National Bank of Serbia

2017 August

INFLATION REPORT

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NATIONAL BANK OF SERBIA
Belgrade, Kralja Petra 12,
Tel: +381 11 3027-100

Belgrade, Nemanjina 17,
Tel: +381 11 333-8000

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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 August *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 10 August 2017.

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

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Veselin Pješčić, Vice Governor

Diana Dragutinović, Vice Governor

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

ABBREVIATIONS

bn – billion
bp – basis point
CPI – Consumer Price Index
ECB – European Central Bank
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
FISIM – Financial Intermediation Services Indirectly Measured
FOMC – Federal Open Market Committee
GDP – gross domestic product
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
LHS – left hand scale
mn – million
NAVA – non-agricultural value added
NPL – non-performing loan
OFO – other financial organisation
OPEC – Organization of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
q-o-q – quarter-on-quarter
RHS – right hand scale
s-a – seasonally-adjusted
SDR – Special Drawing Right
SORS – Statistical Office of the Republic of Serbia
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I Overview

Since the start of the year, inflation has moved within the target band (3.0±1.5%), standing in June at 3.6% year-on-year. Inflationary pressures are still subdued, as confirmed by low and stable core inflation – around 2% year-on-year.

Since January, inflation has moved within the target band (3.0±1.5%), standing in June at 3.6% year-on-year, unchanged from March. From the start of the year, inflation was driven by the recovery of global oil prices that started in the second half of 2016, and by the effects of extremely cold weather in January and February which pushed up prices of vegetables and solid fuels much more than usual for the season. Movements in the second quarter confirmed that in prior months inflation had been driven by higher prices of a small number of products and services. Inflationary pressures are still low, as confirmed by low and stable core inflation, standing at around 2.0% year-on-year. In the second quarter, consumer prices grew at a slower pace than expected in May and considerably slower than in the previous quarter. These prices grew primarily because of higher import prices of fruit and fresh meat and seasonally higher prices of travel packages, while the notable decline in prices of vegetables and firewood due to the waning of the effects of cold weather worked in the opposite direction.

Developments in the international environment since the May Report were marked by the further improvement in outlook for growth in the euro area and the majority of our other important trade partners, and by improved investor sentiment in the international financial market, despite the greater divergence of monetary policies of leading central banks.

Global economic recovery is becoming more certain. Positive economic trends in the euro area, our most important trade partner, continued in the second quarter, with acceleration in growth of gross domestic product and its broad distribution, both sector-wise and geographically. Faster euro area growth also had a positive effect on economic growth acceleration and the outlook for the period ahead in the surrounding countries, which are our important trade partners as well. After growing in the first months of the year, inflation in the global economy stabilised at a somewhat higher level than last year. Its future moderate growth should continue to be supported by global economic recovery, while the high base of energy prices should work in the opposite direction. As inflationary pressures are low, the European Central Bank accordingly still pursues an accommodative monetary policy, while the Federal Reserve System again raised its federal funds rate in June. Besides expectations that the Federal Reserve System will continue raising its rate, it is estimated that by the end of the year it will start to reduce its balance sheet, i.e. cease to reinvest repayments of principal on securities purchased in quantitative easing. While greater divergence of monetary policies of leading central banks is creating more uncertainty surrounding global capital flows to emerging economies, Serbia included, better outlook for global economic growth improved investor sentiment in the international financial market in the second quarter, which also reflected on movements in the domestic foreign exchange market.

The domestic foreign exchange market has been characterised by appreciation pressures since April, and at the same time the country risk premium declined, falling in July to the lowest level on record.

Appreciation pressures were prevalent in the domestic foreign exchange market in the second quarter, continuing into July. This was due to better export performance, a high inflow of foreign direct investment, the return of foreign investors to the government securities market, the seasonal increase in inflows of remittances and growth in FX-indexed bank assets. Relative stability in the foreign exchange market has for quite some time been supported by the improvement in macroeconomic fundamentals, which resulted in the decline in the country risk premium to the lowest level on record in July. Since the beginning of the year, July included, the dinar strengthened by 2.6% against the euro, and by 14.2% against the dollar, owing to the considerable appreciation of the euro vis-à-vis the dollar. To ease excessive short-term strengthening of the dinar against the euro, the National Bank of Serbia intervened in the interbank foreign exchange market by buying 505.0 million euros in the second quarter and 165.0 million euros in July.

In the period since the May Report, the Executive Board of the National Bank of Serbia has kept the key policy rate unchanged at 4.0%, where it has been since July 2016.

Since the May *Report*, the Executive Board made decisions to keep the key policy rate on hold, taking into consideration the medium-term inflation outlook and key factors of inflation, effects of past monetary easing, and the lowering of the inflation target to 3.0%±1.5 pp as of the beginning of 2017. In addition, monetary policy caution in the period observed was also mandated by uncertainty in the international financial and commodity markets, mainly in terms of the pace of normalisation of the Federal Reserve System's monetary policy and the movement of prices of primary commodities. It was assessed that risks from the international environment would be mitigated by better macroeconomic prospects of our economy, reflecting the implementation of fiscal consolidation and structural reforms, full coordination of monetary and fiscal policies and the narrowing in external imbalances, and to an extent, the accommodative monetary policy of the European Central Bank.

The private sector's costs of borrowing were reduced further, both with respect to new dinar loans and euro-indexed loans.

The adopted monetary policy decisions also determined the movement of interest rates in the money market, which showed minimum volatility in the second quarter, while the decline in the country risk premium and interbank competition supported the further reduction in the private sector's costs of borrowing. Specifically, the interest rate on new dinar loans to corporates and households dropped by 0.9 percentage points in the second quarter, equalling 8.5% in June, and the rate on new euro-indexed loans went down by 0.2 percentage points to 3.1%.

Lending activity is accelerating year-on-year. Growth in housing loans in the second quarter was the highest quarterly growth since the third quarter of 2011, when the subsidised housing lending programme was in place as well. The share of non-performing loans in total loans fell further, equalling 15.6% in June, the lowest level since April 2009.

Past monetary policy easing of the National Bank of Serbia, low interest rates in the euro area, narrowing in internal and external imbalances, increased interbank competition, economic growth and labour market recovery helped lending activity accelerate to 4.5% year-on-year in June (excluding the exchange rate effect). Excluding the effect of the write-off of non-performing loans this and last year, year-on-year growth in total loans sped up to 6.7%. The implementation of the NPL Resolution Strategy continues to yield good results. On a gross basis, the share of non-performing loans equalled 15.6% in June, the lowest level since April 2009, and 6.7 percentage points less than in August 2015, when the Strategy was adopted.

Positive fiscal trends continued in the second quarter, with a budget surplus of 2.1% and primary surplus of 5.7% of gross domestic product since the beginning of the year.

Fuelled mainly by higher growth of fiscal revenue, the consolidated budget surplus measured 44.1 billion dinars (2.1% of gross domestic product), whereas the quantitative criterion from the arrangement with the International Monetary Fund permits a general government deficit of 36.1 billion dinars. Furthermore, excluding interest expenses, the general government surplus equalled 5.7% of gross domestic product. Real growth of revenue since the start of the year (5.4% year-on-year) was achieved owing to higher revenue from corporate income tax on account of increased profitability of companies in the previous year, greater revenue from value added tax on account of higher turnover and improved collection, as well as higher contributions due to the recovery of the labour market. At the same time, in real terms, expenses declined relative to the same period last year (by 1.5%), owing mostly to lower interest expenses. The share of central government public debt, whose growing trajectory was reversed last year owing to fiscal efforts, continued down in this year.

Commodity exports in euro terms continued to post high year-on-year growth (11.3%), with persistent broad distribution production-wise and geographically, while the rise in imports (12.8%) was due primarily to greater needs of industry for equipment and intermediate goods, and to an extent, to the continued increase in household consumption. Also, the inflow of foreign direct investment remained high (up by 12.2% year-on-year), while outflows from portfolio investment were considerably lower than in the same period last year (by 72.7%).

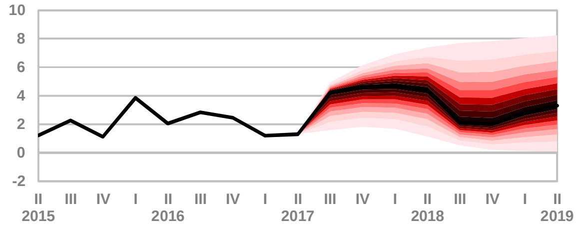
Results recorded in the second quarter indicated that the negative effects of cold weather on exports at the start of the year were temporary in character. In euro terms, exports in the first half of the year, compared to the same period last year, went up by 11.3%, and the distribution by sector of manufacturing remained broad. At the same time, commodity imports in euro terms rose by 12.8%, owing mainly to greater needs of industry for equipment and intermediate goods, and to an extent, to the continued increase in household consumption, which also reflected on higher imports of consumer goods. Along with the expected higher outflows from primary income in an environment of rising foreign direct investment inflows, this resulted in a temporarily higher current account deficit (by 332 million euros) compared to the same period last year. In the remainder of the year, we expect the pace of exports to step up, taking into consideration the expected higher growth in the euro area and our other trade partners, and also a slowdown in the pace of imports, which was evident in June as well. This should keep the current account deficit at around 4% of gross domestic product this year. We also expect that the current account deficit will remain fully covered by the net foreign direct investment inflow, whose 2017 projection was revised to 1.7 billion euros thanks to higher than expected realisation in the first half of the year. Compared to the same period last year, the inflow of foreign direct investment went up by 12.2%, which, along with lower outflows from portfolio investment and financial loans, resulted in a surplus on the financial account.

According to estimates of the Statistical Office of the Republic of Serbia, growth of gross domestic product in the second quarter measured 1.3% year-on-year, driven by improved activity in industry and service sectors, while a negative contribution came from agriculture due to unfavourable agrometeorological conditions and the high base effect from the previous year.

Economic developments since the start of the year were considerably hampered by supply-side factors, which primarily reflected on energy and agriculture, while domestic and external demand continued to have a positive effect. According to the NBS estimate, seasonally-adjusted growth of gross domestic product in the second quarter equalled 0.3% and was mostly driven by industry, which accelerated. The mining and energy sectors started to recover, and positive trends in manufacturing continued owing to the further activation of investment, acceleration in euro area growth and higher domestic demand. Due to further growth in household consumption, service sectors continued to positively affect economic growth. On the expenditure side, the greatest positive contribution to gross domestic product growth in the second quarter came from government investment due to more intense implementation of infrastructure projects. Other components of domestic demand continued to serve as a fillip, and the negative contribution of net exports declined from the first quarter owing to a recovery in exports, which were affected by cold weather at the start of the year.

Economic activity should accelerate to around 3% this year and to around 3.5% in 2018.

GDP growth projection
(y-o-y rates, in %)



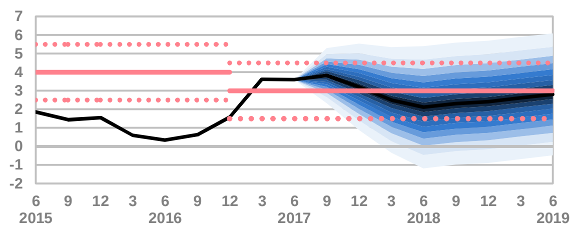
Economic activity is expected to accelerate in the coming period, resulting in growth of gross domestic product by around 3% in 2017 and 3.5% in 2018. This will be aided by the economic recovery of our key trade partners, the diversified inflow of foreign direct investment, and the improvement in the business and investment environment. Gross domestic product growth in the coming period should be driven by industry and service sectors, in line with developments in the first half of the year. Positive effects of construction are also expected – its performance should improve going forward. This year, agriculture is expected to have a negative effect. On the expenditure side, growth of gross domestic product will be mainly driven by investment and exports due to continued intense implementation of infrastructure projects and more favourable investment environment. Contribution of final consumption is also expected to be positive and to gradually increase, primarily on account of higher private sector employment and wages. The risks to the projection for this year are asymmetric downward and are associated with the success of this year's agricultural season and the speed of recovery of the energy sector. The risks are judged to be symmetric in respect of the pace of euro area growth and developments in the global market of primary commodities (oil, base metals and cereals) and the international financial market. Given that the downward risks to the projection this year are driven by supply-side shocks, whose effects on economic activity will be offset once the conditions normalise, risks are asymmetric upward for next year on the same grounds.

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

Year-on-year inflation is expected to continue to move within the target tolerance band (3.0±1.5%) until the end of the projection horizon, i.e. the second quarter of 2019. The high base for petroleum product prices in the coming period and the drop-out of this year's one-off price hikes from year-on-year calculation as of early 2018 will act as a damper, guiding inflation to move at a lower than current level as of the start of next year. A gradual rise in global primary agricultural commodity prices and aggregate demand at home will work in the opposite direction. The risks to the projected inflation path are symmetric and relate primarily to future developments in the international commodity and financial markets, the success of this year's agricultural season and, to a degree, administered price growth.

The new medium-term inflation projection is lower than in May, both for this and next year.

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



The lower inflation projection for 2017 primarily reflects weaker than expected CPI growth in the second quarter, as well as reduced marginal costs of importers and lower prices of primary agricultural commodities in the domestic market (with the nominal appreciation of the dinar against the dollar also providing a contribution) compared to the previous projection. In addition, although oil prices expressed in US dollars were assumed at a somewhat higher level for the end of this year, they are now lower expressed in dinars. On the other hand, somewhat stronger administered price growth is assumed for this year compared to the May projection.

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

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

II Monetary policy since the May *Report*

Since the May Inflation Report, the key policy rate was kept unchanged at 4.0%. The NBS Executive Board made decisions to keep the key policy rate on hold taking into consideration the mid-term inflation outlook and key factors of inflation, the effects of past monetary easing and the lower inflation target, which has been at 3.0%±1.5 pp as of early 2017.

As assessed by the Executive Board, inflation would stay low and stable, moving within the new, lower target band until the end of the projection horizon, i.e. in the next two years. It expected that inflation would be driven primarily by the gradual recovery of domestic demand and higher inflation abroad, and that the high base effect of prices of petroleum products would slow inflation down. Inflationary pressures are still low, as confirmed by the stable movement of core inflation around 2% y-o-y, and by inflation expectations of the financial and corporate sectors, which are within the new, lower target band both for one and two years ahead.

Monetary policy caution in the period observed was mandated by persistent uncertainty in the international financial and commodity markets, mainly in terms of the pace of normalisation of the Fed's monetary policy and the movement of world oil prices. On the other hand, as originally assessed by the Executive Board, risks from the international environment would be mitigated by better macroeconomic prospects of our economy, reflecting successful implementation of fiscal consolidation and structural reforms and the narrowing of external imbalances, and to an extent the ECB's accommodative monetary policy.

Since the May Report, the Executive Board **has kept the key policy rate unchanged (4.0%)**. The decisions to maintain the current degree of monetary accommodation were made in consideration of the inflation outlook and key factors of inflation, effects of past monetary easing and the lowering of the inflation target as of 2017 (3.0%±1.5 pp).

The decisions on monetary policy were based on the May inflation projection, which predicted that y-o-y inflation would move within the new target band during the entire projection horizon. It was envisaged that inflation would be below the current level early next year, since one-off increases in the prices of some products and services from Q1 2017 will drop out of the calculation of y-o-y inflation in early 2018.

The Executive Board expected that the gradual increase in aggregate demand at home and inflation abroad (notably the euro area) would have a more inflationary impact in the period ahead, while the high base effect of petroleum product prices would act as a damper.

The Executive Board assessed that domestic demand strengthened owing to the rise in private sector wages and employment, and to past monetary easing. Interest rates in the domestic market have been on the decline for almost four years, stabilising at their lowest level in recent months. Considerably more favourable terms of financing contributed to growth in lending and investment, which was one of the factors contributing to faster economic growth.

Besides the recovery of domestic demand, the Executive Board assessed that external demand would recover as well. Following a slow global economic recovery in previous years, most economies and international trade are showing visible signs of growth. Better outlook for euro area economic growth should reflect positively on other countries in the region, which are also our important trade partners. In addition, euro area inflation, after growing in early 2017 due to higher prices of energy and food, stabilised at a somewhat higher level than last year.

On the other hand, the Executive Board expected that some factors would slow inflation down. The most important are certainly world prices of oil, which, having risen early this year, dropped again, primarily due to higher supply. Due to uncertainties regarding the movement of oil prices in the coming period and the prices of other primary commodities, the Executive Board stressed the necessity to exercise caution in making monetary policy decisions. Also, in the period since the last *Report* it was confirmed that inflation from the start of the year was mainly driven by higher prices of a small group of products and services. Inflationary pressures are still low, as indicated by low and stable core inflation of around 2% y-o-y, and by inflation expectations of the financial sector and corporates, which are within the target band for both one and two years ahead.

Monetary policy caution in the period observed was also mandated by persistent uncertainty in the international financial market due to increased divergence of monetary policies of leading central banks. In June the Fed again raised its policy rate and announced that it would start normalising its balance sheet by gradually ceasing to reinvest repayments of principal on securities purchased in quantitative easing. Various assessments of investors regarding the pace of the Fed's monetary policy normalisation affect global capital flows, particularly with regard to emerging economies, Serbia included. On the other hand, the ECB continued to pursue an accommodative monetary policy – until the end of 2017, it will continue to implement the quantitative easing programme, which mitigated the adverse effects of the Fed's policy normalisation. The ECB's decisions are of particular importance for Serbia, given our financial links and the fact that the euro area is our most important trade partner.

