in Q4 (contribution to inflation: 0.1 pp) was almost entirely driven by the October rise in electricity prices. Y-o-y, in Q4 administered price growth slackened further, to 2.9% in December (contribution to headline inflation: 0.5 pp), as a result of the lower electricity price hike in 2017 than in 2016.

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



Sources: SORS and NBS calculation.

Text box 1: Significance of import prices for inflation in Serbia

Central banks, whose principal task is to ensure and preserve price stability, pay a special attention to monitoring of the prices of imported goods and services, as well as their direct and indirect influence on the increase in consumer prices. Whereas the prices of import consumer goods affect domestic inflation directly, since they are included in the consumer basket used for measuring inflation, the prices of imported raw materials, intermediate goods and equipment affect inflation indirectly, through their impact on production costs, which afterwards spills over, to a greater or smaller extent, to the prices of consumer goods, as well. Prices in the consumer goods markets largely depend on the volume of consumption, satisfied from imports. In our market this influence is the most discernible in the case of household appliances, clothes and footwear, pharmaceutical and chemical products and alike.

The indirect effect of import prices on domestic inflation may best be seen in the case of the prices of primary commodities, primarily oil and primary agricultural commodities. Namely, as shown in Chart O.1.1, the prices of primary agricultural commodities in the domestic market (corn, wheat and soya bean) are in keeping with the global trends of these prices since those are tradable goods, and even though they are not directly included in the consumer basket, they make an important input in food production. In this way, they indirectly affect the prices of food in the domestic market and hence overall inflation. The situation is similar with the prices of crude oil in the global market, which affect the costs of production of petroleum products, and hence, their prices, as well as the prices of other consumer goods and services (such as transportation, utilities and alike) to the extent that this energy product is used in their production.

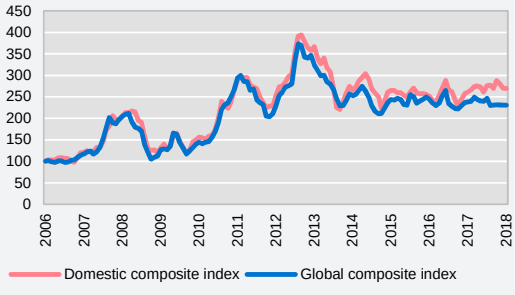
It should not be forgotten that import prices may also have second-round effects on inflation because they may be passed on to the prices of other commodities and services through their impact on inflation expectations.

Since developments of import prices in dinars are important for monitoring and projecting inflation and, hence, for monetary policy making, the NBS constructed the import prices indicator (Chart O.1.2) to track the changes in the prices of goods and services imported into Serbia. This indicator has been generated as the weighted average of changes in the global prices of oil and food, EU consumer prices and export prices in Germany, using the shares of certain groups of commodities and services in the Serbian imports structure as weights.

When it comes to changes in the prices of crude oil imported into Serbia, they are approximated by changes in the spot prices of Brent oil, which is a major global benchmark, particularly concerning contracts that entail physical delivery of oil. Brent is used as the reference price for around 2/3 of the global physical oil trade, as it reflect the terms of demand and supply to the greatest extent. Considering the share in total Serbian imports, the weight 0.05 is used for the prices of crude oil.

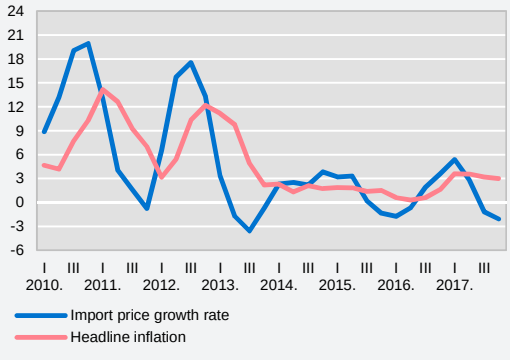
Changes in the prices of food imported into Serbia are approximated with the FAO food price index, which largely reflects the developments in the global agricultural commodities market. The FAO index comprises 23 commodities grouped around five commodity group price indices: 1) Cereal Price Index (wheat, maize and rice); 2) Dairy Price Index

Chart O.1.1 **Domestic and global composite index of primary agricultural commodity prices expressed in dinars***
(January 2006 = 100)



Sources: CBOT - Chicago Board of Trade and BSE - Budapest Stock Exchange.
* Corn, wheat and soya bean.

Chart O.1.2 **Domestic inflation and import prices**
(y-o-y rates, in %)



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

(butter, cheese and two kinds of milk powder); 3) Meat Price Index (poultry, pig, bovine and ovine); 4) Sugar Price Index; and 5) Vegetable Oil Price Index (ten oils). FAO index weights correspond to the share of the export value of each commodity in the total export value of all 23 commodities included in the index, averaged over three years. In line with the Serbian imports structure, import food prices were also assigned the weight of 0.05.

Changes in the prices of services imported into Serbia are approximated by the EU Harmonised Index of Consumer Prices. The selection of EU inflation for approximation was based on the fact that the share of the EU in our overall imports of services exceeds 70%. The weight assigned to the prices of imported services equals 0.19.

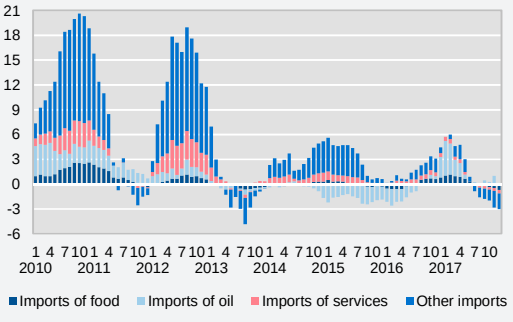
Finally, changes in the prices of other commodities imported into Serbia are approximated by the changes in export prices in Germany. Observed by country, Germany is Serbia's most significant trading partner, with the share in total commodity imports exceeding 12%. The weight given to this commodity group is 0.71.

The developments of imported inflation indicators in euros indicate inflationary pressures up to the beginning of 2013, based on the prices of primary commodities, and afterwards, until the beginning of 2017, they had a disinflationary impact, the strongest influence coming from the drop in the global oil price. At the beginning of 2017, the y-o-y increase in import prices expressed in euros exceeded 5%, affected by the recovery of the global oil price since H2 2016, as well as the pickup in the global food prices, primarily the price of meat in the EU, due to higher demand from some Asian countries but also the fact that they had previously been extremely low. As the base effect of the global energy and food prices was gradually waning, the y-o-y rise in import prices expressed in euros decelerated in the remainder of 2017, and the prices expressed in dinars dropped.

Changes in the prices of import goods and services on domestic inflation are also affected by the exchange rate and this effect is not negligible. Observing the development of indicators of import prices expressed in dinars and domestic inflation at y-o-y level (Chart O.1.2), they are well correlated, and what is also discernible is that changes in import prices are passed on to domestic inflation with a one quarter-delay on average.

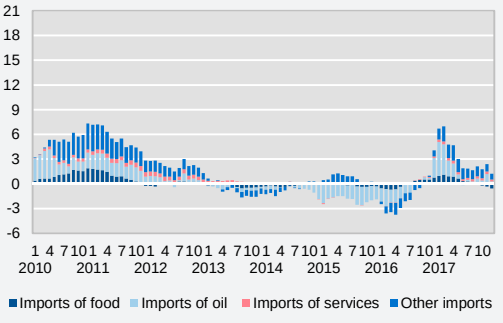
Charts O.1.3 and O.1.4 illustrate the fact that the exchange rate may mitigate or intensify the combined effect of different import prices on domestic inflation. It is obvious that the shocks in the movement of global prices of primary commodities affecting domestic inflation in the period preceding 2012 were significantly intensified by the effects of a more substantial dinar weakening, consequently leading to high and volatile domestic inflation. On the other hand, the achieved and sustained relative dinar exchange rate stability in the period following 2012 reduced the volatility of imported inflation, and thus its effect on domestic inflation and inflation expectations. Price stability is a result of the combined influence of a series of domestic and external factors, and the fact is that, for example, low inflation was maintained in the last year as well, even though the rise in import prices expressed in euros was higher in 2017 than in 2012.

Chart O.1.3 **Contribution of individual components to y-o-y growth rate of import prices in dinars**
(in pp)



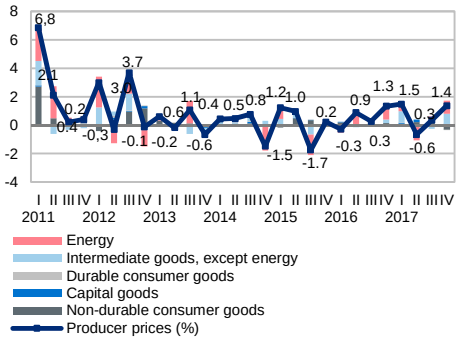
Sources: Destatis, FAO, Bloomberg, Eurostat, SORS and NBS calculation.

Chart O.1.4 **Contribution of individual components to y-o-y growth rate of import prices in euros**
(in pp)



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

Chart III.0.5 **Contribution to quarterly producer price growth***
(in pp)



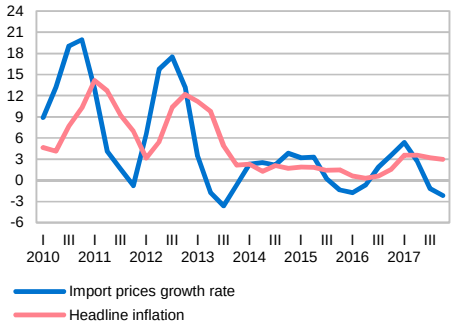
Sources: SORS and NBS calculation.
* Industrial producer prices for the domestic market.

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

	2017			
	March	June	Sep.	Dec.
Consumer prices	3.6	3.6	3.2	3.0
Domestic industrial producer prices	3.1	3.0	3.3	2.6
Prices of elements and materials incorporated in construction	7.7	4.8	2.2	1.8

Sources: SORS and NBS calculation.

Chart III.0.6 **Domestic inflation and import prices**
(y-o-y rates, in %)



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

Producer and import prices

The rise in **industrial producer prices in the domestic market** that began in Q3 (0.3%) continued into Q4 (1.4%), whereas at the y-o-y level it slowed down to 2.6% in December.

The strongest contribution to growth in producer prices in Q4 came from prices in the area of energy production, which rose due to higher costs in the production of petroleum products caused by an increase in the global prices of crude oil, and to higher costs in electricity, gas and steam supply. In addition, producer prices grew in the production of intermediate goods, which can be linked to higher prices in metal ore exploitation and the production of base metals brought about by the rise in the global prices of raw materials. On the other hand, lower producer prices in the production of non-durable consumer goods than in Q3 mostly resulted from lower costs in the food industry on account of a decline in the prices of primary agricultural commodities in the domestic and international market in November and December.

The **prices of elements and materials incorporated in construction** recorded slower y-o-y growth in December (1.8%) than in September (2.2%). At quarterly level, having declined by 0.8% in Q3, these prices increased mildly in Q4 (0.3%).

After falling for two consecutive quarters, **import prices** expressed in dinars[1] rose by 0.6% **in Q4**. Such a development was mostly caused by the increase in global oil prices, which were higher by 18.6% on average in Q4 vs. Q3, mainly due to the extension of the agreement to cut output in OPEC member countries and Russia until the end of 2018, and the present geopolitical tensions. In addition, Q4 also saw an increase in the prices of German exports (used to approximate prices of imported equipment and intermediate goods) by 0.4%, and in consumer prices in the EU (used to approximate service imports) by 0.6%. Conversely, measured by the FAO index, global food prices continued down in Q4 (2.7%), helping mitigate import price growth. **Y-o-y**, import prices expressed in dinars remained in the negative territory in Q4 (-2.2%), their fall accelerating from Q3 (-1.2%).

[1] The weighted average of the global oil and food price index, EU consumer prices and export prices of Germany, one of our main trade partners, is used as an indicator of import prices. See Text box 1, page 12.

Inflation expectations

Short and medium-term inflation expectations of the financial and corporate sectors were anchored within the NBS target band in 2017, moving around the target midpoint for most of the year. According to the January surveys, the financial and corporate sectors expect y-o-y inflation to remain around the target midpoint in January 2019, which suggests that inflationary pressures are still low.

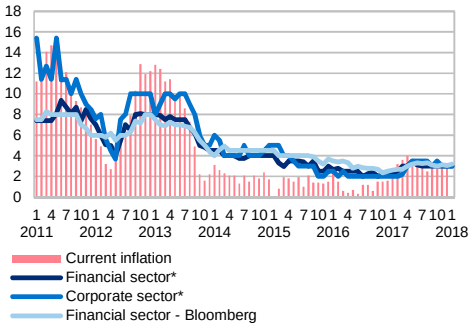
According to surveys, in the period since the previous *Report*, **one-year ahead inflation expectations of the financial sector** have ranged between 3.0% and 3.2%. The **Ninamedia** and **Ipsos**[2] surveys indicated that, after the July decline, the expectations of the financial sector have remained stable, standing at 3.0% in January. According to the Bloomberg survey, the expectations of the financial sector declined from 3.2% in January to 3.1% in February. According to agencies' surveys, 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 by 0.5 pp in November, returning to the target midpoint (3%), where they remained in January. **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[3] 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 equalled 3.1% in November and 3.5% in January. Same as short-term expectations, **medium-term expectations of corporates** declined in November by 0.5 pp to 3.5%, and in January to 3.0%. **Two-year ahead inflation expectations of the household sector** stood at 5% (from May 2017) and 6.0% in January 2018.

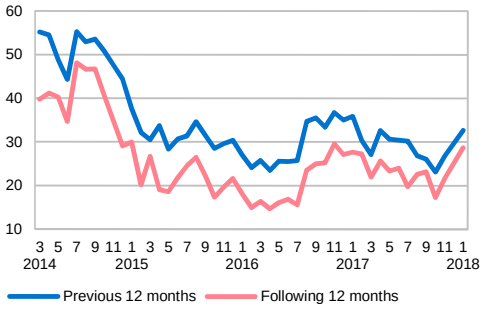
Though stable in all sectors, the dispersion of responses was the lowest in the financial sector and the highest among households.

Chart III.0.7 **Current inflation and one-year ahead inflation expectations**
(y-o-y rates, in %)



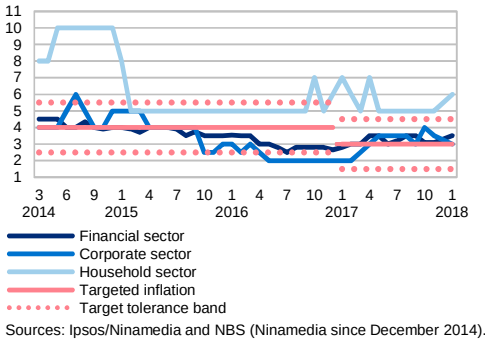
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ipsos and Gallup agencies until December 2014, Ninamedia agency since December 2014, and Ipsos agency since January 2018.

Chart III.0.8 **Household perceived and expected inflation***
(in index points)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).
* Ipsos and Gallup agencies until December 2014, Ninamedia agency since December 2014, and Ipsos agency since January 2018.

Chart III.0.9 **Two-year ahead inflation expectations***
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).
* Ipsos and Gallup agencies until December 2014, Ninamedia agency since December 2014, and Ipsos agency since January 2018.

[2] Ninamedia conducted the survey on expectations of economic agents from December 2014, and Ipsos from January 2018.

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

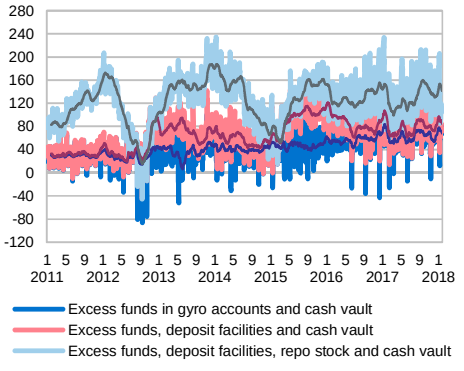
IV. Inflation determinants

1. Financial market trends

In line with the October reduction of the NBS key policy rate, interest rates in the interbank money market and on government securities were further lowered in Q4. The price of dinar private sector lending also dropped, with interest rates on all types of dinar corporate loans reaching new lows in December.

Good export performance of the Serbian economy and high FDI inflows continued to underpin appreciation pressures present throughout most of Q4. Depreciation pressures were registered in mid-November, primarily caused by the seasonal increase of demand of energy importers. In late December, the dinar strengthened anew, among other things, owing to the improved country credit rating, successful review of the arrangement with the IMF and growth in FX-indexed bank assets.

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



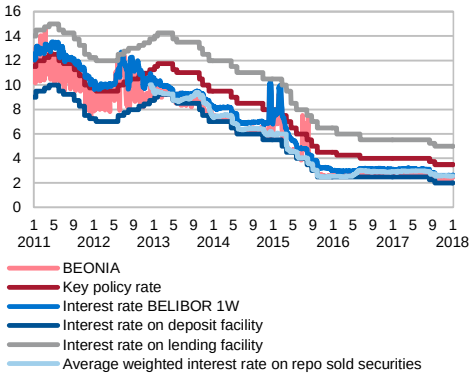
Source: NBS.

Interest rates

The key policy rate cut in October drove down the average repo rate[4] by 0.2 pp to 2.6%, where it remained until the end of the year.

Monetary policy easing also passed through to **interest rates in the interbank money market**, bringing them down. After the October reduction, by end-Q4 they remained stable, and their average monthly values remained practically unchanged. BEONIA averaged 2.4% in December, down by 0.2 pp from its September average. As bank dinar liquidity grew, trading volumes in the interbank overnight money market fell every month, averaging RSD 2.5 bn in Q4, or by RSD 0.4 bn less than in Q3. Compared to September, average monthly BELIBOR rates lost between 0.3 pp and 0.4 pp. In December they moved between 2.5% for the shortest and 3.2% for six-month maturity. Interest rate movements in

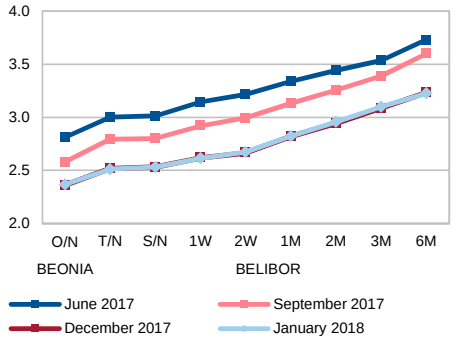
Chart IV.1.2 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

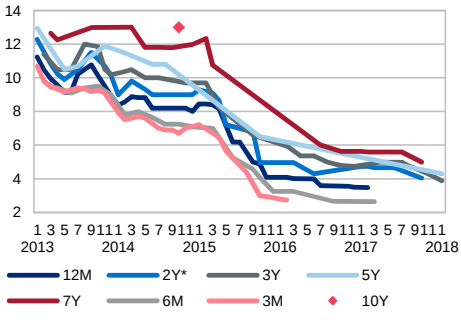
[4] The rate achieved at repo auctions weighted by the amount of sold securities.

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



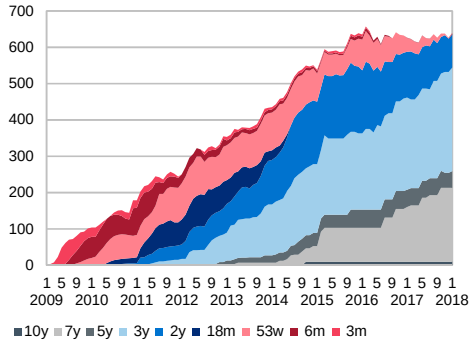
Sources: Thomson Reuters and NBS.

Chart IV.1.4 **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.

Chart IV.1.5 **Stock of sold dinar government securities**
(in RSD bn)



Source: Ministry of Finance.

the interbank money market remained remarkably stable in January 2018.

Improved fiscal position[5] and monetary easing continued to drag down interest rates in the primary market of dinar government securities in Q4. Specifically, rates on seven- and two-year securities edged down by 0.6 pp each, to 5.0% and 4.05% respectively, and the rate on three-year securities lost 0.5 pp, reaching 4.3%. Owing to lower borrowing needs, in Q4 the government offered a lower amount of securities for sale, while demand outstripped supply at all three auctions held in Q4. Demand was higher, particularly at the auction of seven-year securities, thanks to non-residents, who purchased almost 70% of the issue.

Interest rates continued down in January 2018. The rate on three-year securities lost 0.4 pp, reaching 3.9%, and the rate on five-year securities declined by 2.2 pp to 4.3%,[6] with non-residents purchasing almost a half of the five-year securities on offer.

Rates on **euro-denominated government securities** were also lowered in Q4. The rate on one-year securities was cut by 0.1 pp to 0.5%, on three-year securities by 0.4 pp to 1.5%, and on five-year securities by 0.2 pp to 2.4%.

Total trading volume in the **secondary market of government securities** (RSD 162.1 bn) in Q4 was triple that in Q3, owing to higher non-resident activity. Yield rates mostly dropped, in December ranging from 3.2% for the remaining two-month to 5.4% for the remaining 82-month maturity.

The average **weighted interest rate on new dinar loans to corporates and households** decreased by 0.7 pp from September to 8.2% in December. Of this, the average price of dinar corporate loans fell by 1.2 pp to 4.7%, and of household loans by 0.2 pp to 10.6% in December. Interest rates on all types of dinar corporate loans reached new lows in December. Compared to September, rates on current assets loans were cut by 1.2 pp to 4.3%, on investment loans by 0.2 pp to 5.5%, and on loans for other purposes by 1.1 pp to 5.0%. The average price of dinar household loans fell due to declining rates on consumer loans (by 0.7 pp to 8.3%) and other loans (by 0.3 pp to 9.0%). The price of cash loans (11.1%) stayed the same as in September.

[5] Consolidated general government budget surplus of 1.2% of GDP was recorded in 2017.

[6] The last auction for this maturity was held in October 2015.