Still, owing to structural improvements and the narrowing in internal and external imbalances, Serbia is more resilient to potential adverse effects from the international environment. In June, during the seventh review of the stand-by arrangement, the IMF confirmed that Serbia's macroeconomic outlook is improving further, as did the rating agencies Standard & Poor's and Fitch, which affirmed Serbia's credit rating and maintained a positive and stable outlook on its further improvement.

Text box 1: Price and financial stability in Serbia

Over the past five years, the NBS has achieved and maintained price and financial stability, thereby meeting its statutory objectives and contributing to the creation of a more stable business environment, the narrowing of internal and external imbalances, lower costs of borrowing, higher disposable income, more sustainable acceleration of economic growth, a significantly lower country risk premium, improved credit rating of the country, progress on the Doing Business list and enhanced outlook for the coming period. These results are particularly important considering the conditions under which they were achieved – most notably the significant challenges coming from the international environment which heightened uncertainty in all markets and mandated caution on the part of the central bank when passing decisions and implementing measures.

Herein we list our accomplishments, in brief:

Inflation has been brought down from two-digit numbers to a level comparable to European countries. Since the start of 2017, inflation has been moving within the new, lower target tolerance band and inflation expectations have been anchored.

– Standing close to 13% in autumn 2012, inflation was reduced to 2.2% under less than one year and kept low thereafter.

– Inflation expectations of the financial and corporate sectors stood at 8% and 10%, respectively at end-2012 and were rather volatile. Today they are much lower and more stable, moving within the new, lower NBS target, which means that price stability is expected to be preserved both one and two years ahead.

– Owing to the results achieved – improved macroeconomic fundamentals, low inflation, anchored inflation expectations – we have lowered the inflation target from 4±1.5% to 3±1.5% in order to preserve what we have accomplished on a durable basis. This year's results and the two-year ahead projection attest to the soundness of our decision.

Despite a great deal of turbulence from the external environment, the stability of the exchange rate has been preserved, which significantly contributed to overall stability.

– In nominal terms, the dinar has depreciated against the euro by 1.5% over the past five years, compared with the depreciation of 33.2% in the five prior years.

– The NBS net foreign exchange reserves have been preserved and additionally increased, to EUR 8.4 bn at end-2016 (while, for example, in 2012 they stood at EUR 6.6 bn). High foreign exchange reserves are an important component of our economic defence.

Interest rates on dinar borrowing of corporates, households and the government have been significantly lowered, presenting enormous savings to them. This contributed to higher disposable income, growth in lending and economic activity, as well as more successful fiscal consolidation.

– Over the last four years, interest rates on new dinar loans to corporates have been reduced by 11 pp, to households by 10 pp, while interest rates on dinar government securities are down by around 7 pp.

– Lowering of net expenses in respect of interest rates and exchange rate gains and losses was one of the economic success factors; the saving effect of these two items on the profitability of the economy in 2015 and 2016 stood at RSD 148.4 bn.

– Y-o-y growth in loans entered positive territory in early 2015 and stood at 4.5% in June 2017.

Financial stability has been preserved, the share of NPLs dropped significantly and the regulatory framework has been improved.

– The banking sector is stable, adequately capitalised and liquid. It is resilient to different shocks, which was confirmed during the so-called Greek crisis. Combination of the NBS monetary and regulatory policy, on the one hand and fiscal policy on the other, created a more favourable macroeconomic picture conducive to financial system stability – the system is more stable than before.

– NPLs have decreased by close to 7 pp over the past two years (i.e. since the adoption of the NPL Resolution Strategy). This is the lowest level in the past nine years.

– Special diagnostic testing of bank asset quality has been conducted for the first time in the domestic banking system, attesting to the high capitalisation of the financial system.

– A set of by-laws was adopted introducing Basel III standards to Serbia as one of the more significant reforms almost entirely adjusting the regulatory framework of the Republic of Serbia governing this area to the current EU legislation.

Confidence in the dinar is returning slowly. Considering the deep roots of euroisation, dinarisation will be a gradual process, and will remain a priority. Preservation of stability is a crucial precondition for continued results in the area of dinarisation.

– The dinarisation of deposits has increased to around 30%, whereas it was below 20% at end-2012.

– The dinarisation of loans to households is constantly on the rise – from 35% at end-2012 to almost 50% currently. Around 75% of new loans to households in 2015 and 2016 were in dinars.

– In 2016 banks began to offer and approve housing dinar loans, with interest rates below 5% and 30-year maturity period.

– In December 2016 an international financial institution (EBRD) issued a dinar security in the domestic financial market for the first time, and the proceeds were used for dinar lending.

We will reflect on the most important measures and activities primarily in the areas of monetary, macro and microprudential policies, and then on the results they have produced over the past five years.

Closely following the developments in the domestic and international environment, the NBS initiated the current monetary policy easing cycle in May 2013. Since then the **key policy rate has been reduced by 7.75 pp, to 4.0%**, which is its lowest level in the inflation targeting regime. Reducing inflation from a two-digit level to a low level and then the expected movement at low levels enabled us to cut the key policy rate by 375 bp (from 11.75% to 8%) in the period May 2013 – November 2014. Additional significant room for monetary policy easing opened up again in 2015 and 2016 and it was made use of. In the conditions of the full coordination of monetary and fiscal policy measures – the key policy rate was additionally lowered by 400 bp, to 4% by July 2016. It was not changed thereafter considering the effects of past monetary policy easing, lowering of the inflation target since the beginning of 2017, and the uncertainty surrounding the international commodity and financial markets.

Owing to achieved low and stable inflation, which moved on low levels for three years in a row, better macroeconomic fundamentals, anchored inflation expectations and a decelerated rise in administered prices compared to the previous period, at end-2016 we made a decision which was justifiable only in such an environment. **We lowered the inflation target from 4±1.5% to 3±1.5%**, which is the lowest level in the inflation targeting regime (since January 2009). This decision attested to our resolution to keep Serbia within the group of countries with low, stable and predictable inflation, which should contribute to a decrease in long-term dinar interest rates and thus to cost reduction and currency risk mitigation in financing the long-term needs of corporates, households and the government.

The NBS gave an additional monetary incentive to the economy in this period by **gradually lowering the rate of the foreign currency required reserve by 9 pp**, releasing around EUR 1.1 bn for banks. The adjustment of the required reserve rate was made by monitoring and assessing their impact on market movements, expected effects on credit activity and potential effects on price stability. Despite the decrease, the rate of required reserve for foreign currency sources is still significantly higher than the rate of required reserve for dinar sources of finance: 20% and 13% compared to 5% and 0%, depending on the liability maturity (up to and longer than two years). Thus, using the required reserves instrument, the NBS continued the **preferential treatment of dinar sources of finance**, stimulating in this way a greater use of the dinar in the financial system.

The NBS has been constantly **improving the set of monetary policy instruments. The model of repo auctions withdrawing liquidity has been changed**. As of December 2012 variable interest rate operations were in force, with limited quantity of liquidity withdrawals. Up to July 2012, fixed interest rates (key policy rate) repo operations withdrawing liquidity were in use and total amounts of banks' excess liquidity were withdrawn. In the model of auctions withdrawing liquidity applied as of December 2012 – the key policy rate is the maximum rate accepted at an auction, and the predetermined liquidity quantity is withdrawn at maximum. Thus, greater interbank competition in depositing idle funds with the central bank strengthened market operations, which, in the ensuing period, **led to the fall in the interest rates in the money and loan market**. Furthermore, due to the fact that not the entire amount of dinar liquidity is withdrawn, banks are additionally stimulated to lend a portion of liquid assets to the corporate and household sectors or to invest them in government securities. Besides, switching to the model of liquidity withdrawal at variable interest rates and with a limited volume of liquidity withdrawn opened up the possibility for more efficient reactions to short-term market shocks, which was made use of.

Also, parallel to lowering of the key policy rate, we **narrowed the interest rate corridor from ±2.5 pp to ±1.5 pp** relative to the key policy rate and thus stimulated the anchoring (stabilisation) of market interest rate movements within the narrower corridor.

The list of assets eligible as collateral in monetary operations has been expanded. Dinarisation is one of the NBS strategic commitments, which is why we supported the **development of dinar securities market** by adding the dinar bonds of international financial institutions with the highest rating to dinar government securities, as possible collateral in monetary operations with banks.

The efficiency of foreign exchange market interventions has been improved, considering that we have achieved more with less. We have been constantly improving the monitoring of foreign exchange market developments, i.e. the estimation of the intensity and the type of pressures to which the foreign exchange market is exposed, adjusting our activities accordingly, and improving the efficiency of interventions. As a result, the interventions were timely, measured and balanced in terms of reactions to short-term depreciation and appreciation pressures.

We introduced the Chinese yuan in the exchange rate list, after which the NBS concluded the first **swap arrangement with another central bank** – the People's Bank of China. This allows for an exchange of Serbia's and China's national currencies in case of need, with the aim of promoting economic cooperation between the two countries and maintaining financial stability. Late last year, the Serbian banking market welcomed the Bank of China, whose ultimate owner is the Bank of China Ltd. from China, which ranks among the top five banks in the world in terms of market transaction value.

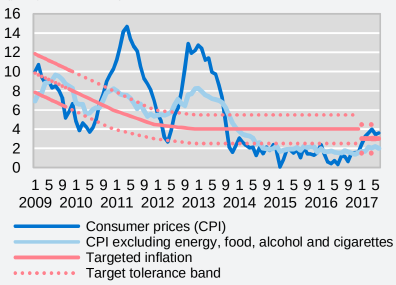
Serbia entered the crisis with the share of NPLs in total loans of around 11% and in early 2009 this share was above 14%. In order to resolve the NPL issue in a systemic way, in cooperation with the Government, the NBS prepared the **NPL Resolution Strategy and the accompanying Action Plans** and adopted them in August 2015. The NBS carried out all the activities defined by its Action Plan within the set deadline. As a result, since the adoption of the Strategy, the NPL share has decreased by around 7 pp, to its lowest level since April 2009. Specifically, the regulatory framework for treatment of restructured receivables has been improved to stimulate sustainable resolution practices and prevent unsustainable refinancing practice (evergreening). The option of assigning NPLs to non-banking sector entities even before their maturity has been introduced. Bad assets management in banks has also been improved by introducing additional requirements for banks in relation to strategic planning and the process of bad assets management, and the Guidelines for publishing bank data and information related to assets quality were issued. Furthermore, the Guidelines for IAS 39 application were published, bank NPL reporting system has been improved, analysis on barriers and limits of the NPL market was conducted, database on property used as collateral by banks was established and additional requirements for banks were introduced in the context of monitoring the quality of collateral instruments and the work of persons assessing those instruments.

In the prior period the NBS **paid a special attention to the development of macroprudential policy**, contributing to the preservation and strengthening of the stability of the financial system as a whole. The **introduction of Basel III standards** reflects the strategic commitment of the NBS to continually improve the legislative framework, in line with the international standards and EU regulations, honouring the specificities of the domestic market. In addition to the minimum capital requirement, **capital buffers are introduced**, the role of which is to cover the cyclical risks (for example, excessive credit growth or excessive growth in real estate prices), structural risks (for example, a high degree of financial euroisation), but also risks of systemic importance. Another key novelty is the introduction of **new liquidity standards** which require first for a bank to have sufficient high quality liquid assets enabling it to sustain a strong deposit withdrawal within 30 calendar days and second to fund its own activities with sufficiently stable sources of funding within a year.

Furthermore, at the proposal of the NBS, other reform laws and regulatory arrangements have been passed improving the business environment in Serbia. **Amendments to the Law on Banks** introduced the resolution function, i.e. an efficient and flexible mechanism for resolving failing banks, aligned with the best European and international practices. **The Law on Payment Services** enhanced payment transactions in the country and abroad and ensured greater security for clients with a concurrent increase in payment transactions efficiency. **The new Law on Insurance** created better and more efficient mechanisms for the protection of citizens and at the same time regulated this segment of the financial market, and insurance business is brought closer to the European standards. As the banking market regulator, the NBS adopted a **system solution** helping citizens to overcome difficulties with CHF loan repayment, without jeopardising legal security, market operations and accountability of all market participants for undertaken liabilities, at the same time. Also, **the amendments to regulations governing financial services consumer protection** provided for better protection of those consumers' rights. In addition, banks were mandated to include in the early repayment of loans the funds overcharged on account of unilateral raising of variable indefinable elements of the interest rate before the start of the application of the Law on the Protection of Financial Services Consumers, and, the banks significantly reimbursed the consumers on this account.

The NBS monetary, macro and microprudential policy measures, coupled with efficient coordination of these policies with fiscal and other economic policies produced the desirable results.

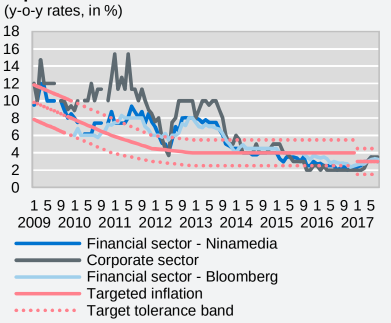
Chart O.1.1 **Price movements**
(y-o-y rates, in %)



Sources: SORS and NBS calculation.

The first and the most important result of undertaken measures is inflation stabilisation at a low level. Inflation has been low, stable and predictable for four years. Standing close to 13% in autumn 2012, inflation was reduced to 2.2% under less than one year and kept low thereafter. Average inflation in the period 2014–2016 moved between 1.1% and 2.1%, whereas in the period 2008–2012 it ranged from 6.2% to 12.5%. Low inflationary pressures from 2013 onwards were partly a result of low cost-push pressures from the international environment but primarily a result of the effects of domestic factors – relative stability of the exchange rate, anchored inflation expectations and effects of fiscal consolidation. With the price stability it has achieved, Serbia is now comparable to other European countries. Since the start of 2017, inflation has moved within the new, lower target tolerance band and the expectation is that this trend will continue until the end of the latest projection period. Low inflationary pressures are confirmed by the core inflation movement at the level of 2%, and **mid-term inflation expectations anchored** within the new target tolerance band.

Chart O.1.2 **One-year ahead inflation expectations**
(y-o-y rates, in %)



Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.

By ensuring low and stable inflation, **the NBS strengthened its credibility**, a fact established by Standard & Poor's, too. In its announcement from June 2017 the agency particularly emphasised the NBS operational independence and increased credibility on account of low and stable inflation for several years in a row, which will, also in the opinion of the agency, remain within the target band of 3±1.5% over the medium run.

Monetary policy easing effected **a significant fall in interest rates on dinar loans to the private sector and government dinar borrowin**g. Over the four years interest rates on new dinar loans to corporates have decreased by 11 pp, and to households by 10 pp. Interest rates on the existing loans to the private sector were also significantly reduced, contributing to the increase of disposable income of this sector. **Interest rates on dinar government securities** are also down by around 7 pp, significantly reducing the costs of dinar borrowing, which, coupled with a more favourable business environment in conditions of low inflation and a stable exchange rate, had a favourable effect on fiscal consolidation and a faster drop in the share of public debt in GDP due to lower borrowing needs of the government. The same period saw a decrease in interest rates on euro-indexed loans by 3.5 pp for corporates and by 3.8 pp for households. **Judging by the movement of interest rates on euro-indexed loans, it can be concluded that a significant fall is due to a lower risk premium of the country and interbank competition**, whereas a portion of the decrease is correlated with lower interest rates in the euro money market. **Serbia's risk premium**

plummeted, by 370 bp and was down to 129 bp in July, which is the lowest level since it has been monitored (April 2005).

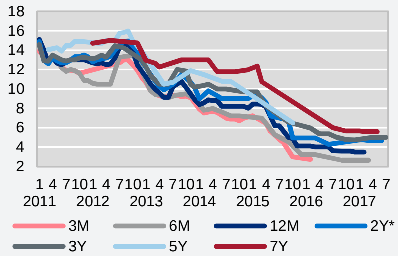
Y-o-y growth in loans entered positive territory in early 2015. Owing to the significantly lower interest rates, economic activity acceleration and labour market recovery, loan demand was on the rise in 2015 and 2016 affecting the credit activity growth, which equalled 1.2% and 1.5%, respectively, excluding the exchange rate effect. The growth was materialised despite the maturing of a significant amount of subsidised loans in 2015, while in 2016 lending activity was significantly determined by the stepped-up bank efforts to resolve NPLs by writing them off or assigning them to non-banking sector entities. Excluding the effects of these factors – lending activity increased by around 4% in 2016. Since early 2015 granting of new investment loans was particularly boosted. Their total amount in 2015 and 2016 was at the level of the total approved new investment loans for a four-year period (2011–2014). **Investment loans were one of the sources of investment financing in the new investment cycle, contributing to faster economic growth**. Y-o-y growth of loans continued in 2017 and stood at 4.5% in June 2017 (6.7% excluding the NPL write-off effect). Additional **quality progress in the loan market is also coming from housing loans**, considering that the growth of housing loans in Q2 2017 was the highest quarterly increment since Q3 2011, when the subsidised housing loan scheme was in effect.

In addition, **the decreased NPL share** should also spur credit activity in the coming period. This share has dropped by almost 7 pp since the adoption of the NPL Resolution Strategy, i.e. over the past two years. This has been the lowest level of corporate **NPLs** in the past nine years, and the most significant drop in the share has been recorded in the case of corporates most severely affected by the crisis.

Over the past five years, the NBS has achieved and preserved **relative exchange rate stability of the dinar against the euro** in the environment of significant turbulence in the international financial market. Bearing in mind the level of euroisation of the domestic economy and the spill-over effect of the exchange rate to prices, the preserved relative stability of the exchange rate was instrumental in the NBS meeting its principal objectives – price and financial stability. Furthermore, exchange rate and inflation stability, coupled with significantly lower interest rates, contributed to the more efficient implementation of fiscal consolidation. The NBS has ensured **a higher degree of stability in the foreign exchange market, spending less foreign currency reserves, that is, "it has achieved more with less"**. In the past five years, the NBS intervened in the foreign exchange market by net selling EUR 765 mn, with 1.5% nominal depreciation of the dinar against the euro (31 July 2017), which is significantly less than EUR 5.7 bn of net sale in the five years preceding this period, when nominal depreciation equalled 33.2%.

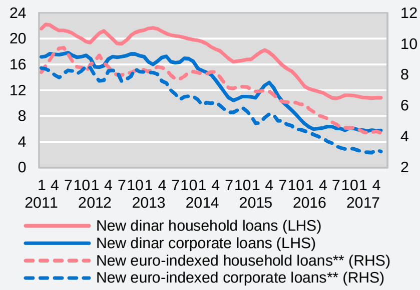
Bracing for the coming pressures by preparing a defence system at peaceful times and investing in stability during turmoil, the NBS has managed **to preserve the country's gross foreign exchange reserves at an adequate level, measured by all criteria. It has also managed to increase them in net terms – net foreign exchange reserves amounted**

Chart O.1.3 **Interest rates in the primary market of government securities**
(p.a., in %)



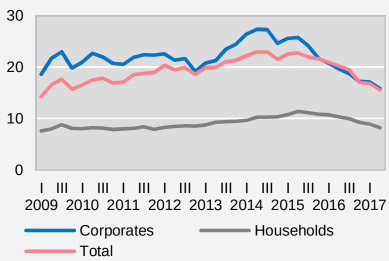
Source: Ministry of Finance.
* Excluding coupon securities with the rate linked to the NBS key policy rate.

Chart O.1.4. **Interest rates on dinar and euro-indexed loans to corporates and households***
(3m moving averages, in %)



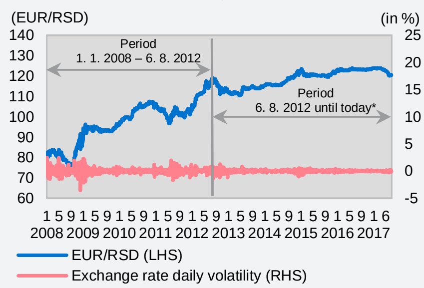
Source: NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

Chart O.1.5 **Share of NPLs in total loans, gross principle**
(in %)



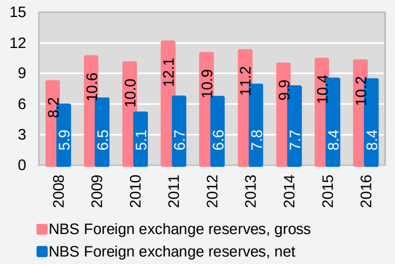
Source: NBS.

Chart O.1.6 **Dinar exchange rate**



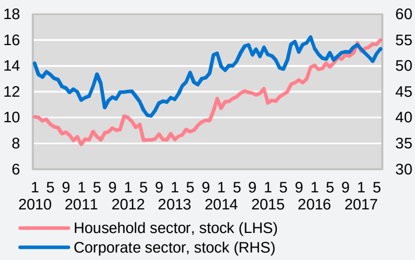
Source: NBS.
* As at 31/07/2017.

Chart O.1.7 **Level of foreign exchange reserves**
(in EUR bn)



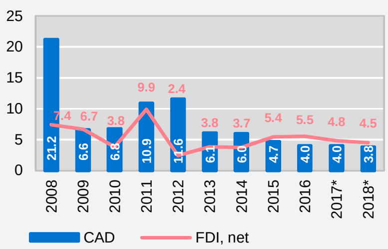
Source: NBS.

Chart O.1.8 **Dinar share in total bank deposits of corporates and households**
(in %)



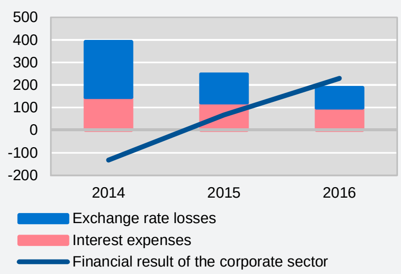
Source: NBS.

Chart O.1.9 **Current account deficit and FDI**
(in % of GDP)



Source: NBS.
* NBS projection.

Chart O.1.10 **Financial result of the corporate sector**
(in RSD bn)



Source: NBS.

to around EUR 8.4 bn, at end-2016, while, for example, in 2008 they stood at 5.9 bn. Our economy's resilience is, without a doubt, conducive to the narrowing of the internal and external imbalances, while an adequate level of foreign exchange reserves is an important component of our economic defence from potential external shocks.

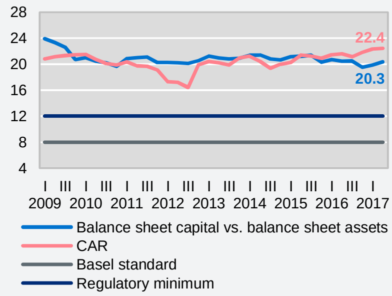
The results of macroeconomic stabilisation efforts, significantly lower interest rates on dinar loans, and specific measures for dinar promotion contributed to the rising level of dinarisation. The share of dinar deposits has increased to around 30%, whereas it was below 20% at end-2012. A great portion of new loans to households is dinar-denominated, the reason why almost a constant rise of dinarisation of household loans has been recorded – from 35% at end-2012 to almost 50% currently. Since last year banks have been offering housing dinar loans, with interest rates below 5% and 30-year maturity period. Last year an international financial organisation with the highest rating issued the first dinar security, and the assets collected in this way were used for dinar lending.

Full coordination of economic policies brought about **the narrowing of external imbalances**. The current account deficit was cut from 11.6% in 2012 to 4% last year. The current account deficit reduction is important, but what is even more important is what has been achieved with **the increase in the share of goods and services exports** by 14.6% of GDP (from 36.2% to 50.8% of GDP) in that period. At the same time, exports are more broad-based both geographically and sector-wise. The same period saw an increase in the share of goods and services imports by 4.7% of GDP. The achieved export results of the economy, particularly manufacturing, undeniably reflect the favourable business and investment environment and the economy's higher competitiveness. Last year, Serbia was included among the top ten countries that made **the most progress in the World Bank's Doing Business list**. Data on **FDI** inflows prove that this improvement was recognised by foreign investors. In the last two years, FDI inflows were at the level of 5.5% of GDP, exceeding our initial expectations, and leading us to revise our projections upwards several times. The inflows recorded in the first half of the year suggest that this year will be similar, which is why we increased the expected net inflow of FDIs in 2017 from EUR 1.6 bn to EUR 1.7 bn. We expect that in the coming period the FDI net inflow will be **more than sufficient to cover the current account defici**t, which will, together with continued good exports performance, supported by the recovery in external demand, considerably buttress the stability of the foreign exchange market.

Having ensured price and relative exchange rate stability, with lower costs of private sector funding, the NBS gave a significant contribution to the **positive financial results of the corporate sector**. In 2015 and 2016 corporates improved their net financial result by RSD 360 bn. There is no doubt that this huge step forward was achieved owing to their stepped-up efforts to rationalise costs and increase the volume of operations, but also **as a result of lower net expenses in respect of interest rates and exchange rate gains and losses, which contributed to the corporate sector's financial result with RSD 148.4 bn**. Continued improvement of the business environment, higher profitability of the domestic economy, more favourable conditions of financing, FDI inflow and improved global growth outlook **provide grounds for the prospects of sustainable growth acceleration**.

As a result of the NBS measures, **the domestic banking sector is stable and highly resilient** to different macroeconomic shocks, featuring **a high degree of capitalisation and liquidity** – the capital adequacy ratio is much higher than the level prescribed by the domestic and international regulatory requirements, while the average monthly liquidity level is also significantly above the regulatory minimum. Strategic orientation towards traditional banking and the absence of hybrid financial instruments created **high quality capital** – the bulk of (more than 90%) the total capital is made of the highest quality Tier 1 capital, with dominance of equity capital. What is also an important fact is that banks operating in Serbia mostly rely on the **domestic, stable sources of finance**, thus reducing bank exposure to the risks from the international environment, and to the risk of a sudden withdrawal of funds by the parent bank, which was one of the challenges faced by the countries in the region during the crisis.

Chart O.1.11 **Capitalisation of the Serbian banking sector**
(in %)



Source: NBS.

In the previous period, the NBS has met its statutory obligations and preserved price and financial stability. Objectives of the NBS have not been achieved at the expense of others, but quite the opposite – to their benefit, which will remain true in the future.

III Inflation movements

Moving within the target tolerance band of 3±1.5% since the start of the year, inflation came at 3.6% y-o-y in June. Compared to Q1, Q2 saw lower inflation, mainly owing to the rise in the import prices of fruit and fresh meat, as well as the seasonal hike in travel packages, whereas with the waning of the effects of cold weather early this year the considerable fall in the prices of vegetables and firewood worked in the opposite direction. That inflationary pressures are still low is confirmed not only by the fact that in the past months inflation was led by the increase in a small number of products and services, but also by low and stable core inflation, which has hovered around 2% since the start of the year, and inflation expectations of the financial sector and corporates, which are within the NBS target band both one and two-years ahead.

Inflation movements in Q2

Consistent with expectations stated in the previous issues of the Report, y-o-y inflation has been moving within the target tolerance band of 3.0±1.5% since January and measured 3.6% in June, the same as at end-Q1. Relative to March, petroleum products gave a lower y-o-y contribution, while that of fruit and fresh meat increased. That inflationary pressures are still low is confirmed not only by the fact that in the past months inflation was led by the increase in a small number of products and services, but also by low and stable core inflation (excluding energy, food, alcohol and cigarettes), which has hovered around 2% y-o-y since the start of the year.

At quarterly level, consumer prices picked up 0.5% in Q2, posting a much lower rise than in Q1. This was lower than even our expectations for Q2 announced in May, mostly owing to the higher than anticipated drop in the prices of fresh vegetables, as well as the lower than expected rise in the prices of fresh meat.

The prices of **food and non-alcoholic beverages** gave the strongest boost to Q2 inflation (0.4 pp), though still smaller than in Q1 due to the considerable drop in the prices of fresh vegetables (9.8%) which came about after the above-seasonal hike in Q1 caused by adverse weather conditions at the start of the year. The prices of **unprocessed food** rose 2.9% (contribution: 0.3 pp) on account of the increase in the prices of fruit (29.7%, contribution: 0.6 pp) and fresh meat (7.2%, contribution: 0.3 pp) which were above the usual level for the season

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

	Share in CPI	2016 III	2016 IV	2017 I	2017 II
Consumer prices (CPI)	100.0	0.2	0.5	2.4	0.5
Unprocessed food	11.3	-2.1	-3.0	11.7	2.9
Processed food	20.7	0.4	0.0	1.3	0.3
Industrial products excluding food and energy	28.5	1.0	0.6	0.5	0.4
Energy	15.5	0.2	2.8	3.3	-1.3
Services	24.0	0.2	0.8	0.8	1.0
Core inflation indicators					
CPI excluding energy	84.5	0.2	0.0	2.2	0.9
CPI excluding energy and unprocessed food	73.2	0.6	0.5	0.8	0.6
CPI excluding energy, food, alcohol and cigarettes	45.3	0.3	0.8	0.2	0.7
Administered prices	18.8	1.4	1.1	1.1	0.0

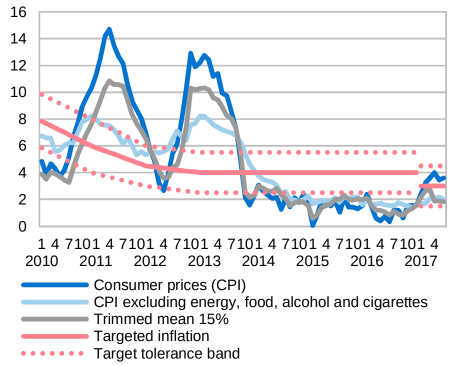
Sources: SORS and NBS calculation.

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

	2017 March	2017 June	Difference
Consumer prices (CPI)	3.6	3.6	0.0
Unprocessed food	0.6	1.0	0.4
Fruit and vegetables	*0.0*	*0.3*	*0.3*
Processed food	0.3	0.4	0.1
Industrial products excluding food and energy	0.7	0.7	0.0
Energy	1.3	0.8	-0.5
Petroleum products	*0.9*	*0.5*	*-0.4*
Services	0.7	0.7	0.0

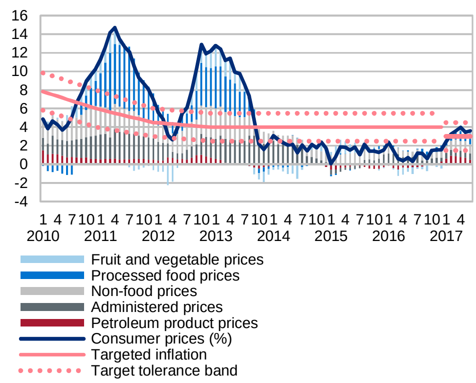
Sources: SORS and NBS calculation.

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



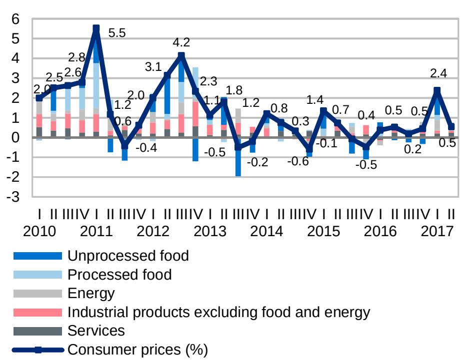
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

as a result of higher import prices of these products. It must be noted that while global meat prices usually post an increase as of May, this year they began rising sooner, most likely owing to elevated demand in certain Asian countries. **Processed food** prices edged up 0.3% providing a slight contribution to inflation which was almost entirely realised in June due to the 0.7% rise in the prices of milk and dairy products.

Energy prices dropped 1.3% in Q2 (contribution: -0.2 pp) due to the lower prices of petroleum products (-1.1%) resulting from a fall in global oil prices in Q2, as well as due to the dinar rising against the dollar and the cheaper prices of solid fuels. Consistent with our expectations in the previous *Report*, the contribution of **petroleum products** to y-o-y inflation decreased from March due to the high base effect and came at 0.5 pp in June.

Service prices were up 1.0% (contribution: 0.2 pp), mainly on account of the seasonal increase in the prices of travel packages (31.6%), while lower rents acted in the opposite direction.

At 0.4% in Q2 (contribution: 0.1 pp), growth in the **prices of industrial products excluding food and energy** was lower than a quarter earlier and chiefly driven by the seasonal increase in the prices of clothes and footwear of 1.3%. In contrast to that, a slight negative contribution came from the lower prices of automobiles and other vehicles on account of the dinar gaining on the euro during Q2.

Core inflation (measured by CPI excluding prices of energy, food, alcohol and cigarettes) equalled 0.7% in Q2, and was largely determined by the seasonal hike in travel package prices and, to a lesser degree, in the prices of clothes and footwear. In y-o-y terms, since the start of the year this inflation indicator has been moving at around 2% where it stood in June as well, hinting at the still low inflationary pressures on the demand side.

Administered prices remained almost unchanged in Q2. Y-o-y, they rose 3.7% (contribution to headline inflation of around 0.7 pp), almost entirely due to the increase in the prices of cigarettes and electricity during the past year.

Producer and external prices

Industrial producer prices dipped 0.6% in Q2 largely as a result of lower prices in the production of petroleum products caused by the fall in the global prices of crude oil in Q2. In addition, producer prices also declined in the production of base metals triggered by the constantly falling iron ore prices in Q2. By contrast, producer food prices continued up in Q2, reflecting an increase in global meat prices. Metal ore exploitation, as well as the production of computers, electronic and optical products, also recorded a rise in producer prices. Y-o-y, growth in industrial producer prices equalled 3.0% at end-Q2, slightly lower than at the end of the previous quarter.

The prices of elements and materials incorporated in construction edged up 0.4% in Q2, while in y-o-y terms, the growth in these prices slowed down from 7.7% in March to 4.8% in June 2017.

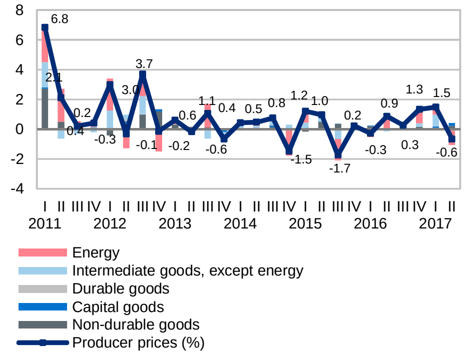
Unlike Q1, when they recorded a rise (0.8%), **external prices** expressed in dinars[1] dropped 2.3% in Q2. The fall was largely precipitated by the lower global prices of oil, as well as food, measured by the FAO index, and most notably of sugar and vegetable oil. Working in the opposite direction, euro area consumer prices (used to approximate service imports) rose during the second quarter, while the prices of German exports (used to approximate prices of imported equipment and intermediate goods) stagnated. The Q2 fall in external prices expressed in dinars was also triggered by the dinar appreciating against the euro and the dollar at the quarterly average of 0.8% and 3.8% respectively. The quarterly fall in external prices led to a slowdown in their y-o-y growth to 2.8% in Q2.

Inflation expectations

Movements in inflation expectations also confirm that inflationary pressures are still low. The results of inflation expectations surveys conducted by both agencies indicate that the **financial and corporate sectors believe that inflation will move within the target tolerance band both in the short and medium term**.