The average **weighted interest rate on new euro and euro-indexed loans to corporates and households** lost 0.1 pp, measuring 3.0% in December. Interest rates on all types of corporate loans were on the decline, thus the average rate fell by 0.2 pp to 2.8% in December. Rates on current assets loans declined by 0.3 pp to 2.6%, on euro-indexed loans for other purposes by 0.6 pp to 2.7%, and on import loans by 0.1 pp to 2.1% in December. Only the price of investment loans was somewhat higher than in September, measuring 3.3% in December. The average weighted interest rate on household loans increased by 0.2 pp to 4.2%, supported by the rise in rates on consumer loans (by 0.1 pp to 5.0%). The prices of housing loans (3.0%) and other loans (6.5%) were at similar levels as in September, while the price of cash loans lost 0.4 pp andequalled 3.0%.

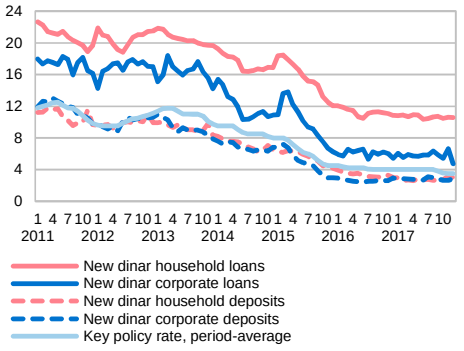
In December, banks termed deposits of households at somewhat higher rates than in September – rates on **dinar savings** were raised by 0.4 pp to 3.0%, and on **euro savings** by 0.3 pp to 0.9%. **Interest rates on euro-denominated corporate deposits** increased (by 0.2 pp to 0.6%), while rates **on dinar deposits** remained unchanged from September (2.8%).

Risk premium

Measured by EMBI, Serbia's risk premium continued down in Q4, reaching its new lowest point in December (96 bp). At end-Q4, the risk premium stood at 102 bp, which is 24 bp lower than at end-Q3. January saw a further decline, with the risk premium falling below 90 bp. On 18 January it reached 85 bp, its lowest value since monitoring of this indicator began (April 2005). At the same time, in Q4 and January EMBI Europe also went down (by a total of 23 bp to 204 bp), though this downward movement was milder than that of Serbia's risk premium. In Q4 EMBI Global recorded the opposite movement, rising by 3 bp to 311 bp, mostly owing to a drastic rise in Venezuela's risk premium (1,760 bp), though it too fell in January, by 19 bp to 292 bp.

Serbia's risk premium was mostly affected by domestic factors, but also by regional and global factors. As regards domestic factors, the decline in Serbia's risk premium was predominantly caused by the preservation of macroeconomic stability and strengthening of macroeconomic fundamentals, and by more favourable growth outlook for the coming period. For this reason, the eighth review of the arrangement with the IMF was

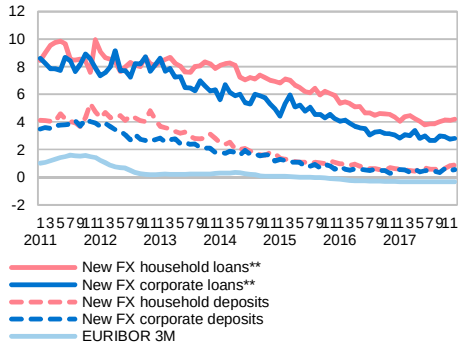
Chart IV.1.6 **Interest rates on dinar loans and deposits of corporates and households***
(weighted average values, p.a., in %)



Source: NBS.

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

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

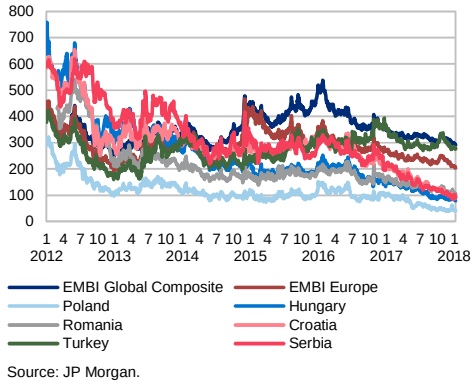


Sources: European Banking Federation and NBS.

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

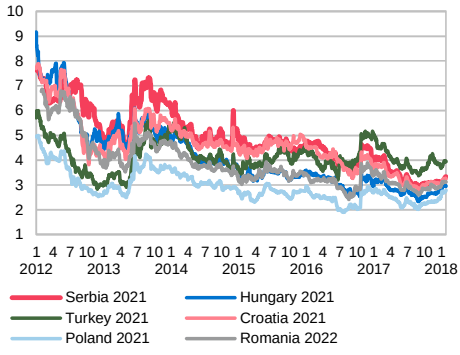
** Euro and euro-indexed.

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



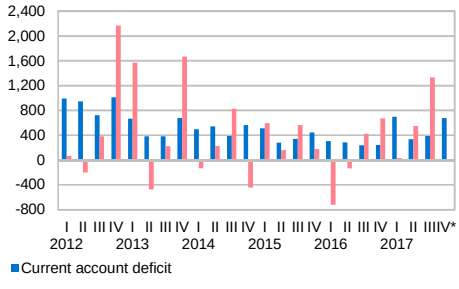
Source: JP Morgan.

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



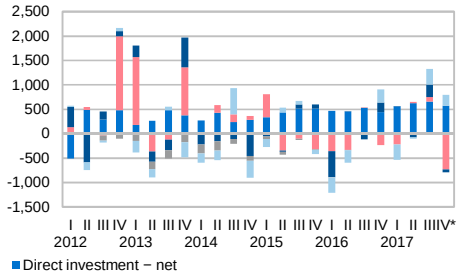
Source: Bloomberg.

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.

also successful, and credit rating agencies Standard & Poor's and Fitch raised Serbia's credit rating in December to BB with stable outlook on its further improvement.

Besides domestic factors, Serbia's risk premium declined also due to regional factors. Among them, the most important was certainly the improved outlook for growth of countries in the region, thanks to faster than expected economic growth in the euro area and better outlook for the period ahead. Faster economic growth in the euro area should facilitate these countries' adjustment to the expected normalisation of monetary policies of advanced economies.

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 impact, as did the continued implementation of the ECB's monetary stimulus measures. In addition, optimism regarding economic growth and the rise in inflation in the US drove up yields on US ten-year Treasury bonds, which rose from 2.3% to 2.7% in Q4 and January 2018. This narrowed the spread between them and yields on Serbia's eurobonds.

Foreign capital inflow

In 2017, the foreign capital inflow, mainly on account of FDI, exceeded the current account deficit, resulting in a rise in the country's FX reserves by around EUR 228 mn (according to the balance of payments methodology). In Q4, the financial account recorded a lower capital inflow (EUR 7.3 mn) than in the previous quarters, which was mostly caused by the payment of due eurobonds issued in the international market in 2012 in the amount of USD 750 mn, which also helped further lower the share of public debt in GDP.

A high net FDI inflow continued into Q4, amounting to EUR 570.9 mn according to preliminary data. At year level, it exceeded expectations, reaching EUR 2,414.7 mn (6.6% of GDP), which is the highest inflow since 2011. In 2017, investment remained highly diverse by activity. The largest amounts were channelled to manufacturing, the financial sector, construction and trade. The majority of FDI came from EU countries (72%), while around 14% of FDI came from Asian countries, mainly China, Taiwan, Hong Kong and the UAE.

The amounts of FDI that are growing every year attest to the constant improvement of the investment environment and rising interest in investment in Serbia. For the third consecutive year, the net FDI inflow fully covered the

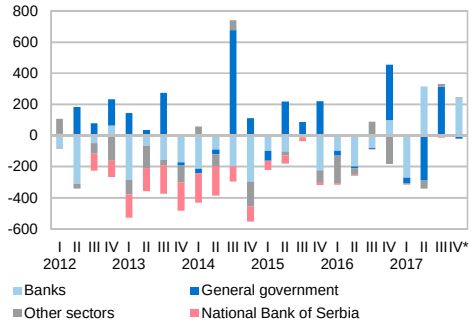
current account deficit (by 115.6% in 2017), which we expect to continue in the coming period.

Unlike in the previous two quarters, Q4 saw an outflow with respect to **portfolio investment** by EUR 728.3 mn. It was mostly caused by the maturing of eurobonds issued in 2012, on which grounds non-residents were paid EUR 570.2 mn in November. To a lesser degree, an outflow was also recorded with respect to dinar government securities.

In Q4, residents net borrowed EUR 226.1 mn with respect to **financial loans**, almost entirely owing to the increase in net borrowing of banks (by EUR 238.8 mn). Borrowing of enterprises also rose (by EUR 7.0 mn). On the other hand, the government's liabilities to foreign creditors fell by EUR 19.6 mn.

The NBS did not make payments to foreign creditors in Q4. In December, the IMF Executive Board made the decision on the successful conclusion of the eighth and final review of the current stand-by arrangement that ends on 22 February 2018. It was assessed that by implementing the agreed economic programme, Serbia has made significant headway, carried out macroeconomic adjustment and considerably strengthened its economic capacity. No payments will be made under this arrangement in the future, since Serbia did not use any of the available funds.

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



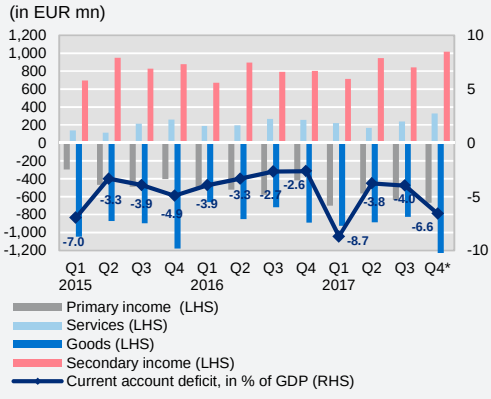
Source: NBS.
* Preliminary data.

Text box 2: An overview of balance of payments in 2017

Owing to strong and diversified growth in exports, **external imbalance of Serbia was significantly reduced in the past five years**. The share of the current account deficit in GDP dropped from 11.6% in 2012 to 5.7% in 2017, and additionally, the current account deficit has been fully covered by the net FDI inflow for the third year in a row (115.6% in 2017). The widening of the current account deficit relative to 2016 is mostly the consequence of a greater commodity deficit, caused by the expansion of imports of equipment in the environment of a strong FDI inflow, higher energy imports on account of more intensified industry needs, the oil price hike and unfavourable weather conditions at the beginning of the year, as well as lower exports of agricultural commodities in Q4 due to a bad agricultural season.

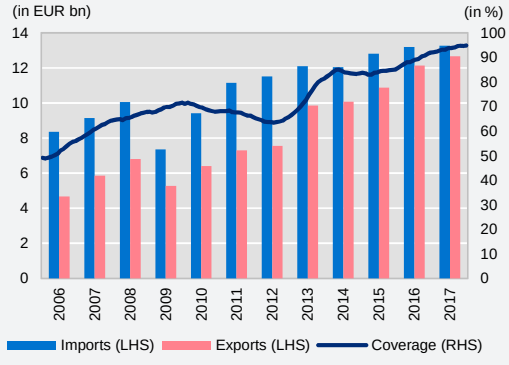
This conclusion is also unequivocally indicated by the pace of the current account deficit throughout the year, i.e. its narrowing from 8.7% of GDP in Q1 to around 4% of GDP in the next two quarters, and then the pick-up to 6.6% in Q4. In 2017 the trade deficit was expectedly adversely affected by the terms of trade due to import prices rising faster than export prices, primarily on account of the oil price hike in the global market.

Chart O.2.1 **Current account structure**
(in EUR mn)



Sources: SORS and NBS calculation.
* NBS estimate.

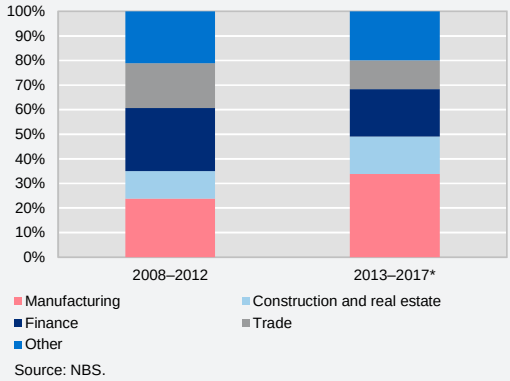
Chart O.2.2 **Coverage of imports by exports in manufacturing**



Sources: SORS and NBS calculation.

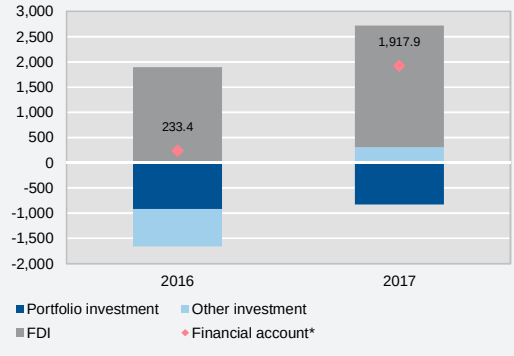
In 2017, commodity exports continued to rise at two-digit rates (10.0% according to the balance of payments methodology), characterised by accelerated growth in manufacturing exports – from 11.6% in 2016 to 13.6% in 2017. The progress in manufacturing is also testified by the cumulative increase in its exports in the past five years, by EUR 6.2 bn, with the rising coverage of imports by exports, from 65.6% in 2012 to 94.8% in 2017. Earlier investment, improvement of the business environment and enhancement of the domestic industry competitiveness are the supply-side factors which contributed to the above progress, and the demand-side factor was the acceleration of growth of the main foreign trade

Chart O.2.3 **Net FDI structure by activity**



Source: NBS.
* Q1–Q3 2017.

Chart O.2.4 **Financial account**
(in EUR mn)



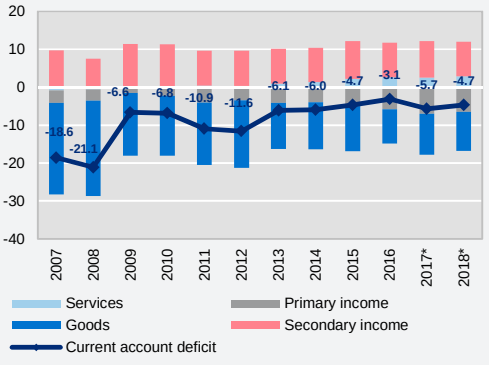
Sources: SORS and NBS calculation.
* Without change in FX reserves.

partners (the euro area and CEFTA). In addition to having faster growth, manufacturing exports also kept their wide sectoral dispersion, considering that in 2017 all areas recorded growth, with the exception of tobacco products, whose exports diminished from the maximum level in 2016. The largest contribution to commodity exports growth came from exports of base metals, rubber and plastic products, chemical products, electrical equipment, and other machinery and equipment, as well as metal products.

In 2017, **commodity imports** also increased (13.4% according to the balance of payments methodology) and had a favourable structure. The increase in imports of equipment, which was entirely expected at this stage of the investment cycle, accelerated compared to 2016 and it stood at 9.4% indicating greater investment. Imports of intermediate goods were higher, too (16.2%), which was also expected. This is a result of elevated imports of industrial raw materials, which is in line with the greater production and exports in manufacturing and increased energy imports, with around 60% of growth in the value of energy imports pertaining to a hike in energy prices in the global market, while around 40% is a result of raised volumes of import on account of increased economy's needs. Increased imports can also partially be attributed to higher imports of consumer goods (3.4%), in line with a gradual recovery of final consumption.

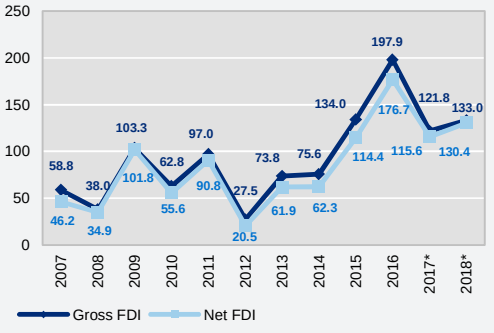
A positive balance in the services account additionally rose in 2017 (4.8%), to around EUR 950 mn, owing to the continued strong growth of services exports (14.6%), the greatest contribution coming from the exports of computer and business services, which have been recording positive net exports since 2011, while transportation services also gave a positive contribution, though to a lesser extent.

Chart O.2.5 **Current account structure**
(in % of GDP)



Sources: SORS and NBS calculation.
* NBS projection.

Chart O.2.6 **Coverage of the current account deficit by FDI**
(in %)



Sources: SORS and NBS calculation.
* NBS projection.

The deficit in the primary income account in 2017 rose primarily due to expectedly higher expenditures on account of FDIs in the environment of a rising FDI inflow as a reflection of an improved business ambience and greater investors' confidence concerning the future economic developments, with a larger portion of earnings reinvested in Serbia. Other expenditure groups in the primary income account were lower, primarily due to lower costs of interest on securities and the decreased need of the government for borrowing in the environment of favourable fiscal developments. **The secondary income account** posted an **increase in surplus** in 2017 which is mostly a result of a higher net inflow of remittances (9.9%).

The financial account of balance of payments recorded favourable tendencies. Owing to the improvement of the business environment, **the net FDI inflow in 2017 kept rising, surpassing our expectations which were revised upwards several times during the year** (from EUR 1.6 bn in May to EUR 2.1 bn in November). The total **gross** FDI **inflow** in 2017 amounted to EUR 2.55 bn (6.9% of GDP), up by 19.6% relative to 2016. The total **net** FDI **inflow** in 2017 reached EUR 2.4 bn (6.6% of GDP), up by 27.1% relative to 2016. In connection with that, the FDI inflow kept its sectoral dispersion and was mostly directed at manufacturing, the financial sector, construction and trade. Observed by country, it can be seen that the largest portion of FDIs came from EU countries, like in previous years, but the inflow coming from China, Russia and the United Arab Emirates also rose compared to 2016.

Portfolio investment in the period January–April 2017 was characterised by the net outflow of around EUR 300 mn, primarily caused by the Fed's continued monetary policy normalisation and a reduced investor exposure to emerging economies. Owing to a more favourable global growth outlook, investors' interest in investing in the CEE region has been on the rise since May. In the period May-October, Serbia had a net inflow of capital on account of portfolio investment in the amount of EUR 290 mn, almost entirely neutralising the net outflow at the beginning of the year. In this period, in addition to greater interest of non-residents for investing in longer-maturity dinar securities in the primary market, the sale of securities by non-residents in the secondary market first significantly diminished in Q2, and then in Q3 non-residents were also the net buyers of securities in the secondary market. Nevertheless, portfolio investment in 2017 was mostly affected by the euro bond falling due in November[1], in the amount of EUR 639 mn (of which EUR 570 mn pertained to non-residents). In annual terms, 2017 recorded a net outflow of portfolio investment amounting to EUR 827 mn, down by 9.8%, relative to 2016 despite the mentioned payment of the euro bond principal. In 2017 residents net borrowed around EUR 200 mn by taking financial loans. Of that amount banks net borrowed EUR 272 mn, while other sectors reduced their foreign liabilities. Bank net borrowing on the grounds of financial loans in 2017 was recorded for the first time since 2010 and the beginning of the process of deleveraging. Owing to favourable developments in the financial account, i.e. inflows which outperformed the current account deficit, **NBS FX reserves were up by EUR 228 mn in 2017, according to the balance of payments methodology**. They amounted to EUR 9,961.7 mn at the end of the year, providing the coverage for 241.2%[2] of external debt that will fall due within a year, and more than five months of imports of goods and services.

According to our estimate, external sustainability will be preserved in the medium term as well. This will be driven by a stimulating business environment, owing to the implementation of structural reforms; progress made in the European integration process; and the continued growth of the main foreign trade partners, which should ensure the continued rise in exports and a stable FDI inflow (around 4.5–5% of GDP). The current account deficit should move around 4% of GDP in the medium term, as well, and the expected narrowing of the goods and services deficit, as well as a stable inflow of current transfers should compensate for the expected widening of the primary income deficit in the environment of a rising FDI inflow.

[1] In November, the principal for euro bond issued in 2012 was paid out, in the nominal amount of USD 750 mn.

[2] According to the stock of external debt in September 2017.

Trends in the FX market and exchange rate

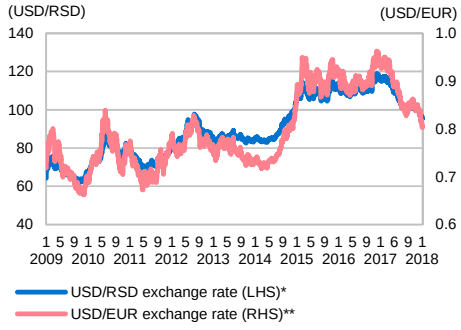
At year level, in 2017 the dinar gained 4.2% against the euro and 18.2% against the dollar, due to the simultaneous strengthening of the euro vs. the dollar. Appreciation pressures in the FX market, which characterised most of the year, primarily resulted from the narrowing in macroeconomic imbalances and more favourable macroeconomic prospects for the coming period, which also helped improve the confidence of foreign investors concerning long-term investment in Serbia and contributed to the decline in the risk premium and the improvement in the country's credit rating by all three credit rating agencies.

At quarterly level, in Q4 the dinar gained 0.8% against the euro and 2.2% against the dollar, as the euro's strengthening vis-à-vis the dollar continued. Good export performance of the Serbian economy and continued high FDI inflows continued to underpin appreciation pressures throughout most of Q4. On the other hand, as usual for the season, Q4 saw higher FX demand of enterprises, mostly due to increased payments for energy imports, which brought about depreciation pressures starting from mid-November. Depreciation pressures were also caused by higher net sale of foreign currency to non-residents in Q4, though they were mitigated by higher purchases of foreign cash than in Q3, the rise in FX-indexed bank assets[7] and the increase in FX supply of foreign citizens, mostly tourists. Moderate depreciation pressures dominated in January 2018 as well.

To ease excessive short-term volatility of the exchange rate, in Q4 the NBS intervened in the IFEM by buying EUR 245.0 mn and selling EUR 285.0 mn. At year level, the NBS net purchased EUR 725.0 mn in the IFEM, further strengthening the country's FX reserves.