According to the Bloomberg and Ninamedia surveys, **one-year ahead inflation expectations of the financial sector** hover around the target midpoint. According to the

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



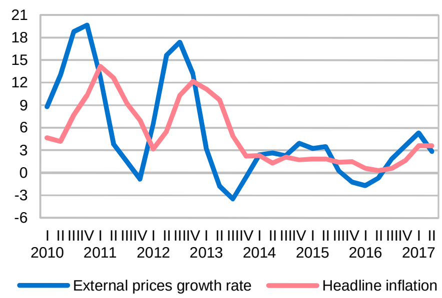
Sources: SORS and NBS calculation.

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

	2016		2017	
	Sep.	Dec.	March	June
Consumer prices	0.6	1.6	3.6	3.6
Domestic industrial producer prices	0.2	2.2	3.1	3.0
Agricultural producer prices	-3.0	3.0	3.7	-6.1
Prices of elements and materials incorporated in construction	1.6	2.4	7.7	4.8

Sources: SORS and NBS calculation.

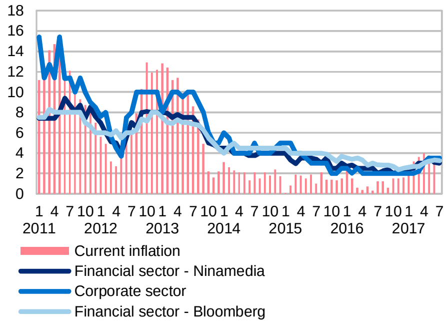
Chart III.0.5 **Domestic inflation and external prices**
(y-o-y rates, in %)



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

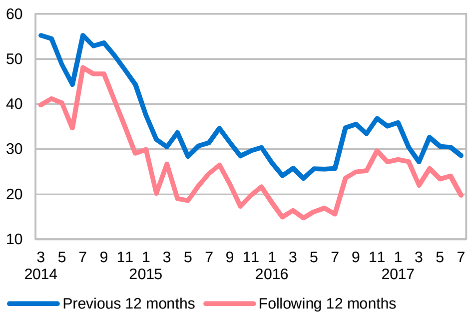
[1] The weighted average of the world oil and food price index, euro area consumer prices and export prices of Germany, one of our main trade partners, is used as an indicator of external prices.

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



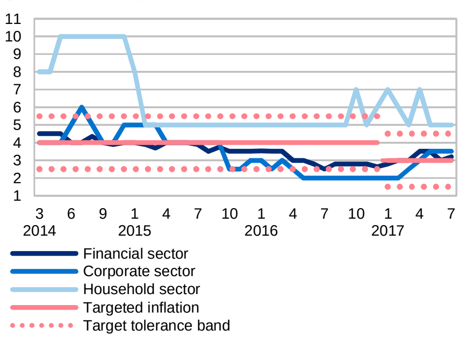
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ninamedia agency since December 2014, and Ipsos and Gallup in the prior period. The survey was not conducted in November 2014.

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



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

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



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

Bloomberg survey, in the period since the previous *Report*, expectations of the financial sector were stable within the range of 3.2–3.3%. The **Ninamedia**[2] survey indicated that the financial sector lowered its expectations in June to 3.1%, down by 0.4 pp from May, and then once again to 3.0% in July. According to the survey of both agencies, one-year ahead inflation expectations of the financial sector have been within the NBS target band since October 2013.

One-year ahead expectations of the corporate sector are also within the target band and in June and July they remained at the May level of 3.5%. After a temporary rise in April, the **inflation expectations of the household sector**, which are usually higher than those of other sectors, again stabilised at 5.0%.

The results of the qualitative survey[3] suggest that the largest share of households (60.0%) believes that prices will rise moderately or somewhat in the next twelve months, while the share of those anticipating a significant price hike in the coming twelve months was 16.3% in July, lower than in the previous survey. At the same time, 16.8% of respondents anticipate no change in prices and 2.0% anticipate a decline. Of the total, 4.9% of respondents said that did not know. Regarding households, anticipated inflation is still lower than perceived inflation, meaning that one part of the population, who feel that prices increased in the past twelve months, do not expect the trend to continue in the coming period.

Medium-term expectations of the financial sector declined 0.3 pp relative to May and equalled 3.2% in July. Two-year ahead inflation expectations of the corporate and household sectors remain unchanged relative to May and stood at 3.5% and 5.0% in June and July respectively.

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

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

[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

Stable movement of interest rates in the interbank money market and the market of government securities with minimum volatility marked Q2, thus rates remained virtually unchanged in this quarter. Private sector's costs of borrowing in dinars and FX were reduced mildly.

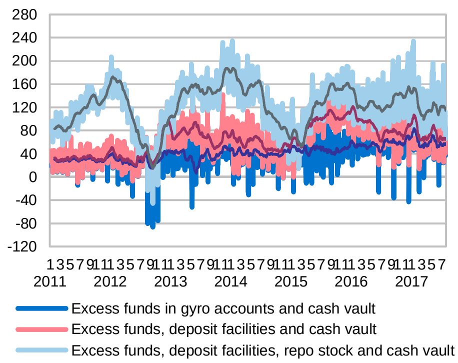
Appreciation pressures strengthened in Q2 on the back of improved export performance, a continued high inflow of FDI, the return of foreign investors to the market of government securities, a seasonally higher inflow of remittances, and growth in FX-indexed bank assets. Relative stability in the FX market has for a long time been supported by improved macroeconomic fundamentals, which resulted also in a lower country risk premium, which was at its ten-year low from May until July, when it dropped to its lowest point on record.

Interest rates

The average repo rate[4] was practically unchanged in Q2, staying at the end-March level of 3.0% at end-June. **Interest rates in the interbank money market** remained stable, displaying minimum volatility in Q2 and July.

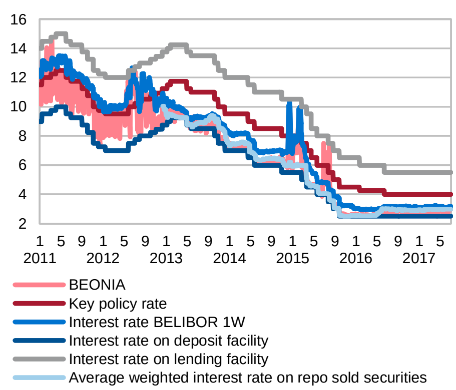
In June, BEONIA averaged 2.8%, same as in March. Average monthly BELIBOR rates also recorded minimum volatility in Q2, staying the same as in March and moving in June between 3.0% for the shortest and 3.7% for six-month maturity. Trading volumes in the interbank market were somewhat higher only in April (RSD 4.1 bn on average), when BEONIA inched up slightly (by 0.1 pp), though it dropped in the following months as dinar liquidity surplus grew, averaging RSD 2.3 bn in June, down by RSD 0.6 bn from March.

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



Source: NBS.

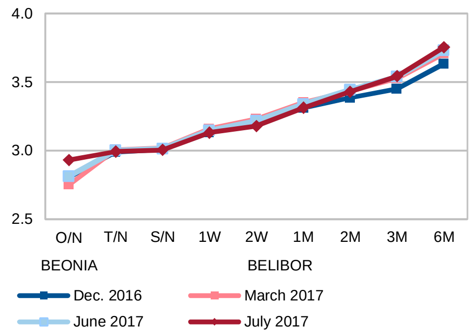
Chart IV.1.2 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

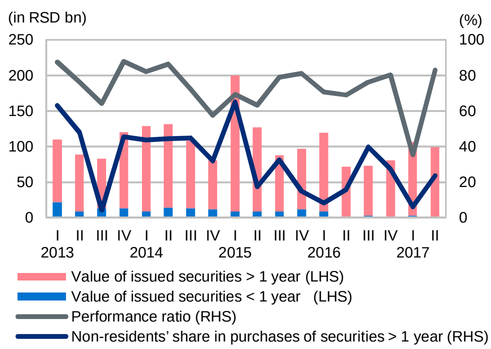
[4] The rate achieved at repo auctions weighted by the amount of sold securities.

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



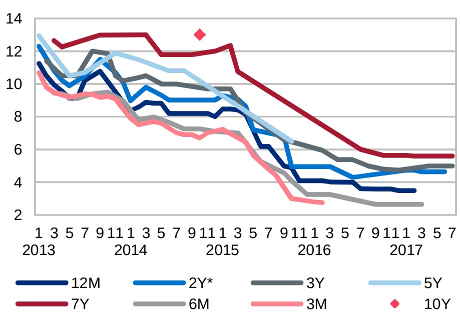
Sources: Thomson Reuters and NBS.

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



Source: Ministry of Finance.

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



Source: Ministry of Finance.
* Excluding coupon securities with the rate linked to the NBS key policy rate.

Rates in the **primary market of dinar government securities** also stayed broadly unchanged in Q2. No auctions were held for shorter maturities, while rates on two-year (4.7%) and seven-year securities (5.6%) were the same as in Q1. Only the rate at auctions of three-year securities in April (5.0%) was 0.3 pp higher than at the last auction for this maturity held at the end of 2016; the rate stayed the same at the May reopening. Auction performance improved relative to Q1, thanks to non-residents investing significantly more in seven-year securities in May. After a year, an auction of two-year amortised bonds at a variable coupon linked to the key policy rate was held in June, with the same fixed margin (0.3 pp). Interest rates at auctions of three- and seven-year dinar government securities stayed at Q2 levels in July.

No major changes occurred at **auctions of euro-denominated government securities**. The rate on one-year securities was cut in Q2 (by 0.2 pp to 0.55%), and the rate on two-year securities was also lowered slightly (by 0.01 pp to 1.0%). Rates on three-year (1.9%) and five-year securities (2.7%) were the same as at auctions in Q1.

Trading volume **in the secondary market of government securities** declined in Q2, since foreign investors sold considerably smaller amounts of securities than in Q1. Total volume in this market amounted to RSD 52.4 bn in Q2, almost three times less than in Q1. Yield rates mostly dropped, ranging from 3.1% for the remaining one-week to 5.4% for the remaining 73-month maturity.

The average **weighted interest rate on dinar loans to corporates and households** was reduced by 0.9 pp from March to 8.5% in June. The average price of dinar household loans in June (10.4%) dropped by 0.3 pp relative to March, whereas the average price of dinar corporate loans declined by 0.1 pp to 5.8%. The growing share of corporate loans, which are cheaper than household loans, led to a more pronounced drop in the average weighted interest rate than in rates for these sectors individually. The greatest fall in household loans (1.5 pp) was recorded by rates on housing loans (including refurbishment loans), which were approved at the average rate of 5.8% in June, while rates on consumer (by 1.1 pp to 7.5%) and cash loans (by 0.3 pp to 10.6%) were also reduced. Only the price of other loans (9.9%) was somewhat higher than in March. A lower average price of dinar corporate loans was determined by the decline in interest rates on other loans (by 1.0 pp to 5.6%), while rates on current assets loans were raised (by

0.5 pp to 5.9%), as were rates on investment loans (by 0.3 pp to 6.7%).

Private sector's costs of borrowing in foreign currency were also more favourable than in Q1. Consequently, the average weighted interest rate on new loans to corporates and households lost 0.2 pp in Q2, coming at 3.1% in June. Specifically, the average rate on household loans was reduced by 0.7 pp to 3.8% due to falling rates on housing, consumer and other loans, which lost between 0.1 pp and 1.2 pp, falling to 3.0%, 5.3% and 5.0%, respectively in June. Only the rate on cash loans (3.3%) was slightly higher than in March (by 0.1 pp). After reaching in May the lowest value thus far (2.8%), in June the average weighted interest rate on corporate loans equalled the March value of 3.0%. The rate on current assets loans was the same, which was 0.1 pp higher than in March, while prices of investment loans and import loans lost 0.2 pp and 0.6 pp, measuring 3.2% and 2.3%, respectively in June. Only other loans were approved at the same rate as in March (2.9%).

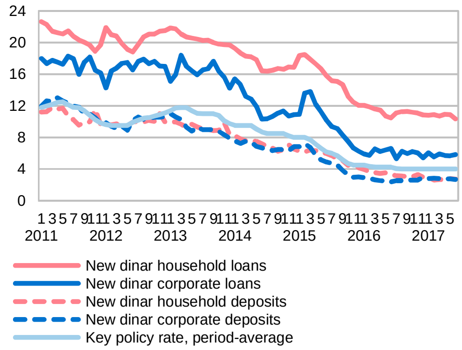
In Q2, banks slightly lowered their **dinar corporate deposit interest rates** (by 0.1 pp to 2.7%), while rates on **deposits in euros** were raised by the same amount, to 0.5% in June. Rates on household savings in dinars stayed the same, equalling 2.7% in June, while rates on savings in euros (0.7%) rose by 0.2 pp from March.

Risk premium

Measured by EMBI, Serbia's risk premium decreased by 32 bp in Q2, and by further 16 bp in July, dropping to 133 bp. On 27 July it reached 130 bp, its lowest value since monitoring of this indicator began (April 2005). Having fallen further in the observed period, Serbia's risk premium almost equalled Romania's risk premium, which also reached its lowest value since its monitoring began (March 2012). In June and July risk premia of the majority of other countries in the region also dropped to their lowest points in years. EMBI Global lost less – 3 bp in Q2, and 4 bp in July, arriving at 324 bp.

The difference in yields on Serbia's dollar eurobonds and US treasury securities was under the impact of both global and domestic factors. Speaking of global factors, investor sentiment in the international financial market improved in the observed period owing to improved outlook for global economic growth. The belief that faster economic growth of the euro area is sustainable has become more prevalent. It was supported by the

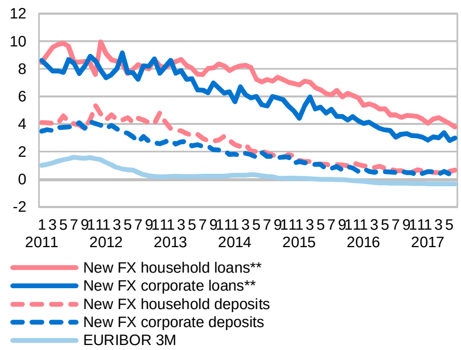
Chart IV.1.6 **Interest rates on dinar loans and deposits of corporates and households***
(weighted average values, p.a., in %)



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 %)

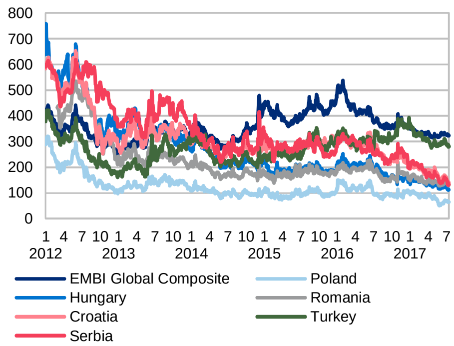


Sources: European Banking Federation and NBS.

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

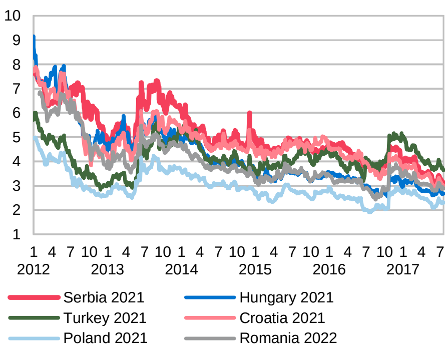
** Euro and euro-indexed.

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



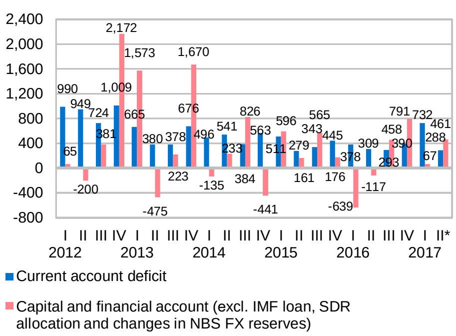
Source: JP Morgan.

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.

ECB's policy – it was announced that it would remain stimulative for as long as necessary. The outcome of the French election is estimated to have positively impacted the euro area outlook, even though the UK election raised uncertainty regarding the Brexit negotiations.

The risk premium declined in the countries in the region due to domestic factors as well, i.e. continued improvement of macroeconomic fundamentals – many countries reduced their public debt, interest rates are relatively low, inflation is low and currencies stable. A better outlook is also indicated by eurobond yields of Serbia and countries in the region, which fell further in the observed period. It is estimated that the expected acceleration of economic growth on a global scale, primarily in the euro area, should facilitate these countries' adjustment to the scale-down of liquidity in the international financial market.

In Serbia, the risk premium fell primarily due to a more favourable macroeconomic outlook resulting from successful implementation of fiscal consolidation and structural reforms. Having achieved structural improvements and narrowed its internal and external imbalances, Serbia raised its resilience to potential negative effects from the international environment. Further improvement of the macroeconomic outlook was also noted by the IMF in June during the seventh review of the stand-by arrangement, and by Standard & Poor's and Fitch agencies, which affirmed Serbia's credit rating and kept the outlook positive and stable.

Foreign capital inflow

Owing to better export performance, a higher inflow of remittances and lower expenses with respect to FDI and portfolio investment, Q2 saw a decrease in the current account deficit relative to Q1. At the same time, the financial account recorded a net capital inflow. As before, the bulk of the inflow related to FDI, and in Q2 an inflow was also recorded with respect to portfolio investment. Due to the repayment of loans by the government, and to an extent by enterprises, an outflow was registered on account of financial loans, while banks' liabilities to foreign creditors increased.

According to preliminary data, Q2 saw a net **FDI** inflow worth EUR 487.3 mn. Thus, the capital inflow on this account from the start of the year reached EUR 991.8 mn, which is 12.2% more than the inflow achieved in the same period last year. In 2017, investment remained highly diverse by activity. The largest amounts were channelled to manufacturing, the financial sector, construction and trade. Around 70% of FDI came from EU countries, and investment from Asian countries, such as China, Taiwan and Hong Kong and UAE, is on the rise (around 12%).