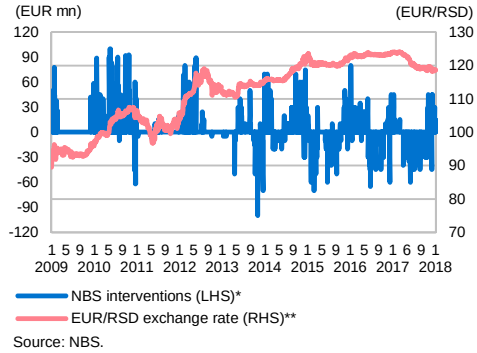
Trading volumes in the IFEM rose in Q4 to a daily average of EUR 47.3 mn, up by EUR 16.6 mn from Q3.[8] The highest volume was recorded in December (EUR 69.2 mn daily average). As volumes rose, volatility of the dinar against the euro increased slightly compared to Q3, as measured by EWMA[9] and EGARCH[10].

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



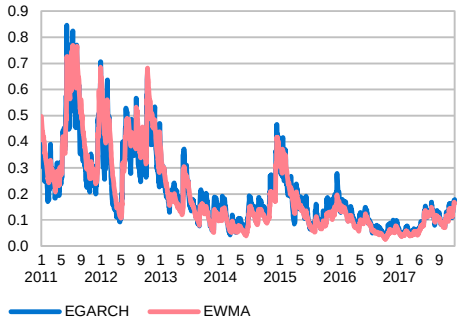
Source: NBS.
* USD 1 in RSD.
** USD 1 in EUR.

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



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

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



Source: NBS.

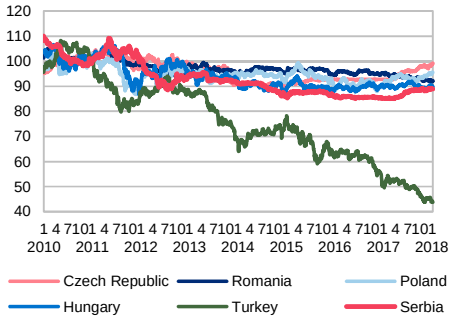
[7] Aiming to balance their long open foreign currency positions, thus reducing exposure to exchange rate risk, banks sell foreign currency, which results in the dinar's strengthening.

[8] Excluding the NBS.

[9] EWMA – Exponentially Weighted Moving Average.

[10] EGARCH – Exponential General Autoregressive Conditional Heteroskedasticity.

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

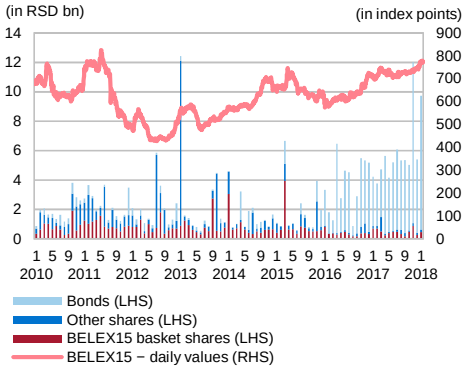


Sources: NBS and websites of central banks.
* Growth indicates appreciation.

The volume of transactions at regular swap auctions organised by the NBS in Q4 was smaller than in Q3. A decline was recorded at three-month auctions, when the NBS bought and sold EUR 32.0 mn (EUR 33.0 mn less than in Q3), while at two-week auctions it bought and sold EUR 90.0 mn (EUR 5.0 mn more than in Q3). On the other hand, the amount of interbank swaps in Q4 (EUR 36.0 mn) was higher by EUR 9.1 mn than in Q3.

Of the currencies of countries in the region running similar exchange rate regimes, besides the dinar, the Hungarian forint also strengthened (0.4%), as did the Czech koruna (1.7%) and the Polish zloty (3.3%). On the other hand, the Romanian lei weakened by 1.3% and the Turkish lira by 7.6%.

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



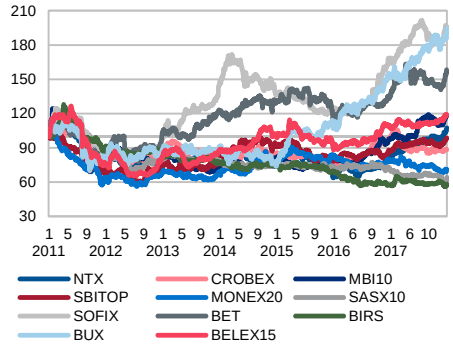
Source: Belgrade Stock Exchange.

Stock exchange trends

The recovery of BSE indices continued in Q4. At end-December, BELEX15 (the index of the most liquid shares) stood at 759.8 points, and the general index at 1,662.5 index points, up by 5.4% and 3.6% respectively from end-September. Thus BELEX15 reached its highest value since June 2011, and BELEXline since October 2008.

Though higher compared to Q3 (by RSD 0.4 bn), the values of trading in shares were still relatively low. Total trading in shares amounted to around RSD 2.0 bn in Q4, with the highest value recorded in November (RSD 1.1 bn), as a result of trading in shares on the prime listing. Transactions with foreign investors made up around 56.5% of trading, with foreign investors selling around RSD 259 mn net.

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.

Trading in bonds also rose – from RSD 15.1 bn in Q3 to RSD 20.4 bn in Q4, largely owing to trading in long-term RS bonds.[11] Foreign investors participated in total trading in bonds with RSD 1.4 bn.

BSE market capitalisation equalled RSD 548.9 bn at end-December, up by RSD 9.0 bn from September 2017 due to increased capitalisation of the prime listing. The share of market capitalisation in estimated GDP declined by 0.2 pp and came at 12.3% at end-Q4.

[11] In November 2015, trading in government long-term bonds on the BSE was enabled.

At end-Q4, the majority of indices in the region were lower than in Q3. The Sarajevo index SASX10 lost the most (10.3%). Besides Serbia, stock indices rose in Hungary, Croatia and Slovenia, with the Budapest index BUX gaining the most (5.6%).

2. Money and loans

As usual for Q4, money supply increased, primarily its most liquid component. Lending continued to recover – in 2017 it expanded by 7.4% despite NPL write-offs that surpassed last year's figures. Owing to the successful implementation of the NPL Resolution Strategy and the rise in lending activity, the share of NPLs in total loans fell below the pre-crisis level.

Monetary aggregates

Dinar reserve money gained 13.8% in nominal and 13.5% in real terms in Q4. This drove the increase in total reserve money, which recorded 8.3% nominal and 8.1% real growth.

Bank investment in repo securities shrank by RSD 29.9 bn in Q4 to RSD 45.1 bn at end-year, which, along with FX payment transactions with Kosovo and Metohija (RSD 17.3 bn), contributed the most to the rise in dinar reserve money. NBS interventions in the IFEM worked in the same direction by RSD 3.9 bn, as the NBS net purchased foreign currency in Q4.[12] Despite the (seasonal) reduction in funds in dinar accounts with the NBS, the government bought FX from the NBS in order to settle its FX liabilities, contributing RSD 0.9 bn to liquidity withdrawal in Q4.

Broader monetary aggregates expanded in Q4. Growth in dinar monetary aggregates was driven by the seasonal increase in cash in circulation and funds in transaction deposits. Thus, compared to September, M1 and M2 were higher by 10.8% and 7.6% respectively, in real terms. This and the further rise in FX deposits pushed M3 up by 3.0% in real terms in Q4.

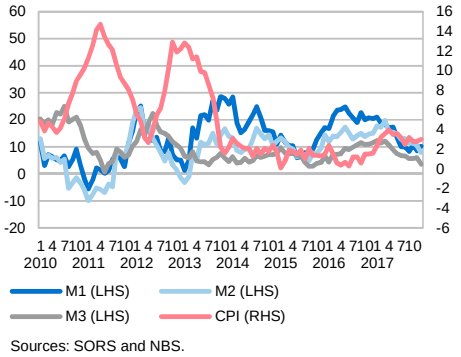
The increase in total transaction deposits in Q4 (RSD 49.9 bn) primarily resulted from higher balances in accounts of enterprises and current accounts of households, while non-profit organisations also contributed, though to a lesser extent. Consistent with expanding activity in the

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

	2017				Share in M3 Dec. 2017 (in %)
	March	June	Sep.	Dec.	
M3	8.2	3.7	2.4	0.6	100.0
FX deposits	4.5	0.1	-0.5	-1.9	61.7
M2	15.6	10.6	7.7	4.7	38.3
Time and savings dinar deposits	20.3	14.7	16.7	-2.0	8.9
M1	14.1	9.4	5.0	7.0	29.4
Demand deposits	16.5	11.9	7.3	9.5	22.2
Currency in circulation	7.5	2.1	-1.8	-0.1	7.2

Source: NBS.

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

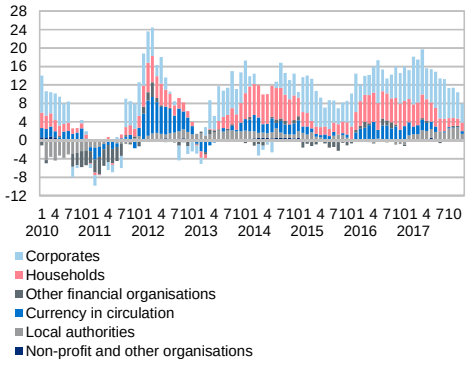


Sources: SORS and NBS.

[12] Transactions under NBS interventions in the interbank FX market (and thus effects on bank liquidity) are disclosed in line with accounting rules as at the settlement date, not the trading day.

trade sector, deposits of trade companies continued their strong growth in Q4. Deposits of construction, energy and manufacturing companies also increased notably, while only the funds in accounts of transport companies declined. Also on the rise were dinar saving deposits of OFOs and dinar household savings (RSD 0.8 bn), which amounted to RSD 49.5 bn at end-year. Unlike transaction deposits, dinar saving and term deposits of corporates lost RSD 4.0 bn in Q4, which is primarily linked to the decision of corporates and households to hold more liquid assets in a low interest rate environment.

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



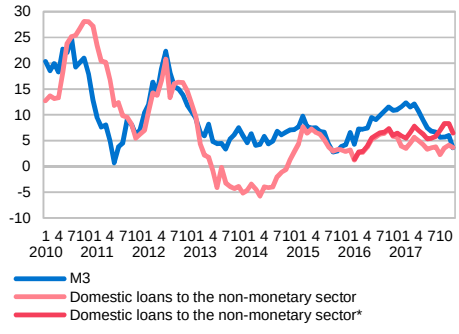
Source: NBS.

Total FX deposits gained EUR 149.1 mn in Q4, primarily on account of a rise in FX savings of citizens (EUR 112.5 mn), which measured almost EUR 9.1 bn at end-2017. Also, owing to good export performance, FX deposits of corporates rose by EUR 41.6 mn, as did funds in accounts of OFOs and non-profit organisations.

Y-o-y growth in two broadest monetary aggregates continued to slow down – in December M2 and M3 were higher by 4.7% and 0.6%, respectively, in real terms. On the other hand, the notable rise in transaction deposits in Q4 pushed up y-o-y growth in M1 from 5.0% in September to 7.0% in December, though this is still considerably lower than growth rates from 2016 and H1 2017.

Loans

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.

Excluding the exchange rate effect,[13] domestic loans increased by 1.6% in Q4, recording growth both in corporate and household segments. According to preliminary data,[14] at year level domestic loans gained 7.4% in 2017, with loans to households rising by 11.6% and to corporates by 4.3%. The rise in private sector lending in an environment characterised by the clean-up of NPLs from bank balance sheets, which reduces the stock of loans, confirms that the recovery of domestic lending is accelerating.

In 2017, banks wrote off RSD 102.0 bn and sold RSD 44.0 bn of NPLs to entities outside the banking sector. Excluding the effects of NPL write-offs over the last year,[15] in December domestic loans increased by 10.2% y-o-y, of which household loans gained 14.0% and corporate loans 7.4%.

[13] Calculated applying the dinar exchange rate against the euro, Swiss franc and dollar as at 30 September 2014 (the so-called programme exchange rate used for monitoring the performance under the arrangement with the IMF), taking into account the currency structure of loan receivables.

[14] According to the pre-closing entries.

[15] In 2017, banks wrote off RSD 74.3 bn of corporate loans and RSD 23.5 bn of household loans.

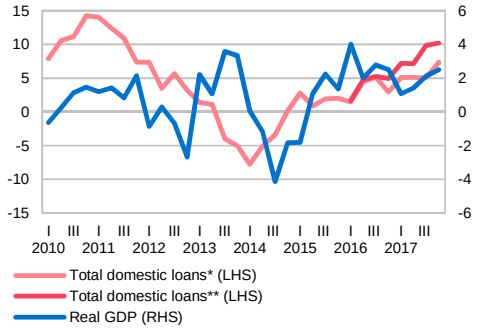
Corporate lending continued up in Q4 and, excluding the exchange rate effect, expanded by 1.5% or RSD 15.7 bn. The growth related to companies, while public enterprise borrowing contracted compared to September. Loans were extended the most to manufacturing, trade and construction companies, which may be linked to rising activity in these sectors, while receivables from transport and real estate companies dropped. By purpose, most bank receivables from corporates were still current assets loans (48.8%), while investment loans constituted 31.5% of these receivables.

More favourable trends are also confirmed by the total amount of new corporate loans in Q4 (RSD 244.0 bn). The approved amount is similar to the amount from the same period in 2016, though it is lower than in Q3, which saw the highest quarterly figures since comparable data on new loans became available. As before, current assets loans were the most popular category – they made up a half of new corporate loans in Q4. The share of investment loans rose to 26.4%, and import loans were kept at higher amounts, equalling 5.6% of new corporate loans.

According to the results of the January bank lending survey,[16] in aggregate terms, banks did not change corporate credit standards in Q4, while a slight easing is expected in Q1 2018. However, according to the criterion of company size, standards were relaxed for SMEs, which is in line with the assessments expressed in the EIB's CESEE Bank Lending Survey.[17] Standards were relaxed for short-term loans, owing to interbank competition and higher risk propensity, and lower costs of funding of some banks. Corporate borrowing terms were more favourable due to lower interest margins and accompanying costs, with the extension of loan maturity for FX-indexed loans, which is probably why collateral requirements were slightly tightened. As expected, corporate loan demand continued up and, in banks' view, was primarily led by the financing of current assets and investment, and to a lesser extent, by debt restructuring. These same factors should remain key drivers of demand in Q1 2018 as well.

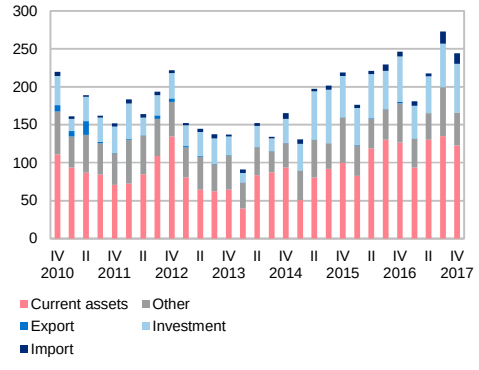
Household lending rose by 1.9% or RSD 16.9 bn in Q4, excluding the exchange rate effect. Specifically, growth

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



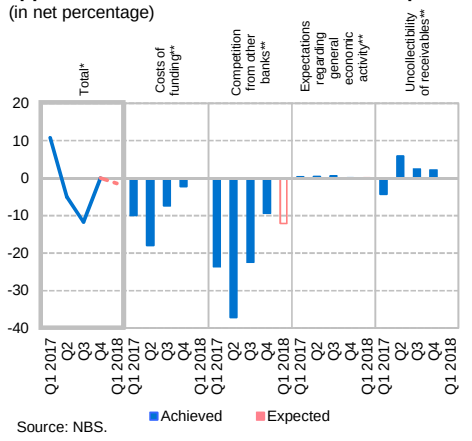
Sources: NBS and SORS.
* Excluding the exchange rate effect.
** Excluding the effect of NPL write-off in the past year.

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)



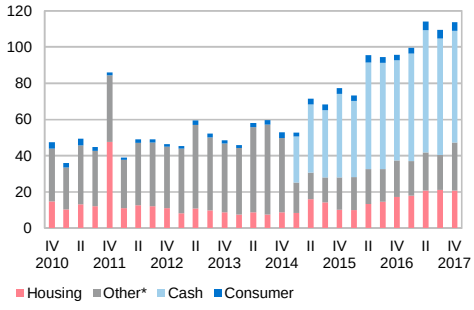
Source: NBS.
* Positive values indicate tightening and negative easing of credit standards relative to the previous quarter.
** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

[16] The NBS has conducted the survey since early 2014.

[17] Ten banks from Serbia, whose assets make up somewhat less than a half of total banking sector assets, participated in this survey: http://www.eib.org/infocentre/publications/all/cesee-bls-2017-h2.htm.

in cash loans (including refinancing loans) came at RSD 14.2 bn, and in housing loans – RSD 4.9 bn. In 2017, housing loans expanded by RSD 17.3 bn, which is 2.3 times higher than the year before.

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

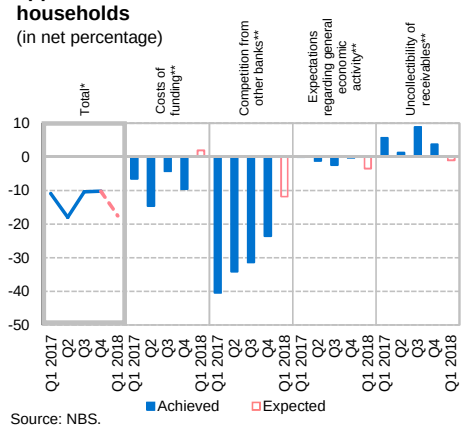


Source: NBS.

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

The volume of new household loans in Q4 (RSD 113.6 bn) was 3.7% higher than in Q3 and 18.7% higher than in the same period last year. Households still predominantly used dinar cash loans and refinancing loans. In Q4 these loans made up 53.8% of new household loans, 71% of which had maturity longer than five years. Housing lending continued to recover, as confirmed by the high amount of new housing loans (RSD 20.7 bn), which is 19.4% higher than in the same period last year. Although most of these loans were FX-denominated, Q4 saw dinar housing loans with the maturity period of 15 years at an interest rate of 4.9%. In addition to approving new loans, in a low interest rate environment there is notable higher refinancing of existing housing loans. Credit card borrowing of citizens remained unchanged, and current account overdrafts decreased slightly relative to Q3.

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.

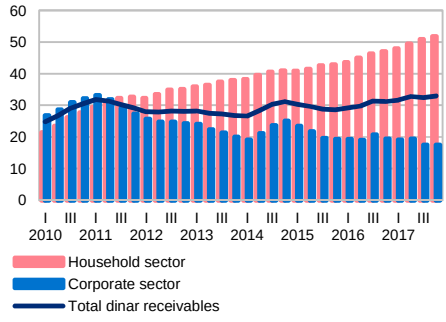
According to the January bank lending survey, banks further eased household credit standards, as expected. The easing related to the most prevalent loans – dinar cash loans, refinancing loans and FX-indexed housing loans, and was primarily caused by interbank competition and lower costs of funding. Household borrowing terms were more favourable due to lower interest margins, with the extension of loan maturity of dinar loans. Relative to Q3, demand for dinar cash loans and refinancing loans increased the most, followed by housing loans. The main factors contributing to rising demand were the refinancing of current obligations, employment and wage growth and purchase of real estate. Banks expect that standard easing and demand growth will continue into Q1 2018.

The dinar share of total **corporate and household** receivables in 2017 rose by 1.8 pp, equalling 33.0% at end-December. Households continued to predominantly borrow in dinars – in 2017, on average, 71% of new household loans were in dinars, contributing to a further rise in dinarisation of household receivables (by 4.8 pp during the year), reaching 51.8% in December. The dinarisation of corporate receivables in December (17.5%) was 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.

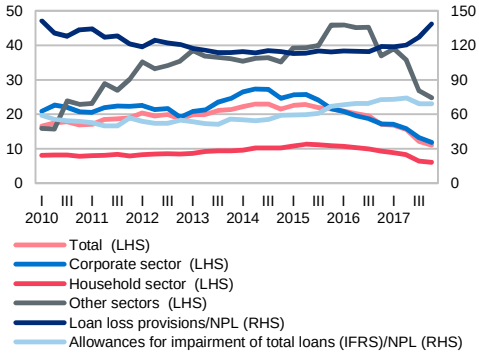
The implementation of the NPL Resolution Strategy, supported by the application of the Decision on the Accounting Write-off of Bank Balance Sheet Assets as of September 2017, continues to yield good results. NPL amounts continued down in Q4, their share in total loans falling below the pre-crisis level. The NPL share amounted to 11.1% in November, down by 11.2 pp from August 2015, when the Strategy was adopted. In 2017 alone, the share lost 5.9 pp (1.1 pp in October and November), owing to intensive efforts to resolve NPLs on the one hand, and to lending growth, on the other. The NPL share in the corporate sector was reduced by 5.4 pp in 2017, to 11.8% in November,[18] and in the household sector by 3.3 pp to 6.0%.[19] The NPL coverage is high – total allowances for loan impairment came at 69.3% of NPLs in November, and loan loss reserves continued to fully cover gross NPLs (by 138.7% in November). Also, after the introduction of Basel III standards,[20] the capital adequacy ratio rose further, to 22.5% in September, indicating the high capitalisation of the domestic banking sector.

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



Source: NBS.

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



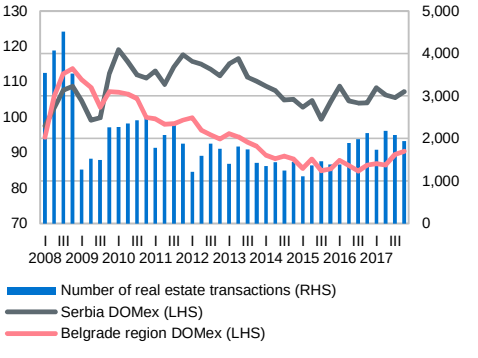
Source: NBS.

3. Real estate market

Prices of real estate rose in Q4. Growth was also recorded at year level, for the second consecutive year, attesting to the recovery of this market. Based on the rise in the number of issued construction permits and the expected further growth in housing loan demand, favourable trends are also expected in the coming period.

As measured by DOMex,[21] the average price of real estate in Serbia rose by 1.6% in Q4. Real estate prices increased across all regions, except in southern and eastern Serbia. In Q4, prices grew the most in Šumadija and western Serbia (4.3%), while in Vojvodina and Belgrade regions they rose by 2.3% and 1.0%, respectively. At year level, in 2017 real estate prices in Serbia increased for the second consecutive year (by 1.4%), driven mainly by the rise in real estate prices in Belgrade.

Chart IV.3.1 **DOMex and number of real estate transactions**
(index, H1 2008 = 100) (No)



Source: National Mortgage Insurance Corporation.

[18] Includes companies and public enterprises. Looking at companies only, the share of NPLs in total loans stood at 11.9% in November, down by 5.6 pp from December 2016.

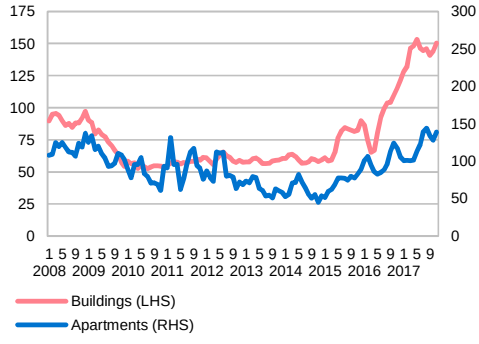
[19] With entrepreneurs and private households included, the share decreases by 3.7 pp to 6.4%.

[20] The regulatory framework of Basel III standards came into force on 30 June 2017.

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

The average real estate price in Serbia equalled EUR 888.8 per square metre. Prices were highest in the Belgrade region, averaging EUR 1,177.1 in Q4, the highest value in the last four years. As in Q3, in Q4 prices in Belgrade were almost twice higher than the prices in other regions in Serbia.

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



Sources: SORS and NBS calculation.

Unlike prices, real estate transactions[22] dropped in Q4 compared to Q3 (by 6.8%), with lower turnover in all regions, except in Šumadija, where it was similar to Q3. Despite the decline, total turnover was higher by 7.3% in 2017 than in 2016.

The number of residential construction permits continued up, rising by 3.5% s-a in the first two months of Q4 relative to Q3, and by 50.4% y-o-y. Higher activity in construction was accompanied by the rise in lending to companies in this sector. Project financing also rose, where, in addition to lending for the construction of residential buildings, banks also offered loans to citizens to purchase flats in those buildings.

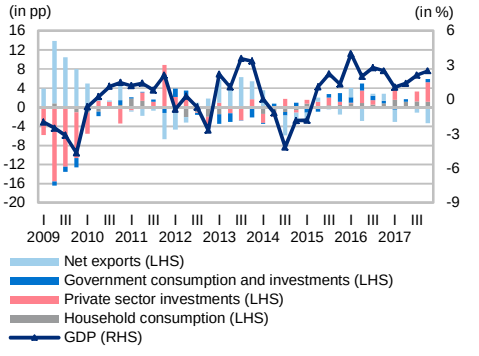
Demand for housing loans is expected to step up and, according to the latest EIB's CESEE Bank Lending Survey, it will be somewhat higher than the regional average. The rise in demand will be contributed by lower interest rates on housing loans and more favourable outlook in the real estate market, and by the rise in employment and wages.

4. Aggregate demand

Continued improvement of the business environment, faster implementation of infrastructure projects and a higher FDI inflow supported further fixed investment, which, as assessed by the NBS, contributed the most to GDP growth of 0.6% s-a in Q4. In addition, household consumption on account of the recovery in the labour market gave a positive contribution, and net exports – a negative contribution. The accelerated rise in private investment and recovery in government investment spurred y-o-y GDP growth in Q4, which, according to the preliminary estimate of the Statistical Office, measured 2.5%.

The achieved macroeconomic stability, implementation of structural reforms and labour market recovery, with favourable monetary conditions, will contribute to a further rise in investment and household consumption,

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



Sources: SORS and NBS calculation.
* NBS estimate for Q4 2017.

[22] The number of real estate transactions and flat prices per square metre also relate only to real estate purchased by insured loans.

which should be the drivers of GDP growth of around 3.5% in 2018. Exports will remain a positive contributor on account of implementation of past investment and stepped-up euro area recovery, but the contribution of net exports will be dampened by higher imports, mainly of equipment and intermediate goods for industrial purposes.

Domestic demand

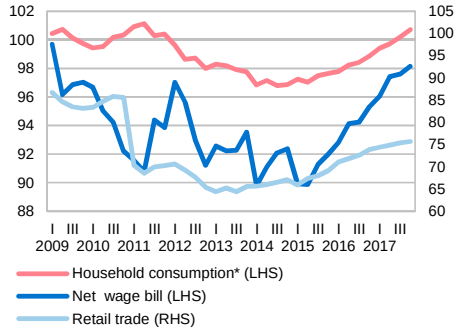
Continued labour market recovery and favourable monetary conditions had a positive effect on household consumption in Q4 as well, which rose by 0.5% s-a, according to the NBS estimate (contribution to GDP: 0.4 pp). A further rise in **household consumption** is primarily indicated by service sector developments. Thus, retail trade turnover edged up by 0.4% s-a in real terms, and the number of domestic tourist arrivals and overnight stays rose by 3.5% s-a and 4.0% s-a, respectively. Based on the NBS estimate, household consumption rose by 1.6% y-o-y in Q4, contributing to GDP by 1.1 pp.

Q4 saw further growth in household income, which is the main source of household consumption. Driven by the rise in private sector employment, the nominal net wage bill grew by 0.9% s-a, and new consumer loans continued up. Also, the remittances inflow accelerated in Q4 compared to a quarter before.

In addition to private consumption, final **government consumption** also expanded in Q4 (0.9% s-a), with a positive contribution to GDP by 0.2 pp. Such a movement is indicated by an increase in government outlays for the purchase of goods and services. On the other hand, wage expenditures contracted in Q4 as well, as a result of the further decline in public sector employment. According to the NBS estimate, final government consumption sped up to 3.0% y-o-y, positively contributing to GDP by 0.6 pp.

Continued improvement of the business environment and favourable monetary conditions supported further **private investment** growth in Q4, which the NBS measures at 4.9% s-a, giving a positive contribution to GDP by 0.9 pp. Total investment added 1.0 pp to GDP growth, given that government investment also picked up by 4.6% s-a. This is indicated by budget capital expenditure, which, owing to stepped up implementation of infrastructure projects, grew by 4.6% s-a in real terms in Q4. Investment growth is indicated particularly by favourable trends recorded in construction in Q4, primarily the rise in the real value of the works by 18.7% y-o-y. In addition, the production of

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



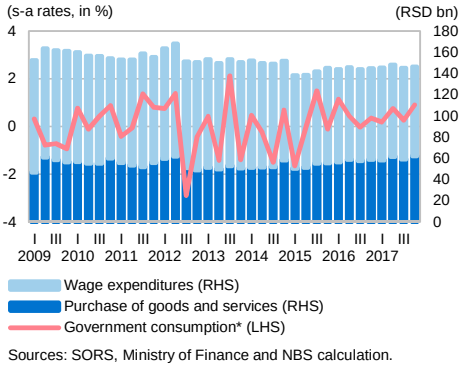
Sources: SORS and NBS calculation.
* NBS estimate for Q4 2017.

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

	2017			
	Q1	Q2	Q3	Q4
Household consumption	**2.0**	**1.6**	**1.7**	**1.6***
Indicators				
Retail trade	4.4	4.2	4.1	2.2
Catering turnover	10.7	7.4	7.6	4.9**
Number of domestic tourists	2.7	10.1	7.6	9.8
Number of overnight stays of domestic tourists	-0.6	10.8	7.5	11.3
Consumer goods imports (BEC classification), nominal	3.6	0.1	3.5	-2.2
Sources				
Total wage bill, nominal	6.8	7.4	6.7	5.8
Net remittances inflow, nominal	8.6	7.5	0.9	22.7
New cash loans, nominal	41.9	14.7	9.6	11.5

* NBS estimate.
** October-November.
Sources: SORS and NBS calculation.

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



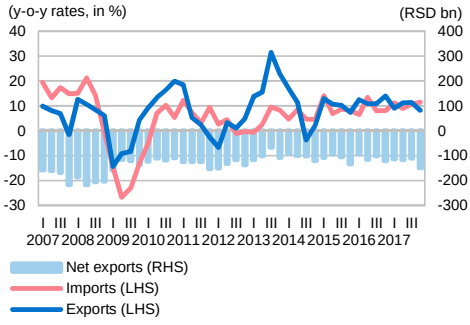
Sources: SORS, Ministry of Finance and NBS calculation.
* NBS estimate for Q4 2017.

Table IV.4.2 **Investment indicators**

	2016	2017			
	IV	I	II	III	IV
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Industrial inventories	-1.1	5.7	2.9	1.1	4.2
Industrial production of capital goods	4.3	9.8	-3.3	1.6	-4.4
Exports of equipment*	4.9	-2.0	4.0	3.1	10.7
Imports of equipment*	0.5	0.1	7.7	-4.0	11.9
Inventories of capital goods	-0.8	3.1	7.6	-0.7	-2.2
Industrial production of intermediate goods	0.9	5.1	5.0	-0.4	-0.4
Exports of intermediate goods*	8.9	8.3	5.6	1.1	2.4
Imports of intermediate goods*	6.8	4.4	4.1	1.6	2.5
Inventories of intermediate goods	2.0	3.6	6.1	2.0	4.5
Industrial production of construction materials	-1.0	2.0	-0.4	0.2	2.3
Inventories of construction materials	4.3	3.6	2.3	-0.4	2.6
Government investment**	-2.8	-6.3	3.0	1.2	4.6

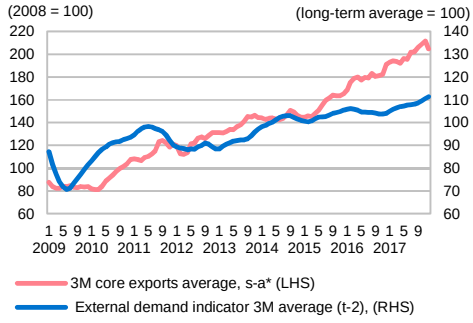
Sources: SORS and NBS calculation.
* Exports and imports are denominated in euros.
** Government investment spending is deflated by the industrial producer price index.

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 for Q4 2017.

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.

construction material increased, and ongoing positive trends in construction in the coming period are signalled by the further rise in the number of issued construction permits and anticipated value of the works based on those permits. Also, Q4 saw a relatively high increase in equipment imports (by 11.9% s-a). Y-o-y, following relatively robust growth in Q3 (9.8%), private investment accelerated further, to 15.2%, positively contributing to GDP by 2.3 pp.

Positive trends were recorded also in terms of the sources of investment financing. The improvement of the country's credit rating by rating agencies, the successful conclusion of the eighth review of the arrangement with the IMF and the reduction in the country risk premium mirrored the positive economic outlook and led to a further rise in FDI inflows. In Q4, net FDI inflows surpassed previous expectations, amounting to EUR 570 mn, while in 2017 as a whole they reached EUR 2.4 bn (6.6% of GDP). Also, Q4 saw an increase in the value of new investment loans compared to both the same period last year and Q3.

It is assessed that a positive contribution to GDP in Q4 also came from the increase in **inventories**. This is signalled by the stockpiling of industrial product inventories (4.2% s-a) in Q4, mainly energy and intermediary goods.

Net external demand

In Q4, real exports of goods and services remained at the relatively high level from Q3, owing to the implementation of earlier investment and the rise in external demand from the euro area and surrounding countries, while the poor agricultural season brought about lower exports of agricultural and food products. At the same time, faster investment growth pushed up growth in equipment imports, while higher needs of manufacturing and increased activity in construction and some service sectors led to higher imports of energy and intermediate goods. Consequently, after falling in Q3, in Q4 imports of goods and services rose by 2.5% s-a in real terms. The rise in imports and stagnation of exports of goods and services resulted in a negative contribution of net exports to GDP (1.8 pp).

Euro-denominated commodity exports fell slightly in Q4 (0.3% s-a) from Q3, mostly as a consequence of lower exports of agricultural and food products. On the other hand, in Q4 manufacturing exports continued up (2.9% s-a) and remained broadly dispersed, with growth recorded in 16 out of 23 sectors. Export growth benefited the most from motor vehicles exports, which were buttressed by

Fiat, and also by the continued rise in exports of other companies in the automobile industry. Total exports of Fiat shrank by EUR 161.9 mn in 2017, but the reduction was compensated by the increase in other companies' exports by EUR 367.0 mn.

In addition to the automobile industry, Q4 saw higher exports of base metals, supported to an extent by the rise in the global prices of steel and copper. In addition, growth in exports of petroleum products, metal, rubber and plastic products, and chemical and pharmaceutical products continued, and after falling in Q3, exports of machinery and equipment and furniture recovered. On the other hand, besides food exports, exports of tobacco products and computers and electronic products went down.

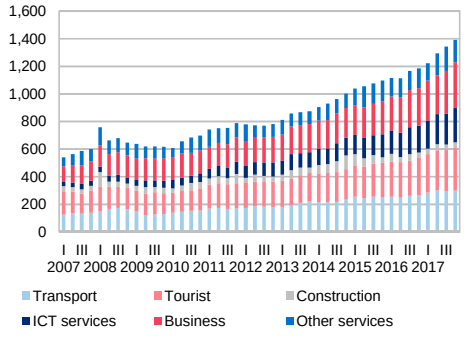
In Q4, exports continued up in services (3.5% s-a), with the highest positive contribution coming from exports of information and communications services (1.8 pp). Also, exports of tourism and business services continued to rise, and construction and transport services were on the mend. In y-o-y terms, exports of services accelerated to 17.2% in Q4 (from 12.4% in Q3). According to preliminary data, total exports of services in 2017 equalled around EUR 5.2 bn, exceeding total imports of services by around EUR 950 mn, continuing the trend of a surplus on trade in services present since 2011.

Euro-denominated commodity imports rose by 4.7% s-a in Q4, and retained a relatively favourable structure. Similar to the most of 2017, in Q4 import growth was driven by higher imports of equipment (11.9% s-a), pointing to a rise in investment, and by higher imports of intermediate goods (2.9% s-a). On the other hand, imports of consumer goods went down (2.2% s-a).

Similar trends are indicated by the structure of imports observed by the EU economic destination, which shows that the rise in imports resulted the most from higher imports of capital goods and energy. As regards energy, crude oil imports stepped up, in part due to the rise in processing volumes at home, and in part to rising global oil prices. On the other hand, natural gas imports slackened, to an extent due to warmer weather in Q4 than the multi-year average.

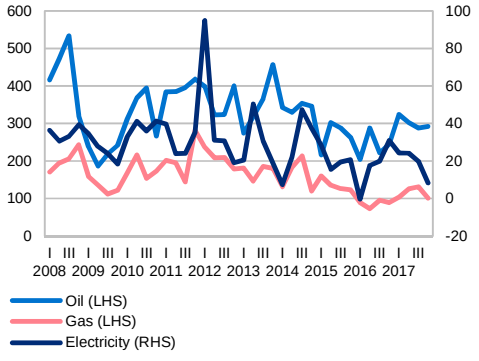
In December, according to s-a data, commodity exports were 98.4% and imports 18.4% above their pre-crisis levels.[23] The export/import cover ratio, measured by a 12-month moving average, in December equalled 78.1%, or 86.6% if services are also included.

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



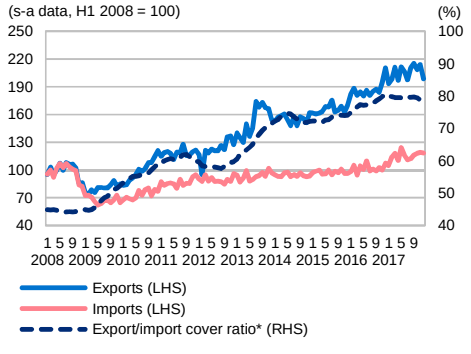
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

Chart IV.4.8 **Commodity trade in euros**
(s-a data, H1 2008 = 100)



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

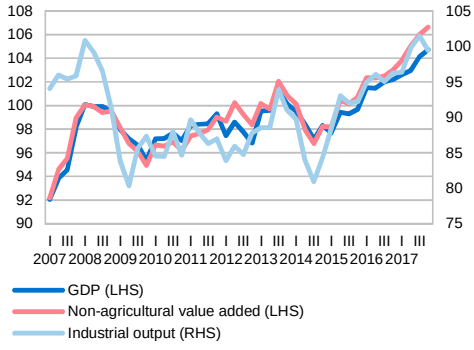
[23] H1 2008.

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

	2016	2017			
	Q4	Q1	Q2	Q3	Q4*
GDP (in %, s-a)	**0.2**	**0.4**	**0.4**	**1.1**	**0.6**
Agriculture	-0.2	-0.4	-0.5	0.1	0.1
Industry	0.2	0.3	0.4	0.2	-0.3
Construction	-0.1	0.1	0.1	0.2	0.2
Services	0.2	0.2	0.4	0.4	0.4
Net taxes	0.1	0.2	0.1	0.1	0.1

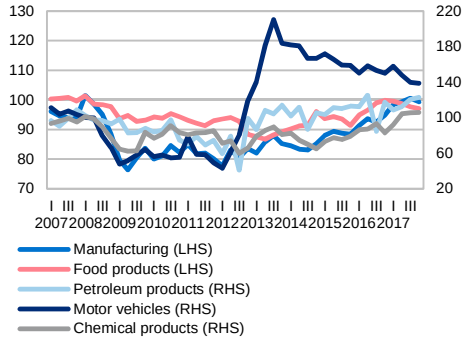
Sources: SORS and NBS calculation.
* NBS estimate.

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 by branch of manufacturing**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

5. Economic activity

Continued recovery in construction and higher activity in service sectors supported the GDP growth of 0.6% s-a in Q4. According to the preliminary estimate of the Statistical Office, y-o-y GDP growth in Q4 accelerated further – to 2.5%, owing to the rise in construction and most service sectors. The NBS estimates that GDP growth will speed up to around 3.5% in 2018. The acceleration should rest on favourable trends in manufacturing, continued growth in construction and service sectors, the recovery in mining and energy, and the low base effect of agriculture.

The recovery that commenced in construction picked up further in Q4, which, along with higher service sector activity, supported the GDP growth of 0.6% s-a in Q4. Growth in Q4 led to a rise in economic activity further beyond the pre-crisis level[24] – 4.7% measured by GDP and 6.6% measured by NAVA.

According to the preliminary estimate of the Statistical Office, GDP growth equalled 2.5% y-o-y in Q4, accelerating compared to Q3 (2.1% y-o-y), on the back of faster growth in construction (contribution: 0.7 pp) and most service sectors (1.6 pp). The industrial sector remained a positive contributor (0.7 pp), while agriculture acted as a drag. At year level, GDP growth in 2017 measured 1.9% according to the preliminary estimate of the Serbian Statistical Office.

After rising during the first three quarters of 2017, in Q4 industrial production fell by 2.1% s-a. In Q4, the physical volume of production in **manufacturing** was lower by 1.2% s-a than in Q3. The rise in the production of petroleum products, rubber and plastic products, and chemical and pharmaceutical products continued, as did the recovery of production of base metals. Production of construction material and furniture continued up, which can be linked to favourable trends in construction. Food production acted as a drag on the movement in the physical volume of production in Q4, largely due to a poor agricultural season. The production of metal products, machinery and equipment, and electrical equipment also dropped. In Q4, the physical volume of manufacturing grew by 5.0% y-o-y, with growth recorded in 16 out of 24 sectors.

[24] H1 2008.

Contracted exploitation of coal and base metals reflected on a decline in the physical volume of production in **mining** (1.4% s-a) in Q4. Also, after rising for two quarters, the physical volume of production in the **electricity, gas and steam supply** sector fell in Q4 (2.6% s-a). Y-o-y, the physical volume of production in the mining sector continued up (5.4%), with positive developments in most areas, while the physical volume of production in the electricity, gas and steam supply sector contracted by 2.5%.

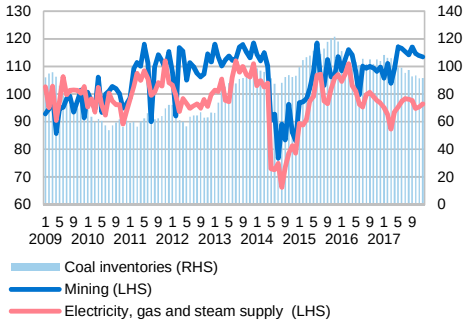
Owing to faster implementation of infrastructure projects, the recovery in **construction** that began in Q3 continued into Q4. The NBS estimates that growth in construction in Q4 measured 5.2% s-a, positively contributing to GDP growth by 0.2 pp. The production of construction materials rose by 2.3% s-a in Q4. Continued positive trends going forward are indicated also by the number of issued construction permits, which is still on the rise – in Q4 it went up by 4.2% s-a, according to the NBS estimate. Y-o-y, growth in construction accelerated to 15.0% in Q4, giving a positive contribution to GDP (0.7 pp).

The greatest positive contribution to quarterly GDP growth in Q4 came from **service sectors** (0.6 pp), owing to the continued rise in domestic demand on the back of the recovery in the labour market. Positive trends continued in the trade sector, as indicated by the rise in retail trade turnover by 0.4% s-a in Q4. Also, in Q4 the number of tourist arrivals rose by 1.4% s-a, and the number of their overnight stays by 2.1% s-a, pointing to further growth in the sector of accommodation and food services.

According to the estimate of the Statistical Office, the physical volume of **agriculture** in 2017 declined by 10%, mainly due to the contracted output of main crops – corn (down by 45.5%), wheat (21.0%) and soya bean (20.0%). Some fruits also recorded lower output (apples, raspberries, plums), whereas viticulture expanded. According to the NBS estimate, animal husbandry stagnated, since the diminished production of pork was offset by higher production of other types of meat.

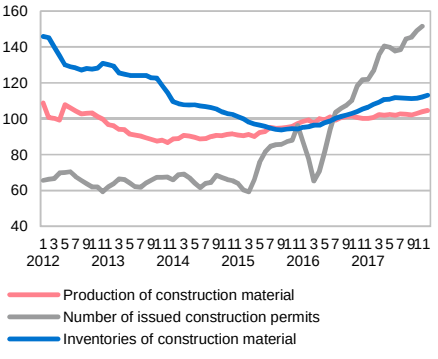
The NBS estimates that GDP growth will accelerate to around 3.5% in 2018. In addition to the carry-over effects[25] due to a faster rise in construction and service

Chart IV.5.3 **Physical volume of production in energy and mining**
(s-a, H1 2008 = 100)



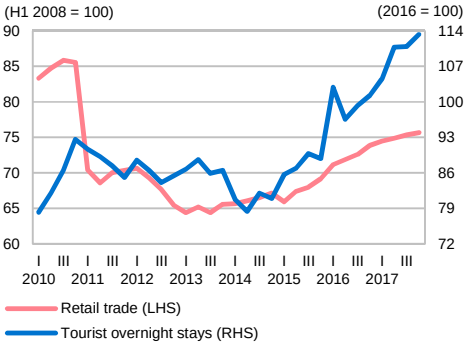
Sources: SORS and NBS calculation.