Trends in H1 attest to the further improvement in the investment environment and favourable perception of foreign investors regarding long-term investment in Serbia. The net FDI inflow in 2017 is likely to exceed our previous expectations and reach around EUR 1.7 bn, which should fully cover the current account deficit, expected to equal around EUR 1.5 bn.

The Q2 inflow in respect of **portfolio investment** (EUR 30.2 mn) was mostly due to investment of foreign investors in seven-year dinar government securities in May. At the same time, foreign investors significantly reduced sales of securities in the secondary market. A part of the inflow resulted from the sale and collection of due foreign securities owned by residents.

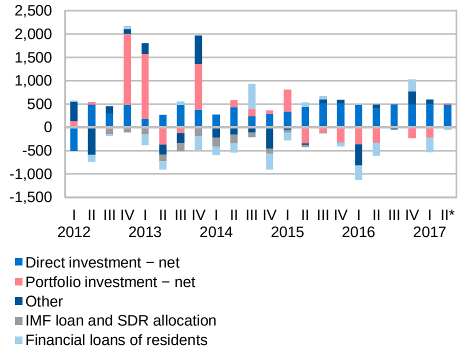
In Q2, residents' liabilities with respect to **financial loans** dropped by EUR 53.6 mn net, which was due primarily to the net repayment of loans by the government (by EUR 297.6 mn). Of this, the majority of the repayment related to loans for budget support taken out in 2011, while the largest amounts of the loans disbursed related to loans intended for road infrastructure and reconstruction of clinical centres. Enterprises also reduced their foreign liabilities (by EUR 44.9 mn), while banks net borrowed from abroad (EUR 288.9 mn).

Trends in the FX market and exchange rate

Appreciation pressures were dominant in Q2, particularly in June, and they were eased by NBS interventions. End-of-period, in Q2, the dinar gained 2.6% against the euro and 9.9% against the dollar, seeing as the period under review was characterised by considerable strengthening of the euro against the US dollar.

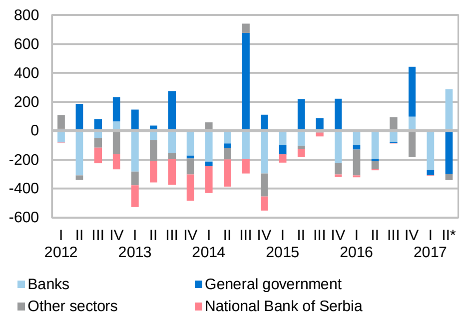
FX demand of enterprises (measured by the net sale of bank foreign currency to enterprises) was 15% lower relative to Q1, and almost 30% lower than in the same period last year. This was supported by improved export performance relative to Q1. At the same time, the FDI inflow continued, and foreign investors considerably stepped up investment in government securities in May. A higher inflow of remittances, seasonally typical of Q2, reflected on increased purchases of foreign cash from

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



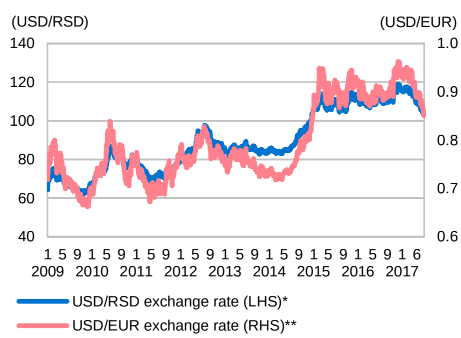
Sources: SORS and NBS.
* Preliminary data.

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



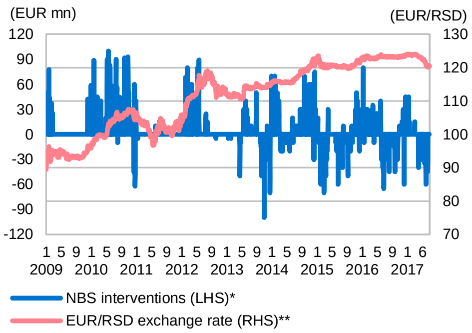
Source: NBS.
* Preliminary data.

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



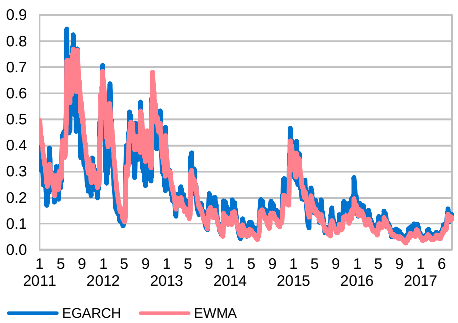
Source: NBS.
* USD 1 in RSD.
** USD 1 in EUR.

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



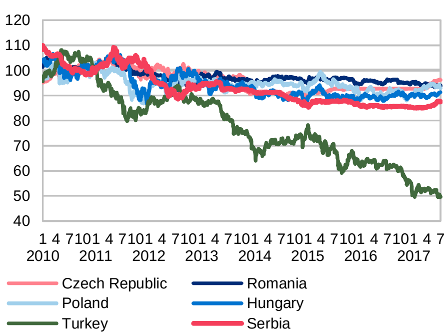
Source: NBS.
* + sale; - purchase.
** EUR 1 in RSD.

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



Source: NBS.

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.

natural persons, which was more than enough in June to cover net FX demand of domestic enterprises and foreign investors. Appreciation pressures were also encouraged by growth in FX-indexed assets of banks,[5] which rose considerably in June.

Relative stability in the FX market has for some time been aided by the significant improvement of macroeconomic fundamentals. This resulted in a lower country risk premium, which fell in July to its lowest level on record.

To ease excessive short-term strengthening of the dinar against the euro, in Q2 the NBS intervened in the IFEM by buying foreign currency. It bought a total of EUR 505.0 mn, most of it in June (EUR 345.0 mn). Regardless, the volatility of the dinar against the euro, measured by EWMA[6] nd EGARCH,[7] was higher than in Q1.

Trading volumes in the IFEM rose in Q2 to a daily average of EUR 21.9 mn, up by EUR 3.7 mn from Q1[8]. The highest volume was recorded in April (EUR 25.4 mn daily average).

The NBS bought and sold EUR 38.0 mn at regular three-month swap auctions (down by EUR 10.5 mn from Q1),and EUR 83.0 mn at two-week auctions (down by EUR 22.0 mn from Q1). The volume of interbank swaps also declined in Q2, to EUR 27.0 mn.

Of the currencies of countries in the region running similar exchange rate regimes, besides the dinar only the Czech koruna strengthened in Q2, by 3.2%, since the Czech central bank announced in April that it would no longer use the exchange rate as an additional instrument of monetary policy easing. Polish, Romanian and Hungarian currencies depreciated slightly against the euro (by 0.2% and 0.1%), while the Turkish lira lost an additional 2.4% against the euro in Q2.

Appreciation pressures and the dinar's strengthening (by 0.4%) continued in July. The NBS intervened in the IFEM by buying EUR 165.0 mn.

[5] In an effort to match their FX positions, banks increase their FX supply in the market.
[6] EWMA – Exponentially Weighted Moving Average.
[7] EGARCH – Exponential General Autoregressive Conditional Heteroskedasticity.
[8] Excluding the NBS.

Stock exchange trends

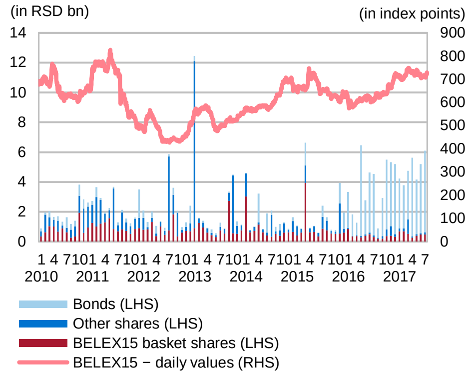
From the start of the year, BSE indices oscillated in both directions. At end-June BELEX15 was 0.8% and BELEXline 1.7% lower than at end-2016. At the same time, indices of stock exchanges in the region recorded various movements. The Sarajevo index fell the most (-11.1%), while the strongest growth was posted by the Romanian index (20.2%).

Total trading in shares went down in Q2 by RSD 1.8 bn from Q1 to RSD 1.4 bn. Around 78% of the shares were BELEX15 shares, and the highest trading volume was recorded in June (RSD 0.6 bn). Foreign investors participated in the total turnover by RSD 0.4 bn and net purchased shares during entire Q2, in the total amount of RSD 0.1 bn.

Unlike shares, trading in bonds continued up. Total trading in bonds amounted to RSD 13.6 bn in Q2, up by RSD 4.1 bn from Q1. Most of the trading related to long-term RS bonds, while June saw trading in EBRD bonds in the amount of RSD 60.0 mn, for the first time since they were issued. Participation of foreign investors in total trading in bonds came at RSD 0.2 bn.

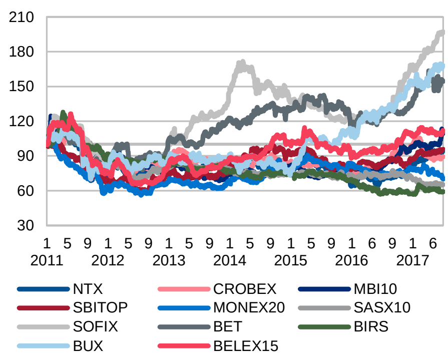
Influenced by the falling prices of shares, BSE market capitalisation went down by RSD 21.2 bn in Q2, coming at RSD 546.0 bn at end-June. Of this, MTP[9] capitalisation lost RSD 6.4 bn, and the regulated market – RSD 14.8 bn. The share of market capitalisation in estimated GDP declined by 0.5 pp and came at 12.9% at end-Q2.

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



Source: Belgrade Stock Exchange.

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



Sources: BSE and websites of regional stock exchanges.

2. Money and loans

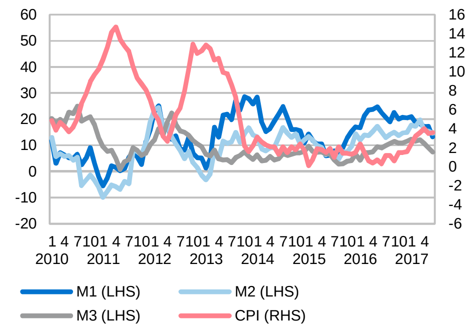
In Q2 money supply increased, primarily its dinar component. While the country's improved fiscal position restricted growth, money supply grew owing to higher private sector lending, whose y-o-y growth accelerated to 4.5% in June.

Monetary aggregates

Dinar reserve money continued down in Q2, by 2.1% in nominal and 2.6% in real terms. The decline of total reserve money was the same, also due to a somewhat

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

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



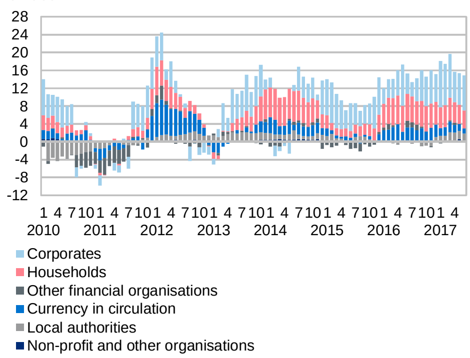
Sources: SORS and NBS.

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

	2016		2017		Share in M3 June 2017 (%)
	Sep.	Dec.	March	June	
M3	10.8	9.8	8.2	3.7	100.0
FX deposits	9.0	7.9	4.5	0.1	63.9
M2	14.3	13.3	15.6	10.6	36.1
Time and savings dinar deposits	-4.9	-0.4	20.3	14.7	9.0
M1	21.9	18.6	14.1	9.4	27.1
Demand deposits	24.7	21.1	16.5	11.9	20.5
Currency in circulation	14.6	12.1	7.5	2.1	6.7

Source: NBS.

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



Source: NBS.

lower amount of bank FX deposits with the NBS. Y-o-y, in June, dinar reserve money was lower by 6.7% and total reserve money by 4.8% in real terms.

The largest contribution to the decrease in dinar reserve money in Q2 came from the government (RSD 70.5 bn). Thanks to the results of fiscal consolidation[10] and above all to the growth in budget revenue, dinar government deposits with the NBS gained RSD 38.2 bn in Q2, despite the purchases of foreign currency to settle FX liabilities. Higher bank investment in repo securities worked in the same direction (by RSD 9.2 bn). On the other hand, bank dinar liquidity grew mostly on the back of FX purchases of the NBS in the IFEM (RSD 51.4 bn) and FX payment transactions with Kosovo and Metohija (RSD 13.0 bn).

Unlike in Q1, when they recorded a seasonal decline, funds in dinar transaction and saving and time deposits went up in Q2, which resulted in an increase in dinar money supply in Q2, whereby M1 rose by 1.4% and M2 by 1.1% in real terms.

Dinar money supply expanded the most in Q2 owing to dinar demand deposits, which gained RSD 12.1 bn. Funds increased the most in accounts of enterprises in manufacturing and construction, and funds in current accounts of households and non-profit organisations also rose. Dinar deposits of longer maturities grew (by RSD 1.5 bn), mostly owing to higher funds in accounts of OFO, while deposits of local authorities continued up in Q2 due to improved collection of fiscal revenues. Dinar household savings equalled RSD 50.7 bn in June.

FX household savings continued up. In Q2 they gained EUR 61.3 mn, amounting to EUR 8.8 bn in June. For this reason and owing to expanded corporate accounts, total FX deposits increased by EUR 112.4 mn in Q2. Still, due to the dinar's appreciation against the euro, expressed in dinars, they declined, while M3 lost 1.0% in real terms in Q2.

Y-o-y, growth in monetary aggregates slowed down since the start of the year – in June M1 was higher by 9.4%, M2 by 10.6% and M3 by 3.7% in real terms. Growth in monetary aggregate M3 was driven by growth in dinar and FX deposits of corporates and households, which resulted from growth recorded thus far and at the same time signals future economic growth.

[10] In the first six months of 2017, a general government surplus of RSD 44.1 bn was recorded.

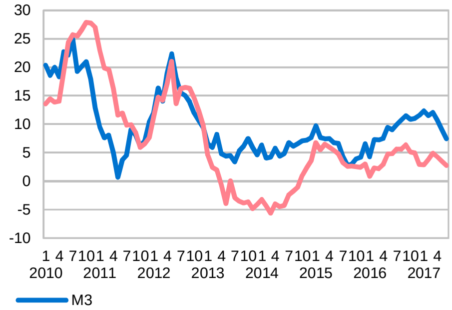
Loans

Excluding the exchange rate effect, in Q2 domestic loans expanded by 2.6%, rising both in households and corporates. This helped y-o-y growth in domestic loans, excluding the exchange rate effect,[11] to speed up to 4.5% in June. Compared to June 2016, household loans went up by 12.1%, while corporate loans went down by 1.2% due to the intensive write-off and sale of NPLs, and partly due to the reduced need of enterprises to borrow owing to improved financial results in 2016. Excluding the effect of NPL write-offs,[12] in June the y-o-y rise in corporate loans equalled 2.7%, and in total loans – 6.7%.

In view of the continued growth in economic activity, past monetary policy easing through which the NBS helped slash interest rates on dinar loans, low interest rates in the international money market which reflected on a drop in interest rates on FX and FX-indexed loans, and increased interbank competition, we expect credit activity to continue to expand throughout the rest of the year. Though intense efforts of banks to resolve NPLs are reducing the stock of loans, positive effects can be expected going forward, as the unburdening of banks' balance sheets from distressed assets creates space for new lending. Positive expectations going forward were also expressed in the EIB's CESEE Bank Lending Survey,[13] where the banking groups, whose subsidiaries operating in Serbia participated in the survey, stated that the potential of the Serbian market for lending has increased and its current market position and profitability indicators have improved.

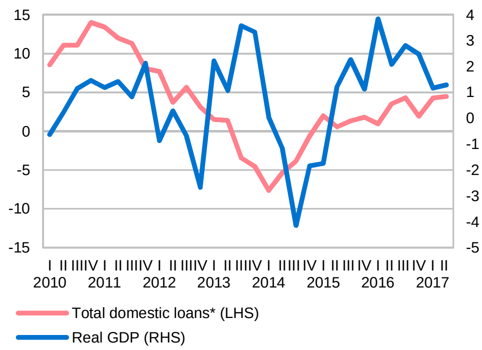
Excluding the exchange rate effect, in Q2 **corporate loans** increased by 0.9% or RSD 9.4 bn, mainly owing to better results in June. Growth was achieved despite the fact that banks continued to work on resolving NPLs, writing off RSD 2.5 bn and selling RSD 4.1 bn of these loans to entities outside the banking sector in Q2. By purpose, most bank receivables from corporates were still current assets loans (47.9%), while investment loans were around a third (32.6%). Owing to a recovery in investment lending in the past two and a half years, the maturity of the credit portfolio was extended, and in June

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



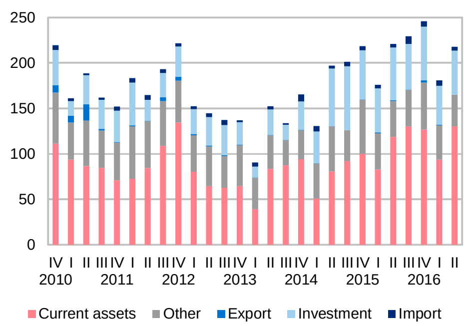
Source: NBS.

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



Sources: NBS and SORS.
* Excluding the exchange rate effect.