Chart IV.5.4. **Construction activity indicators**
(3M averages s-a, 2016 = 100)



Sources: SORS and NBS calculation.

Chart IV.5.5 **Service sector indicators**
(s-a data)



Sources: SORS and NBS calculation.

[25] See Text box 3, page 39.

Table IV.5.2 **Agricultural production**

	Harvested area (thousand hectares)		Average yield (ton/hectare)		Production (thousand tons)		Annual growth (in %)
	2016	2017*	2016	2017*	2016	2017*	
Wheat	595.1	557.7	4.8	4.1	2,884.5	2,277.7	-21.0
Corn	1,010.1	1,007.4	7.3	4.0	7,376.7	4,021.9	-45.5
Soybean	182.4	203.1	3.2	2.3	576.4	461.3	-20.0
Sunflower	200.3	221.7	3.1	2.4	621.1	540.6	-13.0
Sugar beet	49.2	54.2	54.5	46.4	2,683.9	2,513.5	-6.3
Plum	77.9	77.9	5.9	4.2	463.1	330.6	-28.6
Apple	23.7	23.7	13.8	12.9	328.4	306.6	-6.6
Raspberry	11.0	11.0	5.6	5.2	61.9	57.6	-6.9
Grapes	21.2	21.2	6.9	7.8	145.8	165.6	13.5

Source: SORS.
* SORS estimate.

sectors in Q4, GDP growth should also be supported by continued growth in manufacturing and the expected recovery in mining and energy sectors. Also, assuming an average agricultural season, we expect a positive contribution to GDP growth to come from agriculture as well, reflecting a low base.

Text box 3: Carry-over effect on the GDP growth rate

The annual GDP growth rate is determined both by the growth dynamics in a particular year and in the previous (base) year. Starting from there, the annual GDP growth, calculated on the basis of its s-a quarterly level, can be decomposed into the so-called carry-over effect, that is, the deviation of the level achieved in Q4 from the last year's average, and the effect of its quarterly dynamics in the current year. Even though the carry-over effect from the previous year is often overlooked, it can largely affect the annual GDP growth rate.

Generally, the carry-over effect is used to estimate the potential annual GDP growth rate under the assumption that economic activity in all quarters of the reference year on average is kept at the s-a level recorded in the last quarter of the previous year.

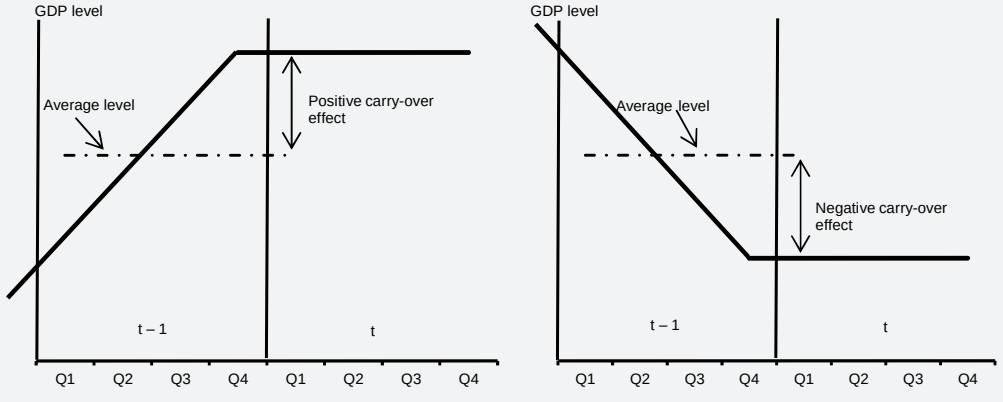
Starting from the previous assumption, the achieved annual GDP growth in the year *t* can be presented in the following manner:

$$\Delta \mathrm{GDP}t/t-1 = \frac{\overline{\mathrm{GDP}}_t - \overline{\mathrm{GDP}}_{t-1}}{\overline{\mathrm{GDP}}_{t-1}} * 100 = \frac{\overline{\mathrm{GDP}}_t - \mathrm{GDP}_{t-1}^{\mathrm{T4}} + \mathrm{GDP}_{t-1}^{\mathrm{T4}} - \overline{\mathrm{GDP}}_{\mathrm{t-1}}}{\overline{\mathrm{GDP}}_{\mathrm{t-1}}} * 100 =$$

$$= \underbrace{\frac{\mathrm{GDP}_{t-1}^{\mathrm{T4}} - \overline{\mathrm{GDP}}_{\mathrm{t-1}}}{\overline{\mathrm{GDP}}_{\mathrm{t-1}}} * 100}_{\text{Carry-over effect}} + \underbrace{\frac{\overline{\mathrm{GDP}}_t - \mathrm{GDP}_{t-1}^{\mathrm{T4}}}{\overline{\mathrm{GDP}}_{\mathrm{t-1}}} * 100}_{\text{Current year effect}}$$

Based on the presented equation, it can be concluded that, **if s-a GDP in Q4 of the previous year** ($\mathrm{GDP}_{t-1}^{\mathrm{T4}}$) **was above the average quarterly s-a GDP in that year** ($\overline{\mathrm{GDP}}_{t-1}$), the carry-over effect **for the current year will be positive** (Chart O.3.1). The other portion, presented as the "current year effect", is reflected in contribution to the growth stemming from the tendency in the GDP developments in the current year and is generated as the ratio between the average GDP in that year ($\overline{\mathrm{GDP}}_t$) and GDP achieved in the last quarter of the previous year ($\overline{\mathrm{GDP}}_{t-1}$),

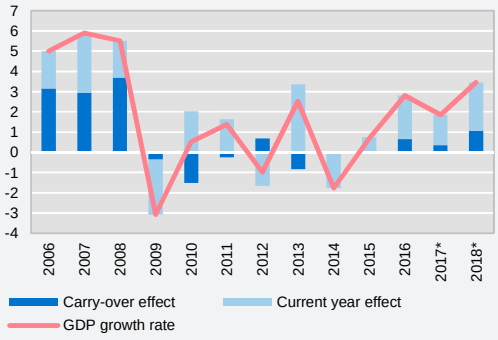
Chart O.3.1 **Calculation of carry-over effect**



Source: ECB Monthly Bulletin, December 2001.

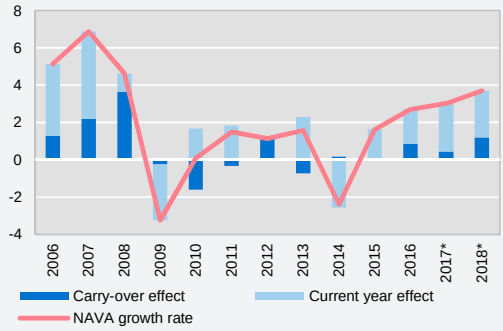
As a result of the impact of the global economic crisis since Q4 2008, the carry-over effect is negative in 2009. And owing to unfavourable tendencies in 2009 it also significantly diminished the achieved positive breakthroughs in terms of GDP developments in 2010. In the period from 2012 until 2014, the carry-over effect varied, mainly depending on hydrometeorological conditions, particularly on agricultural production in 2012, which is visible in the GDP and NAVA growth dynamics.

Chart O.3.2 **Carry-over effect on GDP growth dynamics**
(in %)



Sources: SORS and NBS calculation.
* NBS estimate.

Chart O.3.3 **Carry-over effect on NAVA growth dynamics**
(in %)



Sources: SORS and NBS calculation.
* NBS estimate.

In 2016 and 2017, the carry-over effect was positive and it is expected to continue in this year, as well. A positive carry-over effect is a signal that economic growth in the current year should accelerate, and it is estimated to have been the highest for this year since the crisis period. The carry-over effect on GDP is estimated at around 1.1 pp this year, while on NAVA it is around 1.2 pp, driven primarily by the recovery in construction in H2 2017, as well as growth acceleration in services sectors in Q4.

6. Labour market developments

Positive labour market developments continued in Q4, with a further increase in private sector employment and a decline in unemployment. Higher productivity contributed to the reduction in unit labour costs of the overall economy and the improvement in external cost competitiveness.

Wages and labour productivity

Continued economic growth and the increase in public sector wages in December led to a rise in the nominal net wage in Q4 by 0.5% s-a relative to Q3. Its growth in Q4 was sustained also in y-o-y terms (3.0%), with continued growth in the private (4.0%) and public sectors (0.8%). Average private sector wages surpassed average public sector wages by around 5% in December.

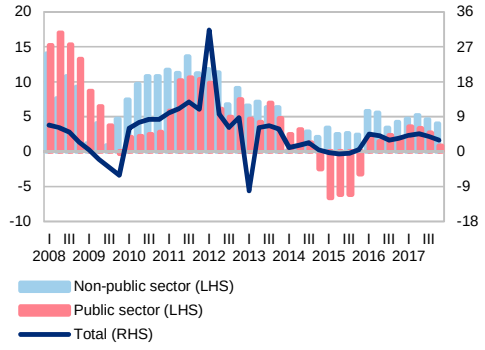
The nominal net wage in Q4 y-o-y rose in the majority of economic sectors. In line with expectations, wage growth was recorded in sectors which greatly contributed to economic growth, such as manufacturing, accommodation and food services, trade, information and communications. On the other hand, lower nominal wages in Q4 were recorded in the real estate sector, transport and health.

Higher average wages and employment in the private sector contributed to an increase in the total nominal wage bill in Q4 by 0.9% s-a, whose growth continued in y-o-y terms as well (5.8%). The average nominal net wage in the Republic of Serbia in Q4 stood at RSD 49,602, up by 3.0% relative to the same period the year before.[26]

In September 2017, the Social and Economic Council of the Republic of Serbia adopted a decision on raising the minimum wage exclusive of taxes and contributions for compulsory social insurance from 130 to 143 dinars net per hour, which comes into force in January 2018. Also, the amendments to the Law on Personal Income Tax raised the non-taxable wage amount from 11,790 dinars to 15,000 dinars, which will come into effect starting from the payment of the January 2018 wages.

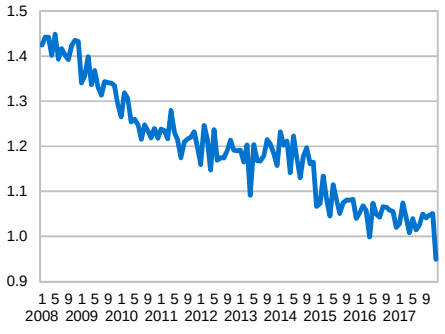
Productivity of the overall economy continued to grow in Q4, leading to **a decrease in unit labour costs of the**

Chart IV.6.1 **Nominal net wages**
(y-o-y growth rates)



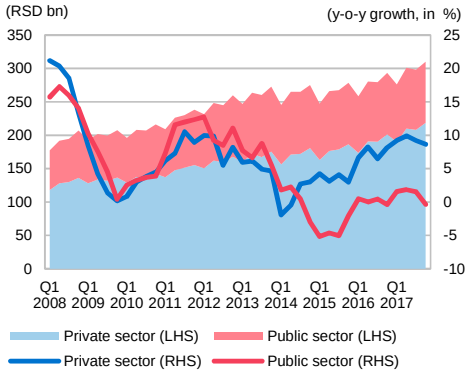
Sources: SORS and NBS calculation.

Chart IV.6.2 **Ratio of average nominal net wage in public and non-public sector**



Sources: SORS and NBS calculation.

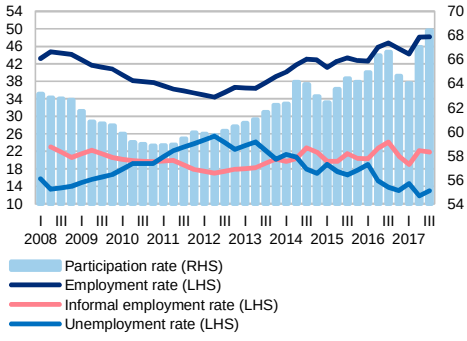
Chart IV.6.3 **Nominal net wage bill**



Sources: SORS and NBS calculation.

[26] The Statistical Office announced that it would change the methodology for calculating average wages in early 2018, whereby it will use the data by the Tax Administration.

Chart IV.6.4 **Labour market indicators according to the *Labour Force Survey***
(in %)



Source: SORS.

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

	2017			
	Q1	Q2	Q3	Q4
Total number of formally employed	2.9	2.7	3.1	2.5
Employed with legal persons	2.5	2.4	2.9	2.3
Entrepreneurs and their employees	6.6	5.9	5.7	5.6
Individual farmers	-3.6	-3.9	-4.6	-6.6
Unemployed persons	-8.2	-8.7	-9.0	-11.7
First-time job seekers	-9.0	-9.4	-9.8	-12.4
Used to be employed	-7.7	-8.3	-8.6	-11.4

Sources: SORS and National Employment Service.

overall economy by 0.8% s-a and an improvement in external cost competitiveness.

Employment

According to data from the Statistical Office, obtained from the Central Registry of Compulsory Social Insurance, as in entire 2017, total formal employment continued its y-o-y growth in Q4. Growth was driven by higher private sector employment, mainly as a result of further economic growth, while public sector employment declined due to further staff rightsizing. Employment with legal persons and the number of private entrepreneurs and their employees continued up, while the number of individual agricultural producers fell in Q4.

The greatest rise in employment in Q4 was recorded in manufacturing, accommodation and food services, and information and communications, i.e. the sectors which, as assessed by the NBS, contributed the most to GDP growth in 2017. On the other hand, employment shrank in agriculture and construction, in part due to seasonal trends, and it declined in the public administration and health as well.

Continued implementation of an active labour market policy (job fairs, training, retraining), with higher labour demand of companies, helped further reduce the number of unemployed persons. According to the data of the National Employment Service, the number of the unemployed in December 2017 equalled 618,827, or 82,120 less than at end-2016. In November, the number of the unemployed stood at 617,376, the lowest level in the last twenty years. Unemployment was lower in almost all occupational groups, where, similarly to the previous quarters, it declined the most in jobs related to manufacturing, trade and hospitality.

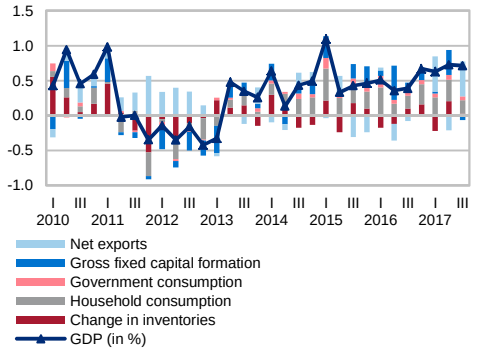
The results of the Labour Force Survey, which covers the informal segment of the labour market as well, also indicate a further labour market rebound. According to the latest results (Q3 2017), the participation rate increased to 68.4%, its highest level since 2014, i.e. since comparable data are available. The employment rate also rose to the highest level since early 2014 – 48.2%, up by 1.4 pp y-o-y. The rise in employment in the period under review was driven by formal employment, as also indicated by the decrease in informal employment by 2.3 pp to 21.8%. The same source puts Q3 unemployment at 12.9%, or 0.9 pp less than in the same period a year before.

7. International environment

Euro area GDP maintained a relatively strong growth pace in H2 2017 as well, with more favourable prospects for the period ahead than previously expected owing to labour market recovery, improved financial conditions and faster global growth. This was reflected on the economic activity throughout the region of Central and South-Eastern Europe, which witnessed improved movements and on top of that anticipates a brighter outlook for the period ahead. Accelerated growth and rosier prospects are expected in the USA as well, primarily owing to the effects of the adopted tax reform which, in addition to having a positive impact on investment and consumption in the US, is likely to contribute to faster global growth.

Global inflation was slightly higher than in the previous period, though most countries do not expect major inflationary pressures yet. Leading central banks continued to pursue diverging monetary policies, however, global financial conditions remain favourable owing to the still exceptionally low interest rates and improved prospects of global economic growth. Euro area growth was faster than anticipated and, together with the relatively stable growth prospects in the USA, it helped the euro outstrip the dollar in 2017, after the EU currency lingered at low levels for three years. The period since the previous Report was also marked by a rise in the prices of primary commodities, notably oil.

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

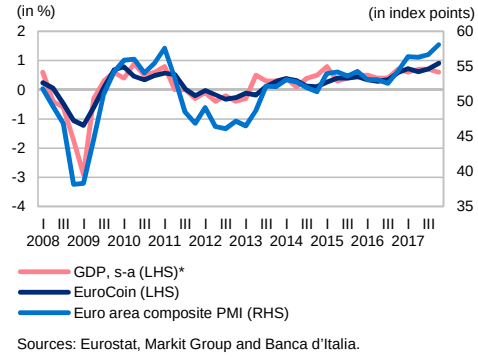


Source: Eurostat.

Economic activity

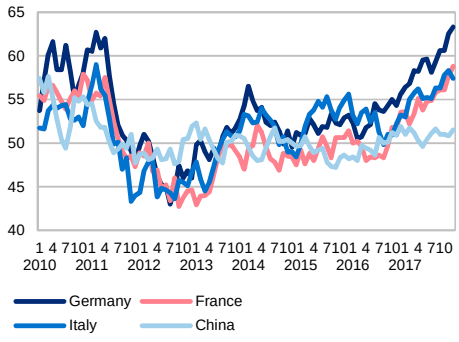
GDP growth in the euro area continued in Q3 at the same pace as in Q2 (0.7% s-a), supported by the extended rise in private consumption and the recovery of net exports. Positive developments in the labour market, favourable monetary conditions and the continued rise in consumer confidence worked towards further growth in private consumption, while faster global upturn, especially in Asian countries, was conducive to the rise in external demand and net exports. Economic growth in Q3 remained broadly dispersed among countries, with Germany and Italy, Serbia's important trade partners, recording accelerated growth relative to Q2. Favourable developments from Q3 continued into Q4, hence the Eurostat flash estimate reported 0.6% s-a GDP growth in the euro area in Q4. At the same time, economic growth in Q4 remained broadly dispersed, as suggested by the movements in leading indicators – in most countries, they stood close to several-year maximums or even

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



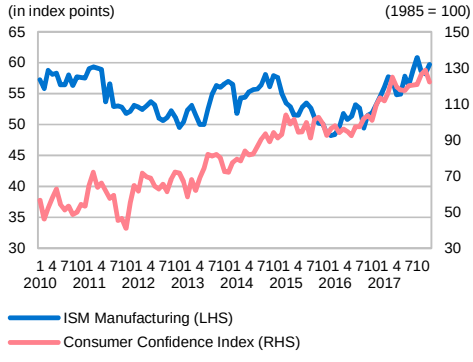
Sources: Eurostat, Markit Group and Banca d'Italia.
* Eurostat's preliminary flash estimate for Q4 2017.

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



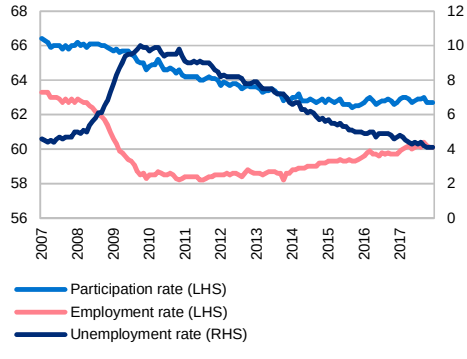
Source: Markit Group.

Chart IV.7.4 **Leading economic indicators in the USA**
(in index points) (1985 = 100)



Source: Institute for Supply Management, Conference Board.

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



Source: Bureau of Labor Statistics.

exceeded them. Thus the PMI Composite for the euro area in Q4 (57.2 points[27] on average) was the highest since early 2011, while the Economic Sentiment Indicator reached its quarterly maximum (114.9 points[28]) for the first time since end-2000.

Under the impact of good economic results in Q3 and favourable expectations for Q4, the prospects for the euro area's GDP growth in 2017 were revised up – according to the Eurostat's flash estimate, it equalled 2.5%, its highest growth rate since 2007. According to the IMF and Consensus Forecast, a similar growth rate (2.2–2.3%) is expected in 2018 as well. Economic growth was revised up (by 0.3–0.5 pp) relative to earlier projections largely due to the anticipated higher positive impact of external demand, whose effect will be more evident in the short-term than in the medium-term. Hence GDP is expected to slow down slightly in 2019 – to 1.8–2.0%, though prospects are more favourable than in the previous projection (by 0.2–0.3 pp). In the medium run, the extended GDP growth in the euro area is likely to be upheld by the further growth in domestic demand (supported by the continued labour market recovery, low interest rates and higher profitability of corporates) and rising external demand on account of the anticipated acceleration in global growth.

On a similar note, **US GDP growth** in Q3 also maintained the pace from Q2 (0.8% s-a), largely owing to the continued rise in private consumption and investment, and faster export growth. According to the preliminary estimate of the US Bureau of Economic Analysis, GDP growth in Q4 equalled 0.6% s-a, and was driven by private consumption and investment, as in prior quarters. Favourable developments in the labour market continued in Q4, with unemployment dipping even further (by 0.1 pp to 4.1% in December) and new nonfarm payrolls going up (around 200,000 on average in Q4). Coupled with high consumer confidence, this reflected positively on private consumption. Investment continued to recover in Q4 as well, owing to favourable financing conditions and better profitability of corporates.

At year level, GDP growth in the USA in 2017 (2.3%) was faster than in 2016 (1.5%), which is chiefly attributable to investment recovery and accelerated export growth. According to the IMF's January estimate, growth prospects for 2018 and 2019 are even more promising (2.7% and 2.5%, respectively) and have been

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

[28] The index has been designed to indicate long-term average with 100 points.

considerably revised up relative to October (by 0.5 pp), while the January Consensus Forecast predicts similar growth (2.7% and 2.4%, respectively).

Favourable economic developments in the euro area reflected positively on investment and export growth of **Central European countrie**s. Together with the continued rise in private consumption, backed by the sustained recovery in the labour market, this helped **maintain the strong pace of GDP growth in Q3 as well**. The biggest GDP growth was recorded by Poland, 5.2% y-o-y, while a pick-up in GDP growth relative to Q2 was reported for the Czech Republic (from 3.4% to 4.7% y-o-y) and Hungary (from 3.3% to 3.9% y-o-y). Relative to October, the Consensus Forecast revised its January GDP growth projection for the region as a whole – by 0.3 pp to 4.3% in 2017 and by 0.2 pp to 3.6% in 2018, while preliminary estimates anticipate growth of 3.2% in 2019.

As regards the **South-Eastern European region**, domestic demand was the main driver of GDP growth in Q3 as well, owing to the further recovery of the labour market and continued investment growth. Exports remained a positive contributor due to strong external demand triggered by stepped-up growth in the EU; however, rising imports of equipment needed for investment projects downplayed the positive contribution of net exports to GDP. Romania boasted the highest growth in the region – 8.8% y-o-y, which is primarily attributable to the rise in private consumption. Relative to October, the January Consensus Forecast revised its GDP growth projection for the region as a whole – by 0.7 pp to 4.9% in 2017, while in 2018 and 2019 growth is expected to slow down to 3.8% and 3.3%, respectively.

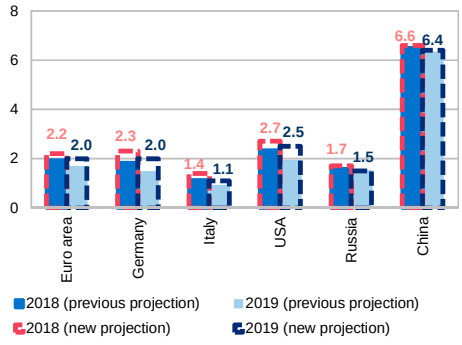
Russia's GDP growth in Q3 measured 1.8% y-o-y and was largely led by the extended growth in private consumption, which benefited from the drop in inflation and the gradual recovery in the labour market. Net exports were another positive contributor, owing to the oil price hike, while investment benefited from lower interest rates and also provided an impetus, though to a lesser degree. The recovery in the price of oil, low inflation and monetary easing should continue to support GDP growth in both 2018 and 2019 when, according to the January Consensus Forecast, GDP growth will measure 1.9% and 1.8%, respectively, while the IMF's

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

	October 2017		January 2018	
	2018	2019	2018	2019
Poland	3.5	3.3	3.8	3.3
Czech Republic	3.1	2.7	3.3	2.8
Hungary	3.4	3.0	3.6	2.8
Albania	4.0	-	3.8	3.9
Bulgaria	3.4	3.1	3.6	3.2
Bosnia and Herzegovina	3.1	-	3.0	3.0
Macedonia	3.3	-	3.2	3.4
Romania	3.9	3.5	4.5	3.6
Slovenia	3.3	2.7	3.7	3.0
Croatia	2.7	2.6	2.8	2.7

Source: Consensus Forecast.

Chart IV.7.6 **Revisions of real GDP growth forecasts for 2018 and 2019 by the IMF**
(in %)



Sources: IMF WEO (October 2017) and IMF WEO Update (January 2018).

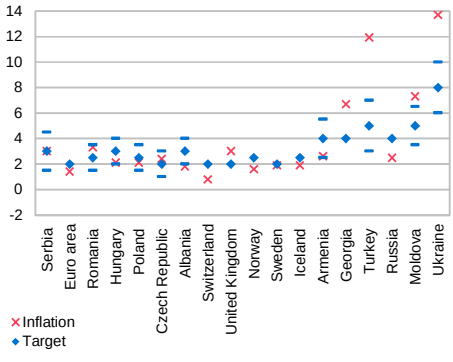
forecast projects growth figures at 1.7% and 1.5%, respectively.

As planned, **the Chinese economy** continued to rebalance its growth structure in 2017, recording a faster rise in final consumption relative to investment, that is to say, the service sectors outstripped the industry. The GDP growth rate in Q4 maintained the pace from Q3 – 6.8% y-o-y, while owing to more favourable developments in H1, annual growth equalled 6.9%. According to the IMF's January forecast, GDP growth in 2018 should decelerate to 6.6%, while the Consensus Forecast predicts 6.5%, based on the expectations that China will uphold a tight monetary policy stance.

Inflation movements

At the global level, inflation edged up compared to the previous period, mostly due to higher energy prices. However, the pick-up in global growth still has not yielded major inflationary pressures. In European countries whose central banks pursue an inflation targeting regime, eight out of 18 countries, including Serbia, achieved their inflation target at end-2017.

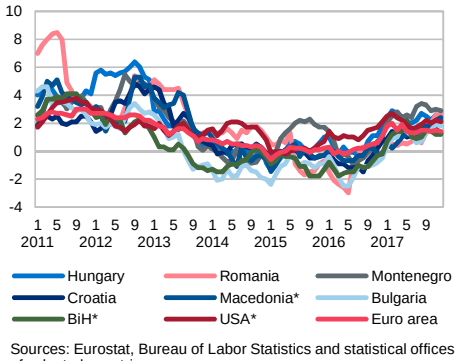
Chart IV.7.7 **Inflation and target by country in December 2017.**
(in %)



Sources: Eurostat and websites of central banks.

Despite the relatively robust economic growth, inflation in **the euro area** was below the target, "below but close to 2%." However, inflation in 2017 was still higher (1.5% y-o-y) than in 2016 (0.3% y-o-y) largely owing to the rising energy prices. Core inflation of 1.0% y-o-y in 2017 was only a tad higher than in 2016 (0.9% y-o-y). During Q4, inflation moved from 1.4% to 1.5% y-o-y. As for Serbia's key foreign trade partners, inflation in Germany moved between 1.5% and 1.8% y-o-y in Q4, as in the prior quarter, while in Italy it dipped to around 1% y-o-y. Analysts estimate that inflation in the euro area is still relatively low mostly due to the appreciation of the euro and the fact that, despite low unemployment (lowest since 2009), wage growth remains moderate. They estimate that appreciation of the euro in 2017 has "postponed" the expected inflation rise and that in 2018 inflation will remain below the target and will not strike a path of moderate growth until the following year.

Chart IV.7.8 **HICP across selected countries**
(y-o-y rates, in %)

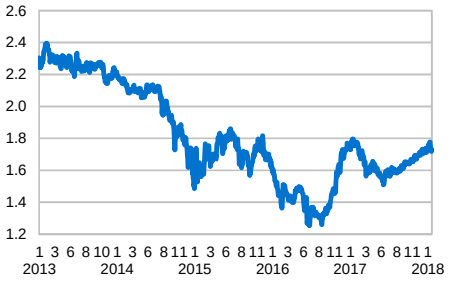


Sources: Eurostat, Bureau of Labor Statistics and statistical offices of selected countries.
* CPI.

Considering the higher prices of oil and food products, in December the ECB revised up its inflation projection for 2018 – to 1.4%, from the September 2017 projection of 1.2%. The projection for 2019 was unchanged (1.5%), while an average inflation of 1.7% is expected in 2020. The ECB expects inflation to rise gradually and come close to the target owing to monetary policy measures, continued economic growth, gradual absorption of

economic slack and rising wages. Relative to October, January inflation expectations of professional forecasters[29] edged up 0.1 pp for 2018 and 2019, to 1.5% and 1.7%, respectively. For 2020, they remained at 1.8%. Long-term inflation expectations, referring to 2022, were kept at 1.9%. They were obtained through a survey and are still somewhat higher than long-term market expectations, which rose from 1.67% in October to 1.73%[30] at end-January.

Chart IV.7.9 **Long-term inflation expectations in the euro area***
(in %)



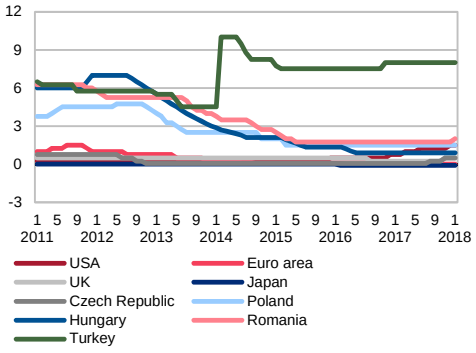
Source: Thomson Reuters.
* The five-year, five-year breakeven forward.

In most **Central and Eastern European countries**, inflation in Q4 was higher than a quarter earlier. Having reached its five-year record of 2.5% in November, inflation in Poland measured 2.1% y-o-y in December, largely owing to a rise in food prices. In Romania and Bulgaria, inflation in Q4 reached its highest level since 2013 (2.6% and 1.9% y-o-y, respectively), on account of rising domestic demand. Inflation in Macedonia also topped its 2013 figure (2.4% y-o-y in December). In Croatia and Bosnia and Herzegovina inflation also exceeded the level from Q3 and on average equalled 1.5% and 1.3%, respectively. By contrast, the end of the year saw inflation in Hungary and Montenegro decline to 2.2% and 2.9% y-o-y, respectively. Russia also saw a drop in inflation, to 2.5% y-o-y in December, on account of the stronger currency and cheaper food, which is attributable to the good agricultural season. As the effects of these factors weaken, the Russian central bank expects inflation to rise gradually and return to the 4.0% target. Inflation in Turkey remains two-digit (11.9% y-o-y in December), and core inflation is on an upward path. The central bank believes that the cumulative effect of the depreciation of the Turkish lira is the key inflation driver, though aggregate demand has also yielded some contribution.

US inflation perked up at end-2017, coming at 2.1% in December. The same is true in annual terms: average y-o-y inflation in 2017 was higher than the 2016 figure (2.1% compared to 1.3%). Conversely, core inflation in 2017 equalled 1.8% and was 0.4 pp lower than in 2016. However, it is noteworthy that core inflation in December increased 0.3 pp from November, which is the highest rise in core inflation in the past 11 months. This encouraged expectations that higher inflation is sustainable and would hover around the Fed's target in 2018 owing to labour market recovery, hike in the prices of primary commodities, a weaker dollar and fiscal stimuli.

[29] ECB Survey of Professional Forecasters (SPF).
[30] The five-year, five-year breakeven forward.

Chart IV.7.10 **Policy rates across selected countries**
(p.a., in %)



Sources: Central banks of selected countries.

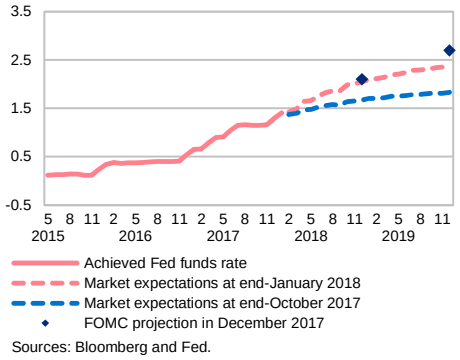
Monetary policy

Monetary policies of leading central banks, the ECB and the Fed, diverged further since the previous Report, as the euro area and the USA are going through different stages of their economic cycle.

In Q4, **the ECB** kept its interest rates at historic minimums (key rate at zero and deposit facility rate below zero) and continued with net asset purchases, though in a lower volume since the start of the year (EUR 30.0 bn), which will be kept until end-September 2018. If necessary, the ECB underlined it would increase the asset purchase programme in terms of size and/or duration until inflation is on the path of sustainable growth which is in accordance with the inflation target. At the same time, it stressed 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 continued 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.

In early December, the EU and the UK reached agreement on Brexit terms, which will be the basis for negotiations on the transitional period and the future trade deal. The Bank of England decided to raise its key refinancing rate from 0.25% to 0.50%. This is the first rate hike since July 2007, and after the rate was trimmed by 0.25 pp in August 2016, immediately after Brexit. It also unanimously decided to keep the bond-buying programme at GBP 435 bn.

Chart IV.7.11. **Achieved and expected Fed funds rate***
(p.a., in %)



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

As expected, **the Fed** raised its interest rate target range in December (1.25%–1.5%) in view of rising economic activity and further strengthening of the labour market. Also, in accordance with earlier announcements, as of October 2017 the Fed has been unwinding its balance sheet, which had increased from USD 800 bn to USD 4.5 tn during the global economic crisis. It is certain that even after the scheduled unwinding, the Fed's balance sheet will be considerably higher than what it was before the crisis. According to the plan, the amount of the reduction to be reinvested will be increased by USD 10 bn after each quarter until a monthly pace of USD 50 bn

is reached around end-2018 (60% of this amount will be Treasury securities and 40% mortgage-backed securities). From then on, the Fed will unload USD 50 bn per month for as long as it deems necessary. The shrinking of the Fed's balance sheet in Q4 was not significant and most analysts see it as a signal to the market that the Fed is in no hurry to get back to normal. Still, some analysts believe that the scheduled trimming of the balance sheet from October 2017 until end-2018 could yield a greater effect that originally assumed by the market.

As for 2018, stronger-than-expected economic growth, a fall in the unemployment rate and data on inflation growth at end-2017 spurred expectations that the Fed might raise the interest rate again in March. For the entire year, the Fed still expects three rate hikes (and two in 2019). The December forecast of FOMC members indicates that the Fed's median interest rate will reach 2.1% in 2018 and 2.7% in 2019, unchanged relative to the September projection. Market expectations at end-January were higher than three months ago and close to the interest rate trajectory from the Fed's previous (December) forecast. Still, analysists estimate that 2018 might yet see four increases, bearing in mind the economic rebound and effects of the tax reform on consumption and investment during the year.

Monetary policies of central banks in **Central and Eastern Europe** started to diverge depending on economic conditions in each country. One of the few that still have not changed their monetary policy is the National Bank of Poland, whose key policy rate has been at the minimum level of 1.5% for three years now.

On the other hand, the Czech National Bank was among the first European central banks to initiate monetary policy tightening in August 2017 due to the expected rise in inflation, triggered by wage and consumption growth. It raised its key policy rate again in November, by 25 bp to 0.5%. There were talks about another increase in December, but a decision was made to wait as the koruna was appreciating more than had been expected. In early February 2018, the Czech central bank decided to raise the policy rate by 25 bp to 0.75%. In addition to the Czech National Bank, the National Bank of Romania also launched a cycle of monetary policy tightening, as had been expected, and raised its key policy rate by 25 bp to 2.0% in January. Prior to that, it kept the rate unchanged in Q4, but in October and November it narrowed the interest rate corridor by a total of 50 bp to ±1.0 pp. The central bank of Turkey has to continue

pursuing a tight monetary policy due to the two-digit headline and core inflation, resulting from the lira's weakening. The central bank of Turkey did not change its key policy rate (8.0%), but instead it raised the late liquidity window rate, that can be used between 4.00 pm and 5.00 pm, by 50 bp to 12.75%.

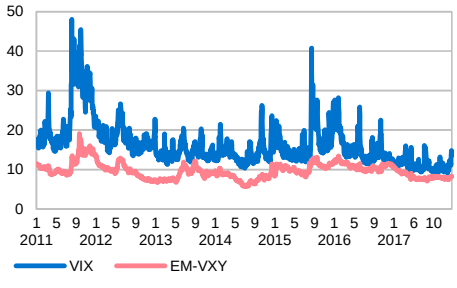
By contrast, inflation lowering enabled the Bank of Russia to continue with monetary policy relaxation. It trimmed the key policy rate twice in Q4, first by 0.25 pp and then by 0.50 pp (exceeding analysts' expectations), to 7.75%. Thus the Bank of Russia had six key policy rate cuts last year and announced new trimmings in 2018. The Hungarian central bank kept its interest rate unchanged (0.9%), but it too continued with monetary policy easing, though through unconventional measures, with the aim of stimulating lending activity and economic growth. Since the start of the year, it began purchasing mortgage securities with minimum three-year maturity and in Q1 2018 it will hold auctions of five and ten-year interest rate swaps in the total amount of around USD 1.2 bn. It also stressed that looser monetary conditions are needed to achieve the inflation target (3%±1 pp) by mid-2019.

Financial and commodity markets

Though the Fed's monetary policy is less accommodative, global financial conditions are still favourable, primarily owing to the ECB's loose monetary policy. In addition, the still relatively low inflationary pressures leave room for a considerable number of other central banks to continue encouraging growth of their economies with their monetary policy.

Optimism generated by the pick-up in global growth reflected on the unusually low financial market volatility. The implicit measure of **financial market volatility** (VIX) dropped to around 10% in mid-September and continued to hover around that level until the end of 2017 and in early 2018. In addition, the EM-VXY index – which tracks volatility in emerging market currencies – continued to move at a relatively low level of around 8%, dipping below 7.5% in several instances during January. At the same time, optimism regarding economic growth, as well as inflation growth affected the rise in the yields on US Treasuries, whereby the two-year Treasuries overshot 2.0% in November for the first time since the crisis broke out. The yields on benchmark ten-year US Treasuries also rose during Q4 and January 2018 – from

Chart IV.7.12 **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.

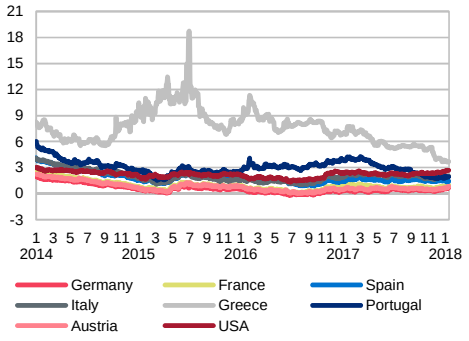
2.3% to 2.6%. Thus the spread between US and German government securities increased, only to stabilise to around 2 pp at the end of the year. In January, the yields on both securities rose, hence the spread remained unchanged. In an environment of a weaker dollar, the price of gold edged up 0.6% in Q4 and gained an additional 3.7% in January.

The World Bank warned that the unusually low financial market volatility and the relatively high asset prices suggest the risk of sudden market adjustments.[31]

The euro continued to gain on the dollar by 1.6% in Q4. One of the main drivers of the stronger currency was the euro area's faster-than-expected growth, due to which the market estimated that the ECB will exit the QE programme more quickly. The ECB's plans to extend the QE programme at least until September 2018, which were announced following the October meeting, reversed the trend and weakened the euro, though only temporarily. The euro picked up again since November, as the data on economic growth (notably Germany's) increasingly suggested that growth in the euro area could be faster than in the USA. During the greater part of December, there were no factors that could lead to major fluctuations in the value of the dollar and the euro considering that the decisions of both leading central banks were aligned with the expectations of market participants. The year ended with the USD/EUR exchange rate of around 1.2, meaning that after three years of weakening, the euro appreciated by 12.1%. It continued to outstrip the dollar in January (by 3.7%), while the US currency fell to its lowest value in three years.

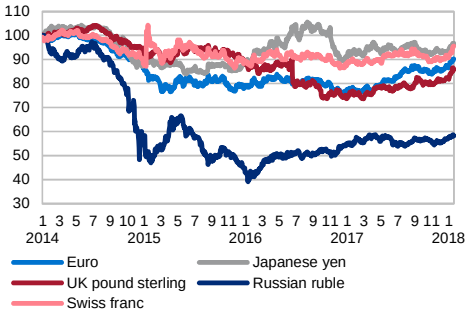
Having begun in Q3, growth in **global oil prices** continued (18.2%). Ranging between USD 56 and USD 67 per barrel, the average price of oil in Q4 was USD 61.4 per barrel, which is 18.7% higher than the average Q3 price (USD 51.7 per barrel). Movements in the price of oil in the global market were affected by both the supply and demand-side factors. In mid-October, the price of oil began to rise in view of expectations that the agreement to cap production, reached between the OPEC countries and Russia, would be extended after March 2018. Under the impact of an agreement to cut crude oil production by 1.8 mn barrels a day until the end of 2018, which was reached in November, the average price of oil moved at around USD 64 per barrel in December. The constant several-week shrinking of oil supplies in the USA also pushed the oil price up in this period. At end-December, following

Chart IV.7.13 **Yield on 10-year bonds of selected countries**
(daily data, in %)



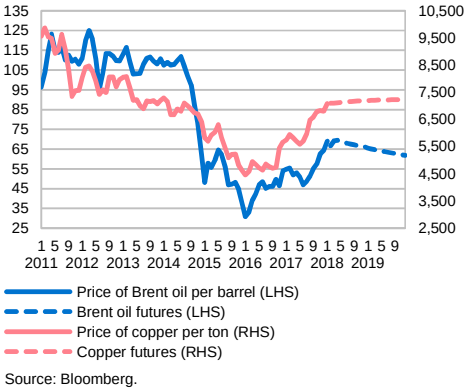
Source: Bloomberg.

Chart IV.7.14 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



Source: IMF.
* Growth indicates appreciation.

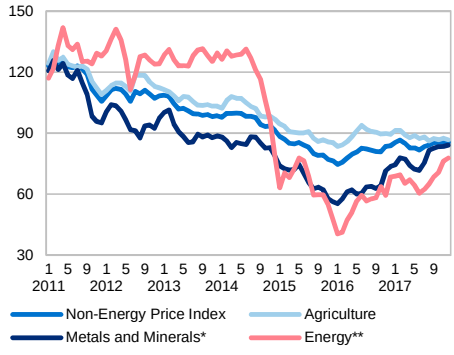
Chart IV.7.15 **Oil and copper price movements**
(average monthly prices, in USD)



Source: Bloomberg.

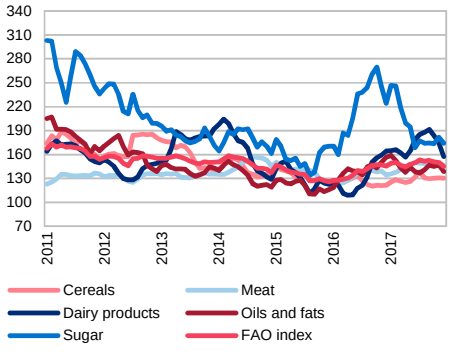
[31] Global Economic Prospects. Broad-Based Upturn but for How Long? A World Bank Group Flagship Report, January 2018.

Chart IV.7.16 **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.