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



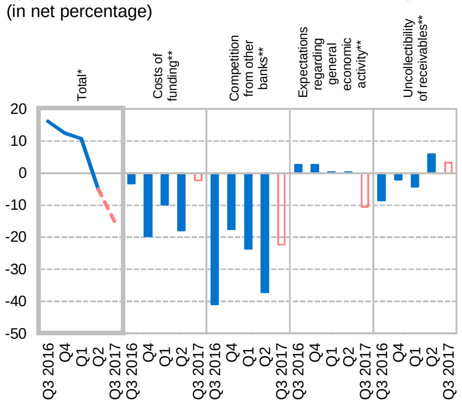
Source: NBS.

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

[12] From the start of 2016 to June 2017, banks wrote off around RSD 47 bn worth of corporate NPLs.

[13] Ten banks from Serbia participated in this survey. Their assets make up somewhat less than a half of total assets of the Serbian banking sector, http://www.eib.org/infocentre/publications/all/cesee-bls-2017-h1.htm.

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)

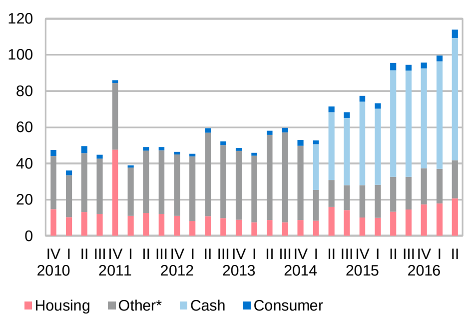


Source: NBS.

* 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.

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.

loans with original maturity of over two years made up around 64% of loan receivables from corporates.

Total new lending to corporates in Q2 (RSD 217.6 bn) went up by a fifth compared to Q1. Corporates continued to predominantly use current assets loans, which made up around 60% of new corporate loans, and the share of investment loans in new loans remained relatively high (22%).

According to the results of the July bank lending survey,[14] in Q2 banks relaxed credit standards for SMEs. Such assessments correspond to the results of the EIB's CESEE Bank Lending Survey, which indicate that standards in Serbia were relaxed similarly to other countries in the region. Standards were eased primarily due to interbank competition, less expensive sources of funding and higher risk propensity, which, together with further growth in economic activity, should contribute to the easing of standards that is also expected in Q3. Terms of borrowing of enterprises were more favourable on account of lower interest margins and associated costs, with the increase in the maximum loan amount. According to banks' assessments, loan demand of corporates continued to grow, primarily driven by the need to finance current assets and investment, and restructure debt. The same factors, with the dominant impact of investment financing, should be the main drivers of growth in demand in Q3 as well.

Household lending continued rising, going up by 4.0% or RSD 33.6 bn in Q2, excluding the exchange rate effect. Growth was still predominantly supported by cash loans (including refinancing loans), and increasingly more by elevated housing lending. Excluding the exchange rate effect, housing loans expanded by RSD 5.7 bn in Q2, which is the highest quarterly growth since Q3 2011, when the subsidised housing lending programme was in place.

The volume of new household loans in Q2 (RSD 114.1 bn) was higher by 19.4% than in the same period last year. Households continued to predominantly use dinar cash loans and refinancing loans, with the extension of the approved maturity. In Q2 these loans made up 59% of new household loans, 72% of which had maturity longer than five years. In line with the more favourable trends in the real estate market, housing lending continued to recover. In Q2, RSD 20.8 bn of these loans was approved,

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

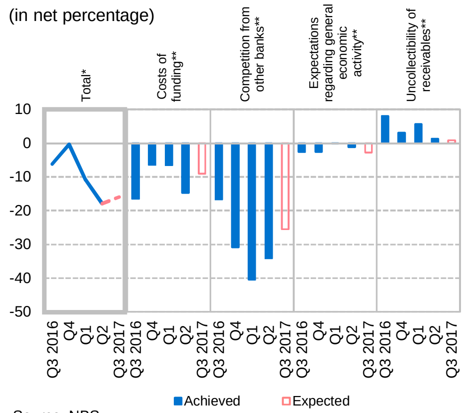
up by 56.6% from the same period last year. Although the majority of this increase related to new loans, refinancing of existing housing loans is notably higher, which can be linked to the use of the option to borrow at more favourable terms, given the considerable decline in interest rates in the previous period. Credit card borrowing and current account overdrafts increased slightly relative to Q1.

According to the results of the July bank lending survey, in Q2 banks continued to ease credit standards for households, primarily driven by interbank competition, as well as by less expensive sources of funding, more favourable outlook in the real estate market and positive expectations regarding economic activity. Banks continued to lower interest margins and associated costs and extend loan maturity. There was a considerable increase in demand, primarily for those loans for which standards were relaxed the most – dinar cash loans and refinancing loans, as well as FX-indexed housing loans. Loan demand was pushed up mostly by the need to refinance current obligations and purchase real estate, and by the rise in private sector employment and wages. The same factors should be the main drivers of its growth in Q3.

The **dinar share of total corporate and household loans** equalled 32.8% at end-June, up by 1.1 pp from end-March and by 1.6 pp from end-2016. Households continued to predominantly borrow in dinars (on average, 70% of new household loans are in dinars), thus contributing to a further rise in dinarisation of household loans, which rose by 2.4 pp in H1 (of which 1.6 pp in Q2), reaching 49.4% in June. In June, 19.4% of corporate loans were dinar loans, the same as at end-2016 and up by 0.3 pp from end-March.

The implementation of the NPL Resolution Strategy continues to yield goods results. This is confirmed by the assessments of the IMF and credit rating agencies. According to the results of bank lending surveys, the lower level of corporate NPLs in previous quarters worked towards the easing of credit standards. On a gross basis, the share of NPLs equalled 15.6% in June, down by 6.7 pp from August 2015, when the Strategy was adopted. From the start of the year, it declined by 1.4 pp (of which by 1.2 pp in Q2), which is supported by activities aimed at resolving NPLs on the one part, and by the growth in credit activity on the other. The decline in the share of

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)

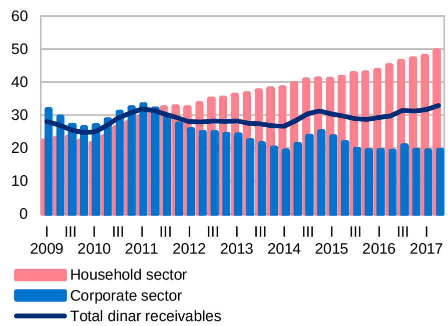


Source: NBS.

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

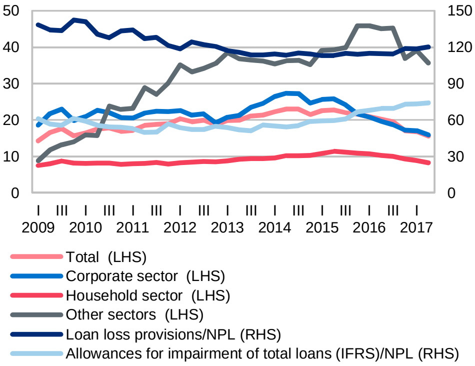
** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

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



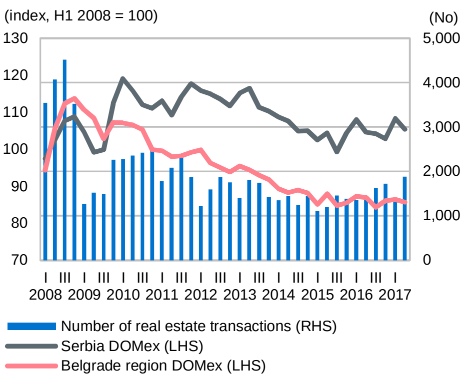
Source: NBS.

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



Source: NBS.

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



Source: National Mortgage Insurance Corporation.

NPLs in Q2 was the most pronounced in the corporate sector, where it declined by 1.2 pp to 15.9% in June,[15] which is the lowest value of this ratio since December 2008. Household NPLs declined by 0.7 pp to 8.2%.[16] Further, allowances for loan impairment came at 74.2% of NPLs in June (4.6 pp more than a year earlier), while loan loss provisions, at 120.2% in June, continued to fully cover the amount of gross NPLs. Also, the capital adequacy ratio of 22.4% in June points to the high capitalisation of the domestic banking sector.

3. Real estate market

Lower prices of real estate and interest rates on housing loans supported the recovery of the real estate market in Q2. Housing loan demand increased, and the Q2 growth in the number of real estate transactions was the highest in almost nine years.

Serbia's average real estate price, as measured by DOMex,[17] decreased by 2.7% in Q2, mostly due to the lower price of real estate in Vojvodina (9.9%). Real estate prices, as measured by this index, also inched down in the Belgrade region (0.8%). Y-o-y, Q2 prices of real estate rose slightly (by 0.8%).

In Q2, the average real estate price in Serbia equalled EUR 873.8 per square metre. The ratio of prices in the Belgrade region and the average for the rest of the country increased from 1.67 in Q1 to 1.74 in Q2 due to lower prices in Vojvodina. On the other hand, the average price in the Southern and Eastern Serbia region, as well as in the Šumadija and Western Serbia region moved up relative to Q1 (2.7% and 1.1%, respectively).

The number of real estate transactions[18] increased in all regions. Compared to Q1, growth equalled 44.1%, and compared to the same period last year – 31.0%, which is the largest quarterly growth in the number of real estate transactions in almost nine years.

Real estate transactions were more numerous in Q2 as a result of higher purchasing power owing to the rise in private sector wages and employment, lower costs of

[15] Includes companies and public enterprises. If only companies are observed, the share of NPLs in total loans came at 15.9% in June, down by 1.4 pp from end-March.

[16] With entrepreneurs and private households included, the share decreased by 0.7 pp to 8.9%.

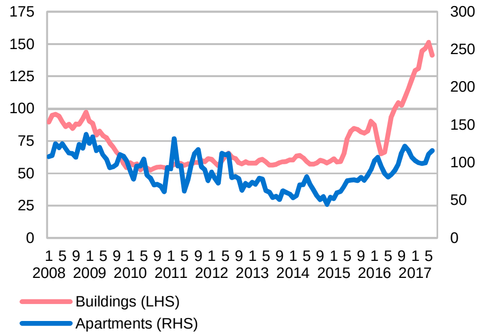
[17] The DOMex is published by the National Mortgage Insurance Corporation and relates only to real estate purchased by insured loans.

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

financing real estate purchases, and expanded real estate supply, which is indicated by the higher number of construction permits for residential buildings in the January–May period by around 25% y-o-y.

The EIB's CESEE Bank Lending Survey indicates robust growth in housing loan demand in the previous months, which was above average in the region. According to the July survey of the NBS, growth exceeded expectations from the April survey. Similar trends are expected in Q3 owing to the recovery of the real estate market and the record low interest rates on euro-indexed housing loans. The EIB's survey also indicates further recovery of the real estate market, and there are assessments that its positive impact on growth in loan demand in Serbia will be considerably stronger than in the region.

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



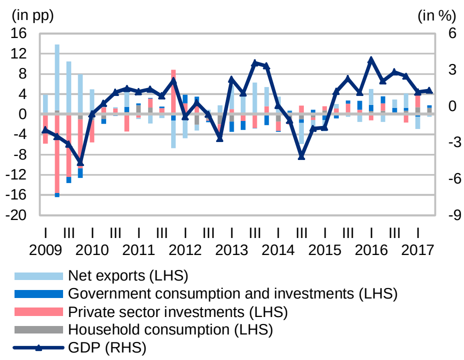
Sources: SORS and NBS calculation.

4. Aggregate demand

Faster GDP growth in Q2 (0.3% s-a) relative to Q1 (0.2% s-a) resulted mostly from the recovery in government investment due to more intense implementation of infrastructure projects. A positive contribution continued to come from other components of domestic demand, while the negative contribution of net exports declined from the start of the year. According to the preliminary estimate of the Serbian Statistical Office, GDP growth in Q2 measured 1.3% y-o-y and, according to the NBS assessment, it was primarily driven by private investment and household consumption.

According to the NBS estimate, GDP growth in 2017 will be driven by domestic demand. Investment is expected to grow further owing to the favourable macroeconomic and business environment and continued faster implementation of infrastructure projects, while the rise in real disposable income on account of higher employment and wages should push household consumption further up. A more favourable outlook for euro area growth and effects of investment from the previous period will continue to act as a fillip to the growth in exports of goods and services. However, the expected increase in imports of intermediate goods and equipment for industrial purposes could dampen the positive contribution of net exports to GDP.

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



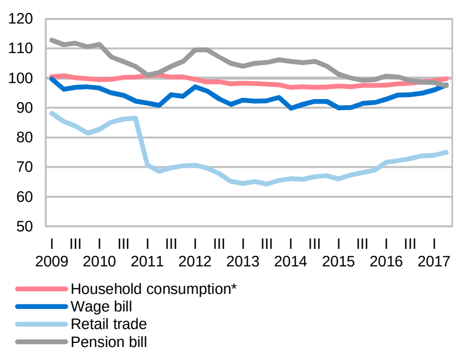
Sources: SORS and NBS calculation.
* NBS estimate for Q2 2017.

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

	2016		2017	
	Q3	Q4	Q1	Q2
Household consumption	**0.5**	**1.0**	**1.9**	**1.7***
Indicators				
Retail trade	6.8	6.7	3.7	3.4
Catering turnover	9.7	6.7	10.5	4.7**
Number of domestic tourists	11.2	10.9	2.7	10.1
Number of overnight stays of domestic tourists	11.6	9.4	-0.6	10.8
Consumer goods imports (BEC classification), nominal	1.3	1.8	11.8	3.1
Sources				
Private sector wage bill	5.3	6.4	5.8	6.0
Bill of total social transfers	1.0	-5.2	-1.6	-2.4
Pension bill	-0.2	-0.8	-2.3	-2.9
Net inflow of remittances, nominal	-6.1	-7.4	8.3	4.1
New consumer loans, nominal	-1.4	-0.1	6.1	15.1
New cash loans, nominal	59.1	20.0	41.9	14.7

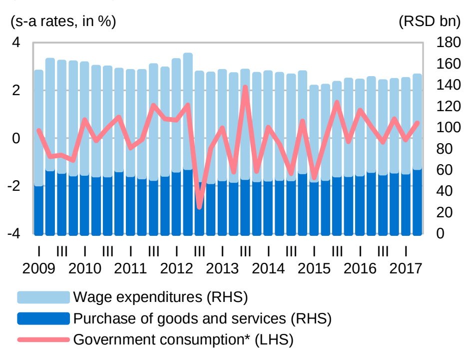
Sources: SORS and NBS calculation.
* NBS estimate.
** April-May.

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



Sources: SORS and NBS calculation.
* NBS estimate for Q2 2017.

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



Sources: SORS, Ministry of Finance and NBS calculation.
* NBS estimate for Q2 2017.

Domestic demand

Household consumption continued up in Q2. According to our estimate, it measured 0.6% s-a, contributing positively to GDP growth by 0.4 pp. Growth in household consumption is indicated by higher retail trade turnover in Q2 (1.2% s-a), by the movement of indicators in the area of tourism, i.e. the higher number of tourist arrivals and overnight stays, which rose by 5.9% and 7.0% s-a, respectively, in the same period, and by increased imports of consumer goods by 2.4% s-a. Household consumption growth in Q2 continued in y-o-y terms as well (1.7% in Q2), providing a positive 1.2 pp contribution to GDP.

In Q2, the primary sources of household consumption continued to record positive movements. Continued positive trends in the labour market, which is reflected in the growth of private sector employment and wages, drove the real private sector wage bill up by 2.7% s-a. In addition, the net remittances inflow continued up y-o-y in Q2, as did new loans for consumption.

According to our estimate, final **government consumption** also continued up in Q2 (0.6% s-a), providing a positive 0.1 pp contribution to GDP. This movement resulted from higher outlays for the purchase of goods and services, while wage expenditures decreased in real terms, which is in line with continued rightsizing of the public sector. Growth in this component of GDP continued in y-o-y terms as well (1.6%), with a positive contribution to GDP of 0.3 pp.

Fixed investment also continued up in Q2, resulting chiefly from the improvement in the business environment. Growth in investment was largely supported by the recovery of **government investment**, which, according to our estimate, measured 18.3% s-a (contribution to GDP by 0.5 pp). This is indicated by budget capital expenditure which accelerated considerably in Q2 for the purposes of infrastructure investment. Y-o-y, government investment went up by 8.1% (contribution to GDP by 0.3 pp).

Private investment also grew (1.0% s-a, according to our estimate), determined predominantly by higher investment into equipment, as indicated by greater domestic production (8.2% s-a) and higher imports of equipment (4.2 s-a). Y-o-y, private investment continued up in Q2 (3.1%) and gave a positive contribution to GDP of 0.5 pp.

A relatively high net FDI inflow was recorded in Q2 – close to EUR 490 mn (up by 20.7% y-o-y), remaining broadly diverse, both geographically and project-wise.

Investment loans were also used as a source of investment financing – these loans retained a relatively high share in total new corporate loans (around 22%). Higher profitability of enterprises opened up space for an expansion of investment from own sources.

A positive contribution to GDP also came from the increase in **inventories** (0.3 pp) in Q2. Inventories of finished industrial products grew by 3.0% s-a and, sector-wise, inventories grew the most in the chemical industry and the production of base metals, metal products and machinery and equipment, and, to a lesser degree, in the production of food and construction material.

Net external demand

Real growth in the exports of goods and services continued in Q2 (4.1% s-a), driven by positive movements in most sectors of manufacturing and the recovery of exports of agricultural products. On the other hand, industry's higher need to import equipment and intermediate goods, along with somewhat increased imports of consumer goods due to continued growth in household consumption, helped real growth of imports of goods and services (5.1% s-a) to outpace exports. As a result, net exports gave a negative contribution to GDP in Q2 (1.2 pp), though less than in Q1.