Chart IV.7.17 **World Food Price Index**
(in real terms, 2002–2004 = 100)



Sources: FAO, UN.

the explosion at an oil pipeline in Libya, the oil price came close to USD 67 per barrel. In the first half of January, it exceeded USD 70 per barrel, mostly in the wake of geopolitical tensions in Iran. In addition, accelerated global rebound and the rising demand drove the oil prices up in the global market.

Based on the World Bank primary commodities' price indices, the growth in the **prices of metals** from Q3 continued, though at a much slower pace (1.7% compared to 15.3%). Thus, the global prices of metals rose 14.4% from a year earlier, owing to the faster pick-up in global growth.

Measured by the FAO index, **world food prices** posted a decline in Q4 (4.9%), unlike in the three prior quarters. A particularly sharp quarterly drop was recorded in the prices of dairy (17.7%), while only cereals posted a rise, albeit a modest one (0.5%). Although average food prices in 2017 were the highest since 2014, they were 23% below the average level in 2011.

The sharpest fall in Q4 was recorded by dairy prices due to the high supply and modest demand. However, they were still 31.5% higher on average than in 2016. The prices of cereals rose mildly in Q4. The vast supply resulted in the lower price of wheat, while the price of corn increased, largely owing to concerns over weather conditions in Argentina. The prices of cereals went up during 2017, though they were still 37% below the maximum from 2011. The meat price index dropped in Q4 owing to an increased supply of beef, while the prices of other meats were relatively stable, which can be attributed to the more balanced supply and demand in the global market. Yet, although meat prices were higher throughout 2017 than in 2016 (by 9.0%), they were still 47% below the five-year average (2012–2016). The sugar price was almost unchanged in Q4. It edged up in November only to fall again in December, partly due to seasonal reasons, and partly owing to modest demand and anticipated high surpluses in 2018. The average price of sugar in 2017 was 11.2% lower than in 2016 and 38% lower than the average recorded in 2011. The fall in sugar prices in 2017 is largely attributable to the good harvest in Brazil, the world's largest producer, and to the recovery in production in India and Thailand. Triggered by the rising supply, the price of vegetable oil fell by 5.4% in Q4, its lowest in five months. Vegetable oil prices trended higher in 2017 than in 2016, but still below the maximums recorded in 2008 and 2011.

V. Inflation projection

Under the February 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 (next two years). Against the backdrop of low inflationary pressures reflecting the majority of factors from the domestic and international environment and the high base effect of fruit and vegetable prices, and energy prices in the short run, in 2018 inflation will move closer to the lower bound of the target tolerance band. Conversely, we expect gradual recovery of domestic demand, which should lead to a moderate rise in inflation in the medium run and ensure that it continues to move within the target tolerance band. 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.

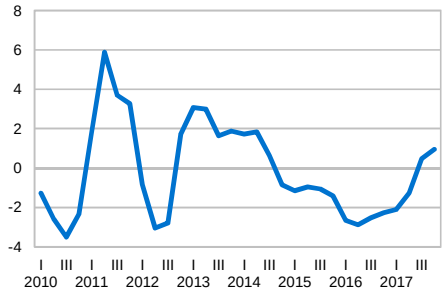
Consistent with expectations stated in the previous projection, following a temporary slowdown in 2017, caused by supply-side shocks, in 2018 and 2019 GDP growth should accelerate to around 3.5%. On the expenditure side, GDP growth will be led mainly by domestic demand, i.e. a continued rise in investment and further recovery of household consumption, as well as net exports. The risks to the GDP projection for this and next year are symmetric and are primarily associated with economic growth in the euro area and Serbia's other important foreign trade partners, developments in the international primary commodity and financial markets, as well as, to an extent, the success of the agricultural season at home and the pace of recovery in the energy sector.

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

Inflation was kept at a low and stable level in 2017 as well. Throughout the year, y-o-y inflation moved within the target tolerance band (3±1.5%). It stood at the 3.0% target in December, this being its average value in 2017. Consumer price growth in Q4 somewhat underperformed the expectations stated in the previous Report, primarily due to a smaller rise in petroleum product prices. Y-o-y inflation slackened as of May also on account of the high base for prices of pork and petroleum products, as well as lower imported inflation, which contributed to the slowdown in core inflation – to 1.3% y-o-y in December, its lowest level since inflation has been measured by CPI. That inflationary pressures are subdued is also signalled by the inflation expectations of the financial and corporate sectors, anchored within the target tolerance band of 3.0±1.5%.

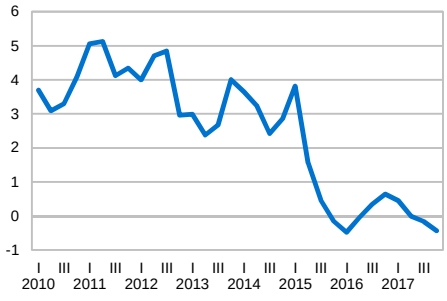
Chart V.0.1 **Monetary Conditions Index***
(in %)



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 expansionary monetary conditions.

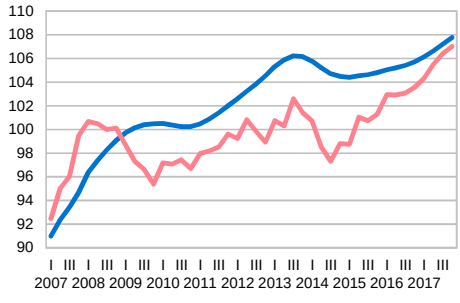
Chart V.0.2 **Real interest rate**
(in %)



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 in the domestic market, present as of April, continued into the major part of Q4. End-of-period, in Q4 the dinar gained 0.8% against the euro and 2.2% against the dollar, reflecting the euro's further appreciation vis-à-vis the dollar. Appreciation pressures were fuelled by the economy's good export results and the continued high FDI inflows. In contrast, as customary for the season, Q4 saw robust FX demand of enterprises, notably energy importers, which is why depreciation pressures emerged in mid-November. Depreciation pressures in Q4 were also generated by elevated net FX sales to non-residents, but were mitigated by higher purchases of foreign cash than in Q3, an increase in FX-indexed bank assets and stronger FX supply of foreign citizens, mainly tourists. Moderate depreciation pressures prevailed early this year as well.

The Monetary Conditions Index, showing a combined impact of the real interest rate gap and the real exchange rate gap, has moved slightly above the neutral level since mid-2017, mainly on account of the nominal appreciation of the dinar. The real interest rate gap remained negative, but did not widen in Q4 given that monetary policy easing by means of the key policy rate was also accompanied with a lower trend of the real interest rate due to a falling risk premium of the country.

GDP grew 0.6% s-a in Q4, led mainly by the continued recovery of the construction sector and expansion in most service sectors on the production side, reflecting a further rise in domestic demand and positive trends in the labour market. In y-o-y terms, GDP accelerated to 2.5%. A positive carry-over effect[32], estimated at 1.1 pp for this year (the highest level since the crisis), signals significant acceleration of economic growth in 2018.

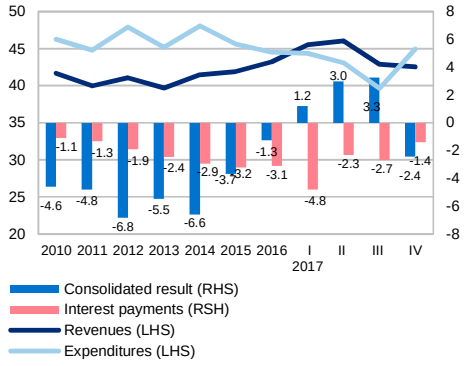
Positive fiscal trends continued into 2017, reflecting mainly a rise in domestic demand and corporate profitability, labour market recovery and improved tax collection.[33] A contribution also came from falling interest expenses against the background of the government's reduced need to borrow and the lower cost of borrowing, owing to monetary policy easing by the NBS and a falling country risk premium. A surplus worth RSD 52.3 bn (1.2% of GDP) was recorded at the general government level in 2017 – for the first time since 2005, vs. the deficit of RSD 54 bn in 2016. Excluding interest expenses, the general government surplus came at 3.9% of GDP. Compared to 2016, total revenue increased by 4.0% and expenditure fell by 1.7% in real terms. Positive fiscal

[32] See Text box 3 p. 39.

[33] Measured by the C-efficiency ratio, it equalled 76.7% in 2017, vs. 75.3% in 2016.

trends, the maturing of eurobonds worth USD 750 mn and the effects of cross-currency changes led to a further decline in central government public debt, which stood at EUR 23.2 bn at end-2017, down by over EUR 1.6 bn from end-2016. Its share in projected GDP was 61.5%, vs. 71.9% at end-2016.

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



Source: Ministry of Finance.

Inflation projection assumptions

External assumptions

GDP growth recorded in the euro area in 2017 (2.5%) is likely to exhibit a similar, relatively vigorous trend in 2018 (2.2%) as well. Domestic demand will remain the main driver of growth, supported by the ongoing recovery in the labour market, favourable terms of borrowing and higher corporate profitability. A positive effect in the short run is expected from external demand, prompted by faster growth in euro area's most important foreign trade partners (the USA, eastern Asia), which is the main reason why the GDP growth projection was revised upward for 2018 (by 0.4 pp) compared to the November projection. A more favourable growth outlook (by 0.1 pp) is foreseen in 2019 as well (1.8%), while the slowdown relative to 2018 is due mainly to the expected gradual waning of the effects of external demand in the medium run.

Despite the relatively dynamic pace of economic growth, still no major inflationary pressures are expected in the euro area. The euro's appreciation in 2017 is estimated to have shifted the expected growth in inflation – it will hover under the target in 2018 as well, whereafter it will gradually rise towards the target. Notwithstanding low unemployment (lowest since 2009), wage growth remains moderate. However, responding to higher oil and food prices, in December the ECB adjusted upward its inflation projection for 2018, to 1.4% from 1.2%, as it forecast in September 2017. While not changing the 2019 projection (1.5%), the ECB expects inflation to rise to 1.7% in 2020. It expects that the gradual rise in inflation and its coming closer to the target will be supported by monetary policy measures, more robust economic growth, a gradual reduction in economic slack and wage growth. In January, inflation expectations of professional forecasters[34] were adjusted upward by 0.1 pp relative to October – to 1.5% and 1.7% in 2018 and 2019 respectively. Expectations for 2020 remained stable, at 1.8%. The assumption for euro area inflation (according

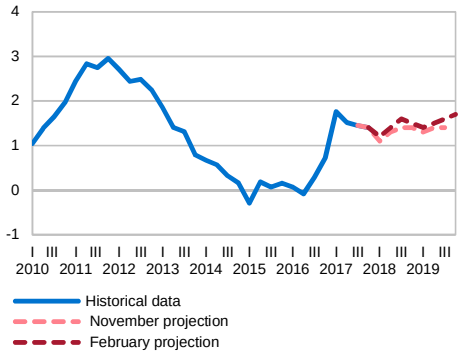
Table V.0.1 **Projection assumptions**

	2018		2019	
External assumptions	Nov	Feb	Nov	Feb
Euro area GDP growth	1.8%	2.2%	1.7%	1.8%
Euro area inflation (annual average)	1.3%	1.4%	1.5%	1.6%
3M EURIBOR	-0.3%	-0.3%	0.0%	-0.1%
International prices of primary agricult. commodities (Q4 to Q4)*	10.8%	14.3%	4.6%	4.8%
Brent oil price per barrel (year-end, USD)	58	66	57	62
Internal assumptions				
Administered prices (Dec to Dec)	4.1%	4.1%	4.0%	4.0%
Trends				
Appreciation trend of the real exchange rate (average)	0.5%	0.5%	0.6%	0.6%
Real interest rate trend (average)	0.6%	0.4%	0.6%	0.3%

* Composite index of soybean, wheat and corn prices.
Sources: NBS, ECB, Consensus Forecast.

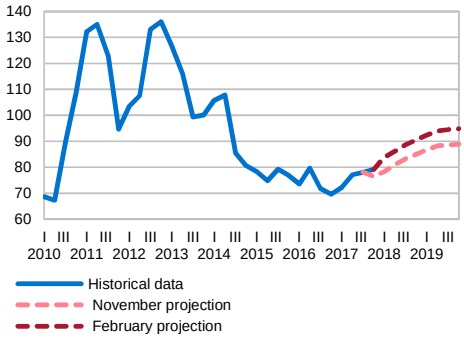
[34] ECB Survey of Professional Forecasters (SPF).

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



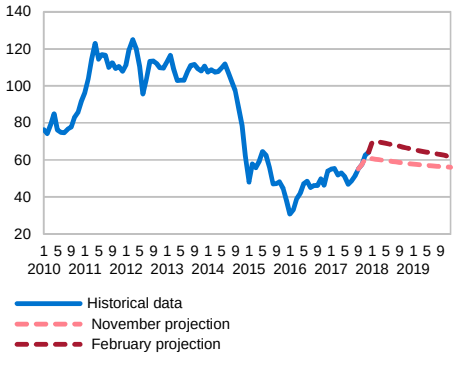
Sources: Consensus Forecast and NBS estimate.

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.

to Consensus Forecast) was raised for both years, by 0.1 pp compared to the November projection, to 1.4% for 2018 and 1.6% for 2019.

In addition, as it announced, the ECB is expected to implement its asset purchase programme until late September 2018, but at a reduced monthly pace of EUR 30.0 bn. According to end-January futures, three-month EURIBOR will be somewhat lower than expected three months ago – it will be negative in 2018 and H1 2019, only to move to positive territory in summer 2019.

Based on futures data, the prices of primary agricultural commodities in the global market should rise by around 14% in 2018, exceeding the assumption from the November projection (10.8%). Given that the current global agricultural season outperformed expectations and contributed to higher supply of primary agricultural commodities in the global market, the estimated growth in their prices is most probably due to the expected rise in demand, notably from emerging economies. Assuming that the next agricultural season will be at the level of multi-annual averages, in 2019 the growth in global prices of primary agricultural commodities is expected to slow to around 5%.

Global oil prices continued up from H2 2017, reflecting both supply- and demand-side factors. In mid-October last year, oil prices picked up reflecting the expected extension of the agreement to cap production after March 2018, reached between the OPEC countries and Russia. The agreement to cut crude oil production by 1.8 mn barrels a day until end-2018 led to average oil prices moving at around USD 64 per barrel in December. Another impulse to oil prices in this period came from oil stockpiles falling for several weeks on end in the US. In late December, following the explosion at a pipeline in Libya, oil rallied to close to USD 67 per barrel. In the first half of January, it shot beyond USD 70 per barrel, mainly over political tensions in Iran. In addition, the acceleration of global economic growth and elevated demand pushed up global oil prices. However, oil futures suggest that global oil prices will not grow further. Judging by the latest available futures, oil prices will touch around USD 66 per barrel late this year, and around USD 62 per barrel at end-2019.

Internal assumptions

In Q4, primary agricultural commodity prices[35] in the domestic market increased less than expected in the

[35] Measured by the composite index of wheat, corn and soya bean.

November projection (0.6% vs. 2.4%). Given the weaker agricultural season at home, we expected a higher rise in these prices in Q4, which however did not take place because of plummeting prices of agricultural commodities in the global market in November and December. Looking ahead, we expect prices at home to mirror their counterparts in the world, given their connectedness – they are expected to rise in the current year, as well as next year, though at a somewhat more moderate pace.

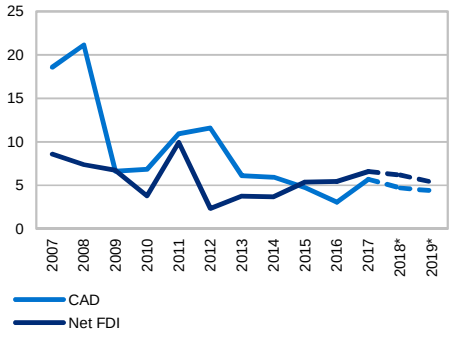
The projection assumes further gradual closing of the output gap,[36] estimated at around -0.8% for Q4 2017. The gap opened in 2008 as the global financial crisis spilled over to Serbia. However, for more than two years, the gap has displayed a closing tendency, reflecting labour market recovery, past monetary policy easing by the NBS and elevated external demand.

The new projection operates on the assumption of administered price growth of around 4.0% in 2018 (adding 0.6 pp to inflation) and a similar pace of growth in 2019. The major contribution is likely to come from the expected cigarette price adjustment due to excise hikes in January and July. For the projection needs only, we assumed that electricity prices will gain 4% both this and next year, and that household gas prices will go up (contributing 0.1 pp to inflation), reflecting rising global oil prices in the prior period.

In accordance with the Fiscal Strategy for 2018–2020 and the eighth review of the arrangement with the IMF, the general government deficit is forecast at 0.5% of GDP in the medium run. Such targeted medium-term level of deficit will ensure a downward trajectory of public debt going forward and should positively reflect on the country risk premium and credit rating. In the period from the previous Report, the country risk premium declined further. During some days of January, it fell even below 90 bp. Given that positive macroeconomic trends are expected to continue, the risk premium is likely to 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 FDI, 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 assumes that inflation expectations will remain anchored within the target tolerance band in the

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



Source: NBS.
* NBS projection.

Table V.0.2. **Fiscal strategy 2018-2020**
(in % of GDP)

	2018	2019	2020
Public revenues	42.3	41.8	41.1
Tax revenues	37.3	37.0	36.6
Non-tax revenues	4.7	4.5	4.2
Public expenditures	43.0	42.3	41.6
Expenditures for employees	9.8	9.7	9.6
Pensions	11.1	11.0	11.0
Interests	2.5	2.3	2.1
Capital expenditures	3.6	3.6	3.7
Total balance	-0.7	-0.5	-0.5
Primary balance	1.9	1.8	1.6

Source: Ministry of Finance.

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

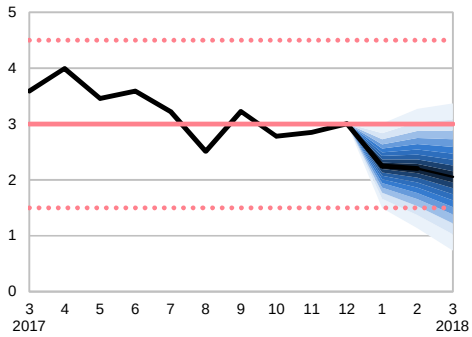
period ahead. Consistent with the expected slowdown in inflation, in 2018 they may decline slightly compared to the current level. We also assumed an appreciation trend of the real exchange rate, which is typical for transition economies.

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. Against the backdrop of low inflationary pressures reflecting the majority of factors from the domestic and international environment and the high base effect of fruit and vegetable prices, and energy prices in the short run, in 2018 inflation will move closer to the lower bound of the target tolerance band. Conversely, we expect gradual recovery of domestic demand, which should lead to a moderate rise in inflation in the medium run and ensure that it continues to move within the target tolerance band.

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



Source: NBS.

Short-term inflation projection

Consistent with previous announcements, once one-off price hikes of some products and services (petroleum products, vegetables and firewood due to cold weather in early 2017, and mobile telephony services) drop out of y-o-y comparison, as of the start of this year inflation will slow down and move closer to the lower bound of the target tolerance band.

In **quarterly terms**, inflation will be under the strongest impact of the seasonal rise in fruit and vegetable prices, and the expected hike in cigarette and petroleum product prices (due to excise adjustment). The seasonal drop in the prices of fresh meat and travel packages will work in the opposite direction.

Y-o-y, core inflation (CPI change excluding the prices of food, energy, alcohol and cigarettes) will remain low and stable, moving in Q1 around the lower bound of the target tolerance band.

Medium-term inflation projection

Y-o-y inflation is projected to continue to move within the target tolerance band (3.0±1.5%) until the end of the projection horizon, i.e. next two years. In 2018, inflation

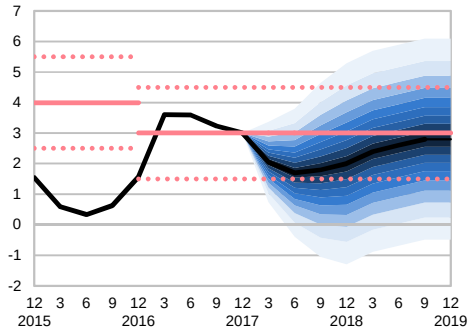
will be slowed by the high base for prices of petroleum products and other products that recorded a one-off hike in early 2017, which is why it will move below the target midpoint. Conversely, we expect gradual recovery of domestic demand, which should lead to a moderate rise in inflation in the medium run and ensure that it continues to move within the target tolerance band.

Under our projection, in 2018 and 2019 domestic demand will continue to recover, while disinflationary pressures generated by a negative output gap are likely to weaken and dissipate until the end of the projection horizon. The narrowing in the gap will benefit from positive labour market trends, an upturn in public sector wages and pensions and the minimum labour cost, past monetary policy easing by the NBS and the ECB's monetary accommodation. At the same time, the ECB's expansionary stance contributes to economic growth in Serbia through higher external demand, i.e. higher demand for our exports, as well as through low interest rates on euro-indexed loans, which spur lending and, by extension, economic activity.

We estimate that the costs of food production inputs (measured by the RMCP gap[37]) are currently moving around the neutral level, where they will stay in the short run. Thereafter, we expect their moderate rise, supported by growing demand against the background of a more favourable 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 smaller than assumed in the previous projection.

In terms of inflation components, y-o-y growth in **prices of food products** will slow down in H1 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 weakening disinflationary pressures from domestic demand. Y-o-y **non-food inflation** will also slow in H1, reflecting the effects of past appreciation of the dinar and the drop-out of the March 2017 increase in mobile telephony prices from y-o-y calculation. Until the end of the projection horizon, we expect its relatively stable movement around the current level, on account of the recovery of domestic demand. Due to the high base and unfavourable weather in 2017, H1 is likely to see significant slowdown in y-o-y growth in **fruit and**

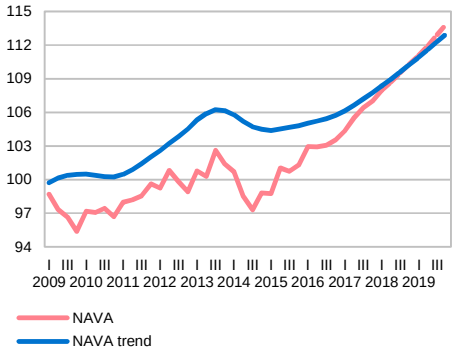
Chart V.0.10 **Inflation projection**
(y-o-y, in %)



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%.