Exports continued to perform well owing largely to the positive effects of external demand, as shown by the movement of its indicator,[19] which continued up in Q2 (0.8% s-a), retaining broad geographical distribution. On the other hand, in y-o-y terms, import prices grew faster than export prices in Q2, thus terms of trade contributed less to foreign trade.

In Q2, commodity exports rose by 2.2% s-a in euro terms. Growth was still widely dispersed across manufacturing (in 14 out of 23 areas). The largest contribution to growth came from the exports of base metals, which rose by 15.3% s-a in Q2, on the back of higher investment in the domestic steel plant after it found a strategic partner. The exports of base metals surged by over 50% y-o-y in H1, and Hesteel Serbia became the second largest individual exporter. Higher production and exports of base metals, along with an increase in production in the rest of the metal industry, boosted the continued growth in the exports of metal products and machinery and equipment.

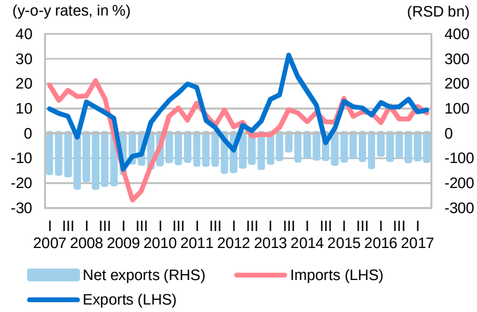
[19] The leading indicator of external demand for Serbian exports was constructed based on movements in the European Sentiment Indicator (ESI). It includes Serbia's 21 most important foreign trade partners – their shares in Serbian exports being used as weights.

Table IV.4.2 **Investment indicators**

	2016			2017	
	II	III	IV	I	II
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Industrial inventories	-0.1	6.1	-0.8	5.1	3.0
Industrial production of machines and equipment	2.4	-3.8	7.3	31.4	8.2
Exports of equipment*	6.8	0.0	5.7	-2.3	3.9
Imports of equipment*	-0.1	-0.9	3.4	4.1	4.2
Inventories of machines and equipment	2.9	-0.9	-8.1	7.2	23.5
Industrial production of intermediate goods	4.8	-1.5	-0.1	6.2	5.4
Exports of intermediate goods*	3.7	1.0	9.1	8.5	5.2
Imports of intermediate goods*	0.6	1.2	8.3	6.3	2.9
Inventories of intermediate goods	0.8	7.4	-0.2	5.1	4.6
Industrial production of construction materials	1.5	-0.4	1.0	1.8	-0.1
Inventories of construction materials	2.6	2.7	3.9	5.0	3.3
Government investment**	3.8	-1.0	-8.1	-9.3	18.3

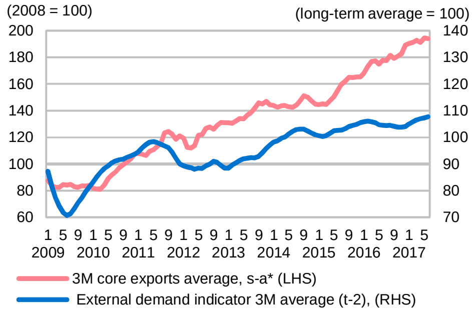
Source: SORS and NBS calculation.
* Exports and imports are denominated in euros.
** Government investment spending is deflated by the industrial producer price index.

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



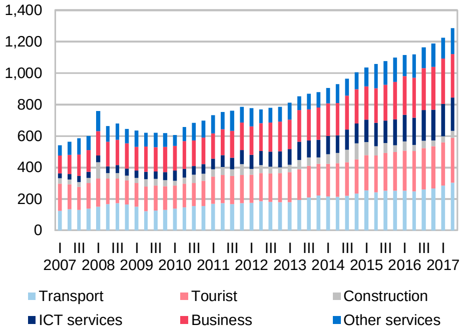
Sources: SORS and NBS calculation.
* NBS estimate for Q2 2017.

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



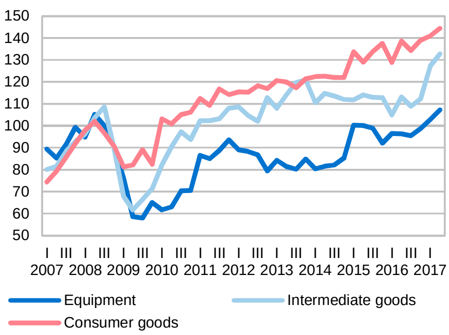
Sources: European Commission, SORS and NBS.
* Excluding agriculture, energy products, motor vehicles and base metals.

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



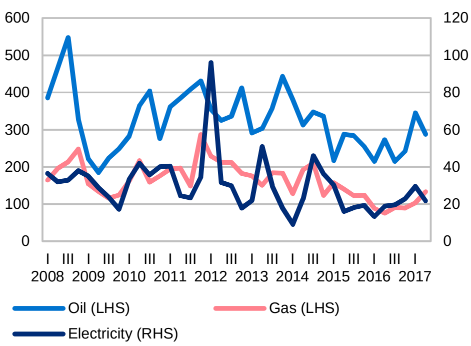
Sources: SORS and NBS calculation.

Chart IV.4.7 **Imports by key components**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Chart IV.4.8 **Energy imports**
(s-a data, in EUR mn)



Sources: SORS and NBS calculation.

Positive trends also continued in other export-oriented fields, such as the production of rubber and plastic products, and chemical products.

Conversely, the automobile industry recorded a decline in exports in Q2, mostly owing to a slowdown in exports of Fiat Automobiles Serbia, which was in part offset by greater exports of other companies in this field. Additionally, the production of electrical equipment and computers and electronic products also saw lower exports, as did petroleum products, in part owing to the decline in their prices in Q2.

Exports of agricultural products rose, thanks mostly to the recovery of the exports of cereals, which was considerably subdued in January and February because of cold weather. In terms of quantity, the exports of wheat were by around 50% higher than in Q1, and of corn – by around 40%. Besides cereals, the exports of fruit and vegetables and animal feed also increased in Q2, while the exports of sugar and meat were similar as in Q1.

Growth in the exports of services continued up in Q2 (5.0% s-a), driven predominantly by higher exports of transport services. Exports also rose in tourism and construction services, as well as in information and communications services. On the other hand, the exports of business services declined in Q2. Growth in the exports of services accelerated in Q2, up by 16.2% y-o-y.

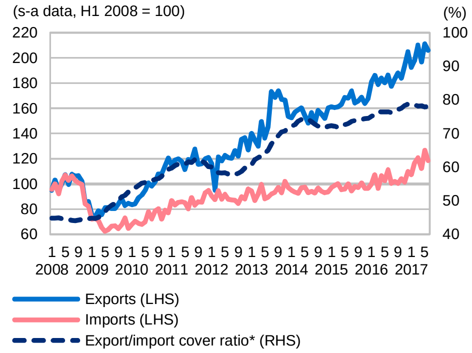
In Q2, growth in commodity imports in euro terms (3.7% s-a) greatly resulted from higher needs of the industry for equipment and intermediate goods, whose imports expanded by 4.2% s-a each. In addition, in line with previous expectations, continued growth in household consumption reflected on the higher imports of consumer goods (2.4% s-a) in Q2.

By economic destination of the EU, imports of capital and intermediate goods grew, which is in line with the above mentioned needs of the economy, most notably manufacturing. The imports of durable consumer goods also grew, while those of non-durable consumer goods were lower than in Q1.

Energy imports were lower than in Q1 (4.2% s-a), as expected. Specifically, exports of petroleum products and electricity declined, in part due to the recovery of domestic production, and to lower import prices in case of petroleum products. On the other hand, natural gas imports grew in Q2, which can be linked to higher activity in industry.

The export/import cover ratio remained high in Q2 – in June it amounted to 78.2%, up by 1.8 pp relative to the same month a year before. As good export performance persisted, in June commodity exports stood at 106.0% above their pre-crisis level,[20] while the strong growth in commodity imports from the start of the year helped it stand at 18.4% above the pre-crisis level in June.

Chart IV.4.9 **Commodity trade in euros**



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

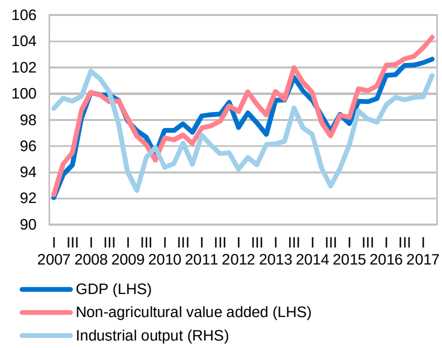
5. Economic activity

Manufacturing continued to reflect positively on GDP growth (0.3% s-a), driven by higher external demand and investment from the previous period, and by further recovery of domestic demand, which at the same time contributed to growth in most service sectors. In addition, mining and energy started to recover in Q2, which, together with continued growth in manufacturing, pushed GDP growth to 1.3% y-o-y in Q2, according to preliminary estimates of the Serbian Statistical Office. At year level, GDP growth should be driven by industry and service sectors, in line with movements in H1. Construction is also expected to boost GDP growth – its performance should improve in H2, while agriculture is expected to be a drag, in line with previous expectations, and taking account of the excellent previous agricultural season.

The recovery that commenced in the sectors of mining and electricity, gas and steam supply, and continued positive trends in manufacturing led to faster GDP growth in Q2 than in Q1, which equalled 0.3% s-a, according to the NBS estimate. Economic growth is estimated to have arrived at 0.8% s-a in Q2 as measured by NAVA, indicating that negative effects mostly came from agriculture. In addition to industry, GDP benefited from higher service sector activity. Economic activity stayed above the pre-crisis level[21] in Q2 – by 2.6% in terms of GDP, or 4.3% as measured by NAVA.

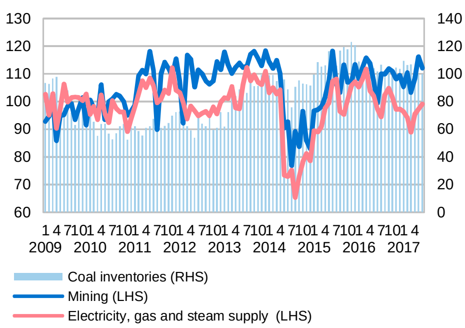
According to the preliminary estimate of the Serbian Statistical Office, GDP growth accelerated from 1.2% y-o-y in Q1 to 1.3% y-o-y in Q2. According to the NBS estimate, GDP growth in Q2 was mostly driven by industry, which picked up after the effects of cold weather at the start of the year. Service sectors continued to

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



Sources: SORS and NBS calculation.

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

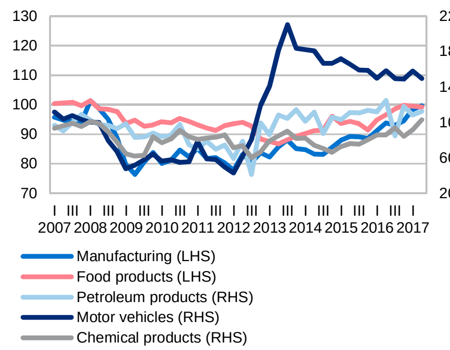


Sources: SORS and NBS calculation.

[20] H1 2008.

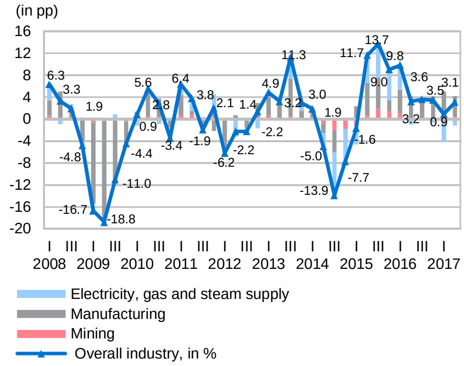
[21] H1 2008.

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



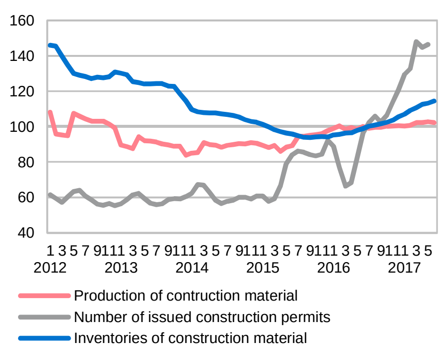
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

provide a positive contribution, owing to continued growth in household consumption. On the other hand, due to last year's high base, agriculture dropped y-o-y in Q2 as well, acting as a drag on GDP.

Following the contraction in the physical **volume of production in Q1, the sectors of mining and electricity, gas and steam supply** recovered in Q2, with the physical volume of production up by 5.5% s-a and 4.4% s-a, respectively. The physical volume of production in mining grew on the back of higher exploitation of coil (7.9% s-a) and, to a lesser extent, higher exploitation of metal ores (11.1% s-a). Furthermore, manufacturing continued to record good performance – its physical volume of production grew by 1.2% s-a in Q2.

In Q2, growth in **manufacturing** was highly diversified among export-oriented sectors, which was aided by the effects of the continued activation of investment and the rise in external demand, on the supply side. Sector-wise, the strongest positive contribution to growth in manufacturing came from the chemical and oil industry, production of machinery and equipment, base metals and metal products, rubber and plastic and electrical equipment. On the other hand, contracted physical volume of production in Q2 was recorded in the automobile and pharmaceutical industries.

Growth in industrial production accelerated to 3.1% y-o-y in Q2, with continued positive contribution of manufacturing (3.8 pp), around 80% of whose sectors grew y-o-y. Mining was another positive factor, contributing 0.4 pp, having recovered from the effects of cold weather. Conversely, the physical volume of production in electricity, gas and steam supply y-o-y dropped in Q2 (6.2%), though the decline decelerated considerably relative to Q1 (14.5%).

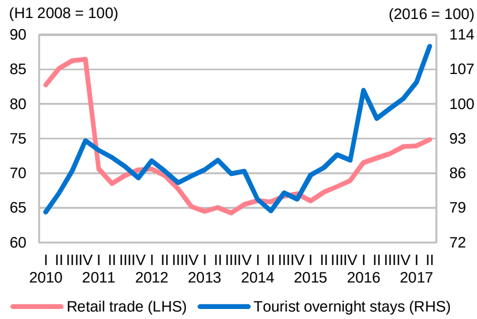
Indicators in construction show that this sector should record more positive movements in the coming period than in early 2017. This is attested by higher government capital expenditure, which is mostly channelled to infrastructure projects, and by the continued rise in formal employment in construction. Also, construction is likely to continue to recover during the year, as indicated by the higher number of issued construction permits, 84.9% y-o-y in the January–May period, and a 32.3% y-o-y rise in the envisaged value of the works during the same period.

According to preliminary estimates of the Serbian Statistical Office, in 2017 wheat production was by around 20% lower at the yearly level, in part due to the smaller surface area of sowed land, and in part to last year's record yields. On the other hand, the surface area of sowed industrial crops was large by around 10%, while the surface area of sowed corn was similar to last year's. Since the official estimates of corn and industrial crop yields are currently unavailable, they were assumed to be at the multi-annual average at the time when the projection was made.

According to the NBS estimate, most **service sectors** gave a positive contribution to GDP. Indicators in trade and food and accommodation services, available on a monthly level, grew in Q2 as well. Thus, retail trade turnover grew by 1.2% s-a, while total tourist arrivals rose by 5.9% s-a and their overnight stays by 7.0% s-a.

At year level, GDP growth in 2017 should be driven by industry and services, in line with movements in H1. Industry is expected to grow on the back of external demand and continued activation of investment, while further growth in household consumption will support growth in the service sectors. Some positive contribution to GDP should come from construction as well, given that its indicators point to more positive movements in the rest of the year. In line with previous NBS expectations, agriculture should act as a drag on GDP in 2017, due to the high base owing to last year's remarkable season.

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



Sources: SORS and NBS calculation.

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

	2016			2017	
	Q2	Q3	Q4	Q1	Q2*
GDP (s-a, in %)	**0.0**	**0.7**	**0.0**	**0.2**	**0.3**
Agriculture	0.0	0.4	-0.3	-0.3	-0.5
Industry	0.0	0.0	-0.1	0.2	0.5
Construction	0.0	0.1	-0.1	0.0	0.0
Services	0.2	0.2	0.2	0.2	0.3
Net taxes	0.1	0.0	0.1	0.1	0.0

Sources: SORS and NBS calculation.
* NBS estimate.

Text Box 2: Economic Sentiment Indicator (ESI) for Serbia

Indicators obtained by surveying companies and households are often used to assess the current economic developments and for the purpose of short-term forecasts. The advantage of these indicators lies in their relatively short-term availability (immediately upon the completion of or even during the reference period), therefore they are used as the leading indicators of economic developments, i.e. they suggest the evolution of certain economic variables before the official statistics is published. One such indicator (Economic Sentiment Indicator – ESI) was created by the European Commission[1] and is calculated for EU member states and for the candidate countries (country level), and also at the EU and euro area aggregate levels. In addition to the benefit of short-term data availability, computation and monitoring of this indicator was also motivated by the need to harmonise the assessments of the EU and candidate countries' economic conditions, providing also for the possibility of a better comparison of economic situation and outlook at country level.