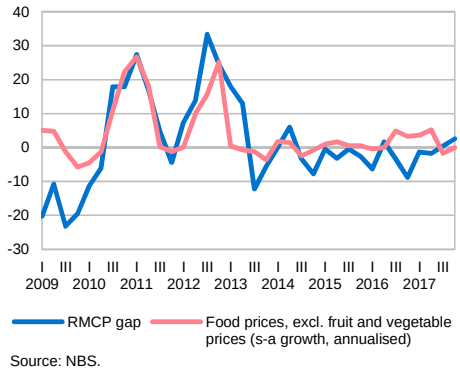
Chart V.0.11 **Output gap projection**
(Q3 2008 = 100)



Sources: SORS and NBS calculation.

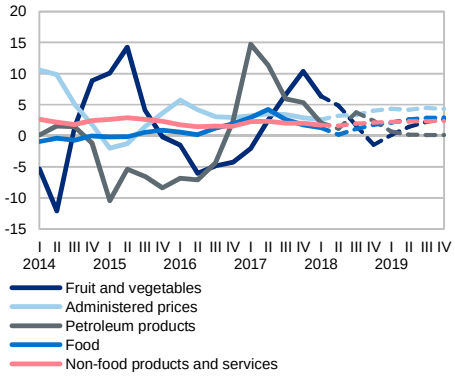
[37] Real marginal costs of processed food producers (RMCP) are calculated as the ratio of primary agricultural commodity prices and food prices. A negative RMCP gap opens when these costs fall below the trend level.

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



Source: NBS.

Chart V.0.13 **Projection of inflation components**
(average y-o-y rate, in %)



Source: NBS.

vegetable prices, which will probably decline in y-o-y terms with the onset of the new agricultural season. Y-o-y growth in **petroleum product prices** in early 2018 will continue to decelerate, on the back of the high base effect, despite the global oil price hike from mid-2017. Petroleum product prices will temporarily go up in H2, also in response to the base effect. Thereafter, until the end of the projection horizon, y-o-y growth in these prices should be marginal, but is likely to remain in the positive territory.

Uncertainties surrounding the inflation projection relate primarily to further developments 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, or even somewhat lower compared to the current level, until the end of the projection horizon. Global oil prices rallied in Q4 mainly on account of weaker supply, partly due to geopolitical tensions, and partly reflecting the extension of the agreement of OPEC member countries to cap production, and a slower pace of opening of oil fields in the US. Given that these prices are, by their nature, highly volatile and under the impact of a number of factors both on the supply- and demand-side, it may happen that oil prices depart from the assumed path in the projection horizon. In view of a better global growth outlook, which may bolster oil demand, we believe that the risks to the projection on these grounds are asymmetric to the upside. 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. As in the past several years the prices of primary agricultural commodities in the global market rose slightly or even declined, whilst futures anticipated growth, risks to the projection on these grounds are assessed to be skewed to the downside.

Risks to the projection are also associated with developments in global financial markets, primarily the stance of monetary policies of the ECB and Fed and, consequently, the euro-dollar relationship. In October, the Fed began to decrease its reinvestment of principal payments it receives from securities purchased as part of the QE programme, while in December it raised its key rate, for the third time in 2017. This could weigh down on portfolio investment in emerging economies, Serbia included, and fuel depreciation pressures in those

countries. The ECB's monetary accommodation works in the opposite direction as the ECB will implement its QE programme at least until September this year, with monthly purchases reduced from EUR 60 bn to EUR 30 bn. If necessary, as it emphasised, the ECB will increase the size and/or duration of this stimulus programme. Still, it was expected in Q4 that due to a better economic outlook of the euro area, the ECB might decide not to extend the QE programme after September.

The projection operates on the assumption that administered prices will grow at a rate of around 4.0% this and next year. However, as administered price growth underperformed the projected level in the previous two years, the risks to the projection in this regard are judged to be mildly asymmetric to the downside.

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

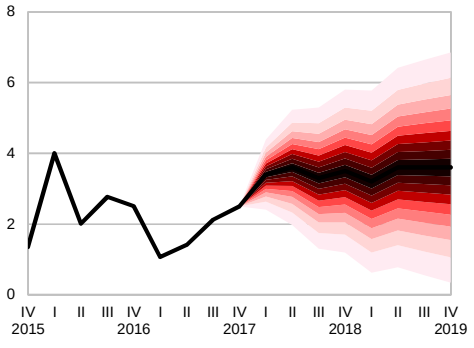
Looking ahead, monetary policy decisions of the NBS will continue to depend on the assessment of the impact of inflation factors from the domestic and international environment. As the key risks emanate from the international environment, the NBS will continue to closely monitor and assess movements and trends in the international financial market and the market of primary commodities, notably crude oil and primary agricultural commodities, and will assess their impact on economic developments in Serbia. 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 and stronger resilience to external uncertainties.

GDP projection

Owing to stronger domestic macroeconomic fundamentals, implementation of structural reforms and improvement of the investment climate, in prior years Serbia has created the basis for growth acceleration in the medium run. We therefore assess that, after temporarily slowing down in 2017 due to supply-side shocks, GDP will speed up to around 3.5% in 2018 and maintain a similar pace in 2019.

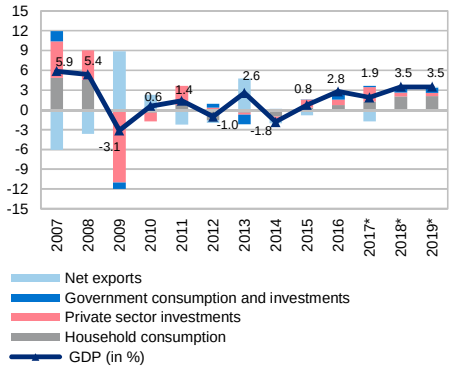
In 2018, GDP growth will continue to be led chiefly by domestic demand, i.e. investment and further recovery of household consumption. Owing to further improvement of the business environment, the net FDI inflow is expected to stay relatively high (5–6% of GDP) and

Chart V.0.14 **GDP growth projection**
(y-o-y rates, in %)



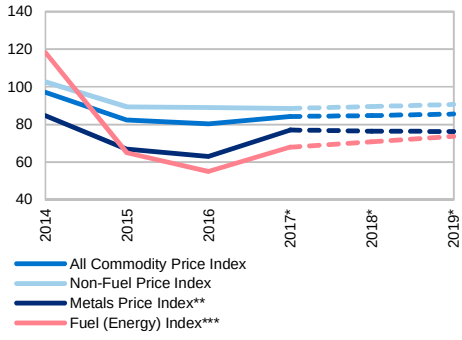
Source: NBS.

Chart V.0.15 **Contributions to real GDP growth**
(in pp)



Sources: SORS and NBS calculation.
* NBS estimate.

Chart V.0.16 **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.

diversified by project, which will, along with a step-up in implementation of infrastructure projects and favourable monetary conditions, contribute to continued investment growth. In addition, further growth in private sector employment, a higher minimum wage and a rise in public sector wages and pensions will prop up household consumption.

A positive contribution to GDP in 2018 is also expected from net exports, supported by continued robust and broad-based exports, notably in manufacturing – reflecting earlier investment and growth acceleration in the euro area and the region of Central and South-Eastern Europe. Imports are also expected to continue up, albeit at a slower pace than in 2017, given that the continuation of the investment cycle will impact further growth in equipment imports, while higher production in manufacturing and activity in some service sectors will push up the imports of energy and intermediate goods. Growth in imports should also be supported, to an extent, by the higher imports of consumer goods on account of the further recovery of household consumption.

On the production side, GDP growth should be led by positive trends in manufacturing, underpinned by earlier investment, continued expansion in the euro area and the expected further recovery in the mining and energy sectors. A positive contribution is also expected from the ongoing growth in construction, as indicated by a further rise in the number of issued construction permits and the anticipated value of works based on those permits. To a similar extent as in 2017, an impulse is also expected from service sectors, in line with the assumed gradual recovery of domestic demand. Assuming an average agricultural season, a boost will also come from agriculture, owing to the low base.

GDP is expected to grow at a similar pace (around 3.5%) in 2019. As in 2018, it will be supported by a rise in investment and exports, which will continue to reflect the positive effects of structural reforms, FDI inflows and solid external demand. Household consumption will continue to gradually recover, on the basis of further labour market recovery, which should partly spill over to higher imports of consumer goods. Still, the expected import growth will continue to be largely led by a rebound in imports of equipment and intermediate goods for industrial purposes.

Growing investment and external demand, and the recovery of household consumption, will continue to

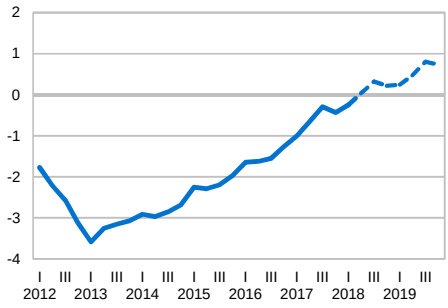
support growth in manufacturing and service sectors, which should be the drivers of GDP growth in 2019, on the production side.

The risks to the GDP projection for this and next year are symmetric and are primarily associated with economic growth in the euro area and Serbia's other important foreign trade partners, developments in the international primary commodity and financial markets, as well as, to an extent, the success of the agricultural season at home and the pace of recovery in the energy sector.

Among other factors, external demand – depending predominantly on the pace of economic activity in the euro area (our most important foreign trade partner), will impact the rate of GDP growth in the medium run. Though the forecasts of euro area GDP growth are now much more favourable than in the previous projection, risks persist that may further accelerate or possibly slow euro area growth, which may – through higher/lower external demand, reflect on faster/slower GDP growth in Serbia this and next year. In addition to directly boosting domestic exports, faster euro area growth should generate more favourable economic trends in countries of Central and South-Eastern Europe, with which Serbia has goods trade relations, and thus indirectly contribute to growth in our GDP.

In addition, the GDP growth projection will be under the sway of developments in global markets of primary commodities, notably oil and, to a degree, base metals and cereals. Compared to November, the February

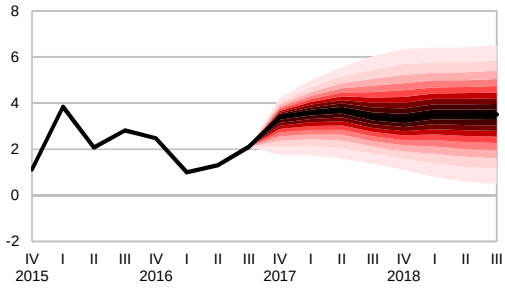
Chart V.0.17 **Assumption for euro area output gap**
(level)



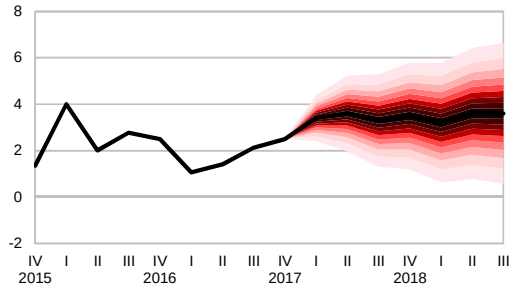
Sources: IMF and OECD calculation.

Chart V.0.18 **Current vs. previous GDP growth projection**

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



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



Source: NBS.

projection assumes higher oil prices, which are, however, expected to decline somewhat over the projection horizon. Given that global oil prices may fluctuate significantly in both directions, their rise in net importing countries, including Serbia, may lead to a lower real disposable income and slower GDP growth. However, their fall below the level assumed by the projection could result in a higher real disposable income and lower operating costs of companies, which would positively affect GDP growth. As Serbia is a net importer of oil and net exporter of base metals and cereals, a rise in the global prices of the latter products could positively affect net exports and contribute to faster GDP growth. A fall in these prices in the global market would work in the opposite direction.

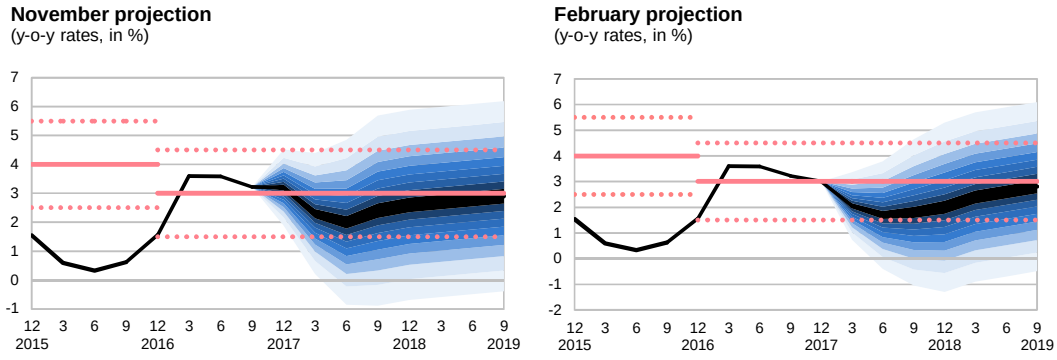
Given that Serbia is a small and open economy, it is exposed, to an extent, to volatile movements in the global financial market, stemming from diverging monetary policies of the Fed and ECB. A gradual reduction in the Fed's monetary policy accommodation may reflect on smaller capital inflows to emerging economies, including Serbia and, to a degree, to economic slowdown. Further monetary accommodation by the ECB would produce an opposite effect.

The risk to the GDP projection is also associated, to an extent, with developments in the agricultural and energy sectors, which remained exposed to weather conditions more than other sectors. This is why possibly adverse weather (a drought, flood) may act as a drag on agricultural production and slow the nascent recovery in the energy sector and GDP growth. On the other hand, assuming more favourable weather conditions, growth in agricultural production may exceed multi-annual averages, which we used as a projection assumption.

Comparison and outcome of inflation projections

The new medium-term inflation projection is lower than in November, until the end of projection horizon. The lower current projection is due mainly to the smaller than expected rise in consumer prices in Q4 and lower import prices of primary agricultural commodities expressed in dinars, compared to the previous projection. Although the prices of primary agricultural commodities in the global market, consistent with futures trends, are now anticipated to be higher relative to the previous projection both this and next year, the nominal appreciation of the dinar against the dollar, which is

Chart V.0.19 **Current vs. previous inflation projection**

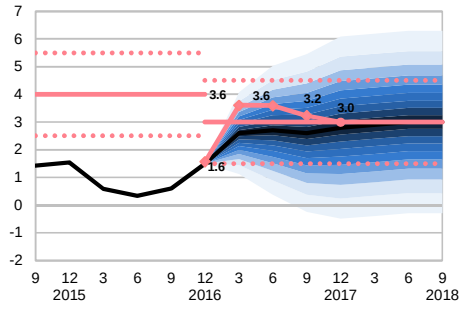


Source: NBS.

largely due to the euro's gaining ground against the dollar, weighs down on their growth expressed in dinars. In contrast, relative to the previous projection, we expect the negative output gap to close somewhat more quickly in response to faster than previously expected growth in the euro area, which is our most important trade partner. Besides, oil prices are higher than forecast in the November projection.

In the past year inflation has been moving within the range projected in February 2017, but above the central projection, notably in H1. Such an outturn was due mainly to higher than expected growth in petroleum product prices, which took place with the recovery of global oil prices, and a higher than expected rise in fruit and vegetable prices in early 2017 due to exceptionally cold weather.

Chart V.0.20 **Achievement of February 2017 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	Q4 2017	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	5.3	5.3[2]
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.8	237.4	268.6	294.0	259.7	238.7	237.7	239.5	257.5		
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	27.9	27.4	29.6	27.0	27.0
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	9.7	10.9	8.7		
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	25.6	17.7	19.7	17.0[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	75.0	72.2	72.4		
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	12.4	11.7	11.5	11.5		
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	138.6	137.6		
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	176.2	176.2
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	185.0	185.0
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	118.7	118.9	108.9	107.6	113.2[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	7,977	8,902	9,687	10,306[2]	36,832[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	26,488	26,135	25,435	26,033		
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,728	4,043	4,442	777	974	846		
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	9,962	9,962
Short-term debt[3]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	676	527	693	733		
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	-694	-336	-384	-676	-2,090[2]

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

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 1January 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. External debt repayment does not include: short-term debt repayment and early 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	Q4 2017	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	1.1	1.4	2.1	2.5	1.9
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	3.0	3.0
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	9,962	9,962
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	4,982	5,031	19,330[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	12.8	8.9	11.2[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	5,090	5,652	5,570	6,053	22,365[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	14.5	12.4	14.4	15.2	14.1[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	-1,075	-694	-336	-384	-676	-2.090[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	-8.7	-3.8	-4.0	-6.6	-5.7[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	12.9		
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	416.7	395.3
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	-2.7	0.8
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	-2.4	1.2
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	64.4	61.5	61.5
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	101.13	107.50
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	99.12	99.12
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	119.11	121.34
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	118.47	118.47
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	7,977	8,902	9,687	10,306[6]	36,832[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 Survey.

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

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	3.50	0

2018

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

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 7 December 2017

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

In making such decision, the NBS Executive Board had in mind the November inflation projection and movement in inflation factors, the expected effects of past monetary policy easing, better economic performance in the third quarter and a more favourable outlook for the period ahead.

As assessed by the NBS Executive Board, inflationary pressures remain subdued, as confirmed by the slowdown in year-on-year headline and core inflation over the past months, to 2.8% and 1.4% in October. That inflationary pressures are subdued is also indicated by the fact that inflation expectations of the financial and corporate sectors continue to move within the NBS target tolerance band. Since early 2017, fiscal trends have been more favourable than expected and the risk premium has fallen to its new low on record for Serbia, reflecting not only global factors, but also the strengthening of domestic macroeconomic fundamentals and a more favourable outlook for the period ahead. Another drag on inflation comes from lower dinar-denominated import prices.

The NBS Executive Board expects inflation to continue to move within the target tolerance band of 3.0±1.5%. In the first half of 2018, inflation is likely to move below the target midpoint, reflecting the high base for prices of petroleum products and other products which recorded one-off hikes early this year. The expected rise in domestic demand will work in the opposite direction.

The NBS Executive Board carefully monitors developments in the international environment, primarily in the global financial market and world prices of primary commodities. Uncertainty in the international financial market over the divergence of monetary policies of the leading central banks – the Fed and the European Central Bank, still prevails, which may affect global capital flows towards emerging economies, including Serbia. In addition, uncertainty surrounds also the movements of world prices of primary commodities, especially world oil prices, which recorded moderate growth in the previous months. Nevertheless, the Executive Board points out that the resilience of our economy to potential negative impacts from the international environment has increased, owing to the strengthening of domestic macroeconomic fundamentals and a more favourable outlook for the period ahead.

September and October easing of monetary policy passed through to interest rates on new dinar loans which dropped by 0.3 pp in the household segment and by 0.4 pp in the corporate segment in October. Lower lending interest rates, coupled with the acceleration of economic activity, recovery in the labour market and a decline in the risk premium reflected positively on lending which sped up to 6.4% year-on-year in October, or to 11.3% if we exclude the effect of the write-off of non-performing loans whose share fell to its lowest level in the last nine years.

With the gradual waning of the effects of shocks on the supply side, GDP growth accelerated to 2.1% year-on-year in the third quarter. A pick-up in activity was mostly recorded in manufacturing, which was positively affected by improved investment ambience and recovery in external demand. That investment ambience has improved is also attested by Serbia's further progress on global competitiveness lists. Owing to labour market recovery, the services sectors also recorded accelerated activity.

At today's meeting, the NBS Executive Board adopted the Memorandum on Inflation Targets until 2020, which sets the inflation target at 3.0±1.5% until 2020.

The next rate-setting meeting will be held on 11 January 2018.

Press release from Executive Board meeting held on 11 January 2018

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

In making such decision, the Executive Board had in mind the expected movement in inflation and its factors in the coming period, and the expected effects of past monetary policy easing.

As assessed by the Serbian Statistical Office, in December 2017 inflation measured 3% year-on-year, i.e. the target midpoint. Inflation expectations of the financial and corporate sectors are anchored within the target tolerance band.

The NBS Executive Board expects inflation to continue to move within the target tolerance band of 3.0±1.5%. In the first half of this year, inflation is likely to move below the target midpoint, reflecting the high base for prices of petroleum products and other products which recorded one-off hikes in early 2017. The expected rise in domestic demand will work in the opposite direction.

The NBS Executive Board carefully monitors developments in the international environment, primarily developments in the global financial market and world prices of primary commodities, which mandate caution. Uncertainty in the international financial market over the divergence of monetary policies of the leading central banks – the Fed and the European Central Bank, still prevails, which may affect global capital flows towards emerging economies, including Serbia. In addition, uncertainty surrounds also the movements of world prices of primary commodities, especially world oil prices, which recorded growth in the previous months. Nevertheless, the Executive Board points out that the resilience of our economy to potential negative impacts from the international environment has increased, owing to the strengthening of domestic macroeconomic fundamentals and a more favourable outlook for the period ahead.

The next rate-setting meeting will be held on 8 February 2018.

Press release from Executive Board meeting held on 8 February 2018

At today's meeting, the NBS Executive Board voted to keep the key policy rate on hold, at 3.5%. In making the decision, the Executive Board was guided by the new, February inflation projection and its factors, and the effects of past monetary policy easing.

In December, inflation stood at the target midpoint of 3.0% y-o-y, this being its average value in 2017. Under the February central projection as well, year-on-year inflation will continue to move within the target tolerance band until the end of the projection horizon (in the next two years).

The Executive Board underscored that monetary policy caution was still mandated by developments in the international commodity and financial markets. The global prices of primary commodities, particularly oil, rose in recent months, and their movement in the period ahead is also uncertain. Also, uncertainty in the international financial market over the divergence of monetary policies of the leading central banks – the Fed and the European Central Bank, still prevails, which may affect global capital flows towards emerging economies, including Serbia. Nevertheless, the Executive Board points out that the resilience of our economy to potential negative impacts from the international environment has increased, owing to the strengthening of domestic macroeconomic fundamentals and a more favourable outlook for the period ahead.

At today's meeting, the NBS Executive Board adopted the February Inflation Report, which will be presented to the public on Wednesday, 14 February. On this occasion, monetary policy decisions and the underlying macroeconomic developments will be explained in more detail.

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