The Economic Sentiment Indicator is calculated on the basis of respondents' answers to questions concerning the assessment of the current and future economic developments. The Indicator comprises answers to fifteen questions in total, grouped in five sectors – industry, retail trade, other service sectors, construction and consumers. In Serbia the research is carried out in the form of a survey, based on the stratified sample,[2] and the survey is conducted by the Statistical Office. Questions are most often qualitative, and the responses are most often defined so as to point to improved, deteriorated, or unchanged sentiment of respondents. Responses are quantified by calculating the net percentage, i.e. the difference between the number of responses giving positive expectations and the number of responses giving negative expectations of economic developments expressed in percentage points. Net percentages obtained in this manner are then seasonally adjusted, and aggregated into sector-specific indicators of great analytical importance, particularly in construction and other service sectors, in the case of which the official statistics is available on a quarterly basis and with a greater time lag. Sector-specific indicators are further combined to construct the economic activity indicator for the economy as a whole. The following **weights** are allocated to **different sectors**:

– industry 40%,

– retail trade 5%,

– other service sectors 30%,

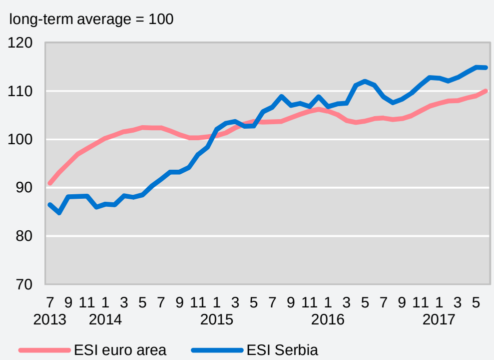
– construction 5%, and

– consumers 20%.

The composite economic sentiment indicator is calculated as an index with long-term average taken as the base period, so the index movement above 100 indicates the economic sentiment above the long-term average and vice versa.

As of May 2013, this indicator has been calculated for Serbia, too, and its development (Chart O.2.1) points to the significant improvement of sentiment in terms of economic conditions in Serbia. This indicator reached its long-term average in early 2015, which is attributable to the initiated structural reforms. Thereafter, the economic sentiment indicator was constantly above the long-term average. This was driven primarily by the achieved macroeconomic stability, continued implementation of structural reforms and improvement of the business ambience, better than expected effects of fiscal consolidation, as well as labour market recovery.

Chart O.2.1 **Economic sentiment indicators for Serbia and the euro area**
(3m moving averages)



Sources: European Commission and NBS calculation.

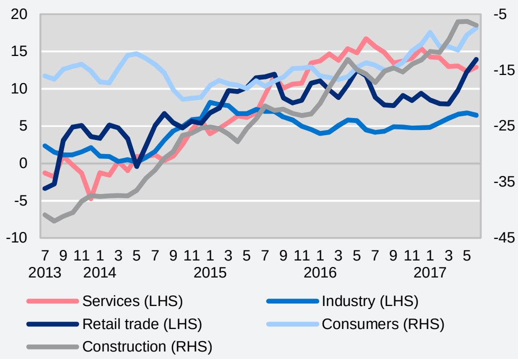
[1] https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys/methodology-business-and-consumer-surveys/methodological-guidelines-and-other-documents_en.

[2] The sample covers 1,541 enterprises in the industry sector, 1,641 enterprises in retail trade, 1,649 enterprises in the other service sectors, 887 enterprises in construction, and 1,200 households in the consumers sector.

In addition to domestic factors, euro area growth was also conducive to the brightened economic sentiment. This growth, supported with the ECB expansionary monetary policy, was also signalled by the same indicator constructed for the euro area, which has been moving above the long-term average since the beginning of 2014. A high positive correlation between the developments of these indicators for Serbia and the euro area is also expectedly pronounced, at 0.83 in the reference period (Chart O.2.1).

From a sectoral perspective, economic sentiment has improved in all sectors since mid-2013 (Chart O.2.2). Industry and retail trade sectors' confidence moved within the positive zone almost throughout the entire reference period (July 2013 – June 2017), indicating the higher number of respondents expecting improvement of economic conditions relative to the number of those expecting deterioration. Judging by this indicator, the major progress was made in the construction sector (decrease in the negative net percentage from 40.8 pp in mid-2013 to 7.0 pp in June 2017), which can be linked to the improved legislation governing this area (introduction of the electronic issuance of construction permits, reform of the retail estate cadastre in terms of shortening the deadline for property registration and alike). Economic sentiment in the other sectors of services also improved, as evidenced by the positive value in the net percentage of 12.9 pp in June 2017, compared to July 2013 (-1.3 pp), and also in the consumers sector (from -16.0 pp to -7.5 pp).

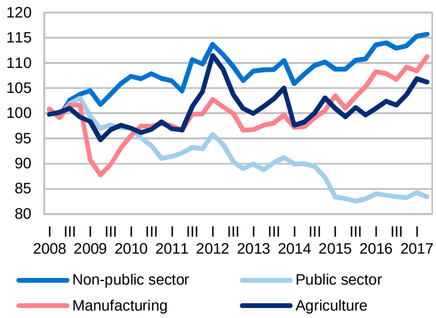
Chart O.2.2 **Sector-specific economic sentiment indicators for Serbia**
(3m moving averages, in net percent)



Sources: European Commission and NBS calculation.

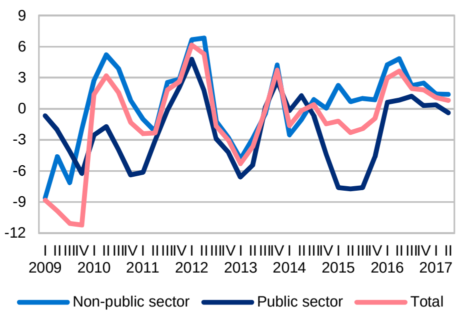
With the exception of a slight fall in January and February, attributable to cold weather, the upward trend of the economic sentiment indicator continued in H1 2017. Economic expectations remained on the increase in most of the observed sectors, possibly suggesting that economic activity growth is widely dispersed by sectors, while the lasting favourable economic sentiment in the euro area, as well, should be an incentive on the external demand side. This, together with further implementation of structural reforms and preservation of macroeconomic stability, should have a positive impact on economic agents' sentiment in the coming period, and reflect on their decisions regarding investment and consumption.

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



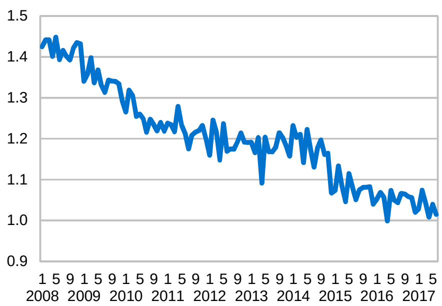
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

6. Labour market developments

Labour market recovery, led primarily by the positive private sector developments, continued in Q2. Economic growth was accompanied by wage growth, with a concurrent increase in the number of the formally employed and the decrease in the number of the unemployed.

Wages and labour productivity

The net wage continued to rise in real terms (0.2% s-a) in Q2, pushed by the higher private sector wage (0.3% s-a), while on the other hand, the real net wage in the public sector was cut (1.1% s-a), leading to the further narrowing of the gap between the average public and private sector wages, to 1.5% in June. The total real net wage continued to rise at the y-o-y level (0.8%) as well, which is also attributable to the persistent wage rise in the private sector (1.4% y-o-y). At the same time, the public sector real wage was lower by 0.4%.

Observed by industries, the highest s-a increase in real net wages was recorded in manufacturing and trade sectors, which were the main drivers of economic growth since the beginning of the year. Real net wages also increased in the real estate and financial sectors, and to a lesser extent in construction. On the other hand, a lower real net wage was recorded in mining and energy, agriculture and service sectors with high shares of the state (public administration, education, health, and social protection).

The increase in the private sector average wage and employment contributed to the further growth of total wage bill in Q2 (1.7% s-a), while, on the other hand, a lower average wage and continued public sector rationalisation consequently led to the fall in the same sector wage bill. The average nominal net wage paid in the Republic of Serbia in Q2 equalled RSD 48,670, up by 4.6% relative to the same period the year before.

Productivity growth in the overall industry recorded in Q2 (1.3% s-a) was lower than the rise in the real gross wage (2.2% s-a), and unit labour costs increased on those grounds by 0.9% s-a.

Employment

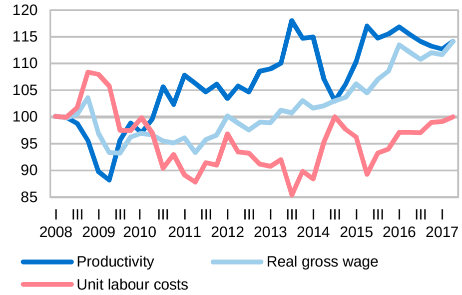
According to our estimate, faster economic growth in Q2 and persistent efforts to curb the grey economy continued to have a positive impact on formal labour market developments. According to the Statistical Office data, obtained from the Compulsory Social Insurance Central Register, the number of people in formal employment increased by 1.4% in Q2. Such development resulted from a continued rise in the number of people employed by legal entities and the number of entrepreneurs and their employees, while the number of registered individual agricultural producers fell. In y-o-y terms, the total number of people in formal employment increased by 2.7% in June.

Increased formal employment in Q2 is a result of increased private sector employment, to the largest extent, primarily in manufacturing and trade, and to a lesser extent in the transport sector, accommodation and food services and professional, scientific, innovation and technical activities. In Q2, financial and education sectors recorded lower employment.

Elevated recruitment needs, combined with active labour market policies, continued to produce results in terms of reducing unemployment. According to the data of the National Employment Service, the number of the unemployed in Q2 was additionally cut by 42,470 people and stood at 645,426 in June. In Q2, unemployment declined across all occupation groups, primarily in occupations connected with manufacturing and trade, which is in line with increased employment in those sectors. In Q2, the number of unemployment benefit recipients also fell, to 36,385 persons in June.

Labour Force Survey data for Q1 were in line with expectations, since due to seasonal factors the unemployment rate recorded an increase and the employment rate a decrease, compared to Q4 2016. However, compared to Q1 2016, the most significant labour market indicators improved, confirming the positive movements, indicated by the formal sources (the Compulsory Social Insurance Central Register and the National Employment Service). Hence, the employment rate in Q1 (44.2%) was up by 1.6 pp relative to the same period the year before, driven by increased employment in industry and services, with informal employment dropping by 1.3 pp, to 19%. Also, the same period saw a cut in the unemployment rate by 4.4 pp, to 14.6%, as well as in long-term unemployment and unemployment across all age groups.

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



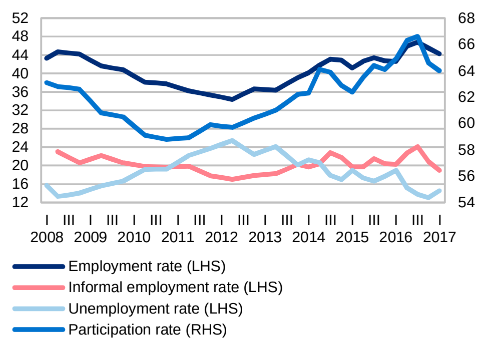
Sources: SORS and NBS calculation.

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

	2016		2017	
	Q3	Q4	Q1	Q2
Total number of formally employed	0.6	0.1	0.5	1.4
Employed with legal persons	0.7	-0.1	0.5	1.3
Entrepreneurs and their employees	1.2	0.8	1.1	2.7
Individual farmers	-1.5	0.2	-1.1	-1.5
Unemployed persons	-3.1	2.4	-1.9	-6.2
First-time job seekers	-2.8	0.9	-2.6	-5.1
Used to be employed	-3.2	3.1	-1.5	-6.7

Sources: SORS and National Employment Service.

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



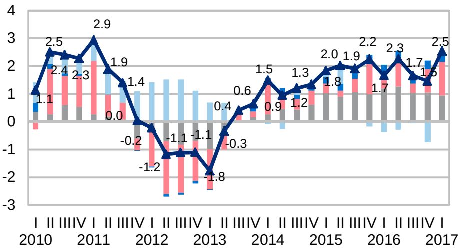
Source: SORS.

7. International environment

Positive economic developments in the euro area continued in Q2 2017 owing to accelerated growth of GDP which was widely spread across sectors and regions. The speedier growth in the euro area spurred a faster rise in GDP in Central and South East European countries. For the majority of countries in Europe, such movements helped improve their economic outlooks and revise their GDP growth projections upwards for this and the following year. By contrast, GDP growth in the USA was revised down due to subdued economic movements at the start of the year and the risk pertaining to the implementation of the announced stimulative economic policy measures.

Despite the faster-paced economic growth, inflationary pressures remained weak in the majority of countries, mostly owing to the repeated fall in oil prices in the global market. Because of the low inflationary pressures, central banks of most countries still opted for accommodative monetary policy measures. An exception to this was the Fed which continued with monetary policy normalisation. Though expected to be gradual, the pace of the Fed's normalisation in the period ahead will affect the global capital flows.

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

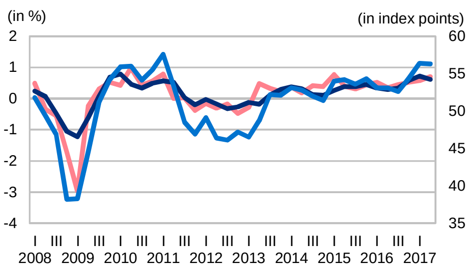


Source: Eurostat.

Economic activity

The euro area seems to have struck the path of sustainable growth. GDP growth in Q1 2017 equalled 0.5% s-a and was led by domestic demand, as well as widely spread over sectors and geographies. Private consumption remained a stable driver of growth owing to a rise in real disposable income and consumer confidence, with a strong contribution from investment led by favourable financing terms, stepped-up demand for real estate and the need for equipment upgrades. On the production side, the greatest contribution came from the construction and services sectors and, to a lesser degree, from industry.

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

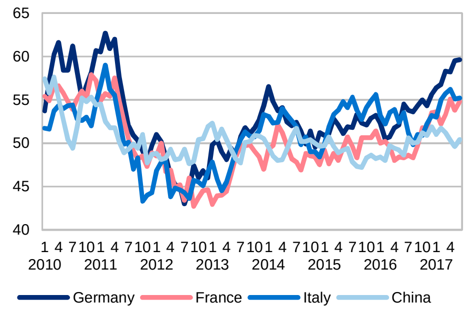


Sources: Eurostat, Markit Group and Banca d'Italia.
* Eurostat's preliminary flash estimate for Q2 2017.

Movements in leading indicators suggest that GDP growth could be even faster in Q2, as confirmed by the Eurostat flash estimate (0.6% s-a). On average, the PMI Composite index recorded the highest values in six years during Q2, while the Economic Sentiment Indicator was up by 1.9% on average compared to Q1. The recovery continued in the labour market as well, with the unemployment rate declining further – down to its lowest in eight years (9.1%).

With the exception of France, all largest euro area economies recorded faster growth in Q1, while key indicators suggest a slight acceleration could also be expected in Q2. Industrial production on the production side and private consumption and investment on the expenditure side are likely to be the main drivers of GDP growth in Germany in Q2. On the other hand, Italy expects the largest contribution to growth to come from higher external demand and investment, whereas the contribution of private consumption is limited due to the relatively high unemployment and a slower rise in wages relative to the euro area average.

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

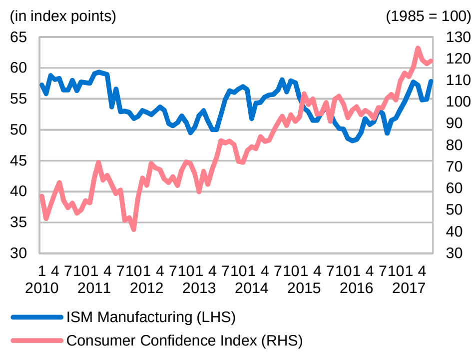


Source: Markit Group.

Private consumption and investment are likely to remain the drivers of growth in the coming period, with the anticipated positive contribution of net exports on account of the recovery and acceleration of growth in emerging economies. According to the ECB's June estimate, euro area GDP growth should equal 1.9% in 2017, which is up by 0.1 pp relative to the March forecast and in line with the latest estimates of the IMF and Consensus Forecast. The ECB expects a similar growth rate in 2018 (1.8%), while the IMF and Consensus Forecast estimates have also been revised up to 1.7%.

GDP in the USA edged up 0.3% s-a in Q1, still led by private consumption. Also, fixed investment rose more quickly since the start of the year, mostly in the energy sector as a result of the recovery in oil prices. Owing to stronger external demand and depreciation of the dollar, net exports also gave a positive contribution.

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

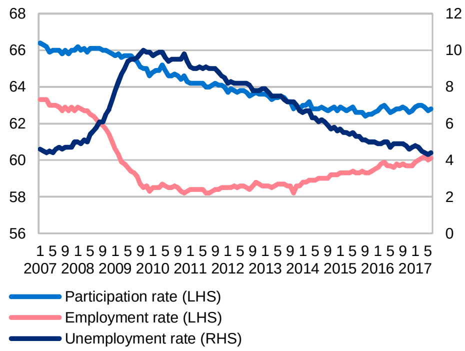


Source: Institute for Supply Management, Conference Board.

Following a weaker beginning of the year, it is estimated that GDP growth in Q2 picked up the pace – according to the preliminary assessment of the US Bureau of Economic Analysis, it measured 0.7% s-a. It should still be led by private consumption on account of favourable labour market developments, i.e. low unemployment rate (4.4% in June) and the fact that the average nonfarm payrolls remained relatively high at around 200,000 a month. Also, the Consumer Confidence Index was kept high in Q2 as well. The ISM Manufacturing Index, which was higher in June than in March, also indicates faster GDP growth.

Results at the start of the year and the risk regarding the implementation of the announced economic stimuli induced the IMF to revise down the projection of GDP growth in the USA from 2.3% to 2.1% in 2017 and from 2.5% to 2.1% in 2018.

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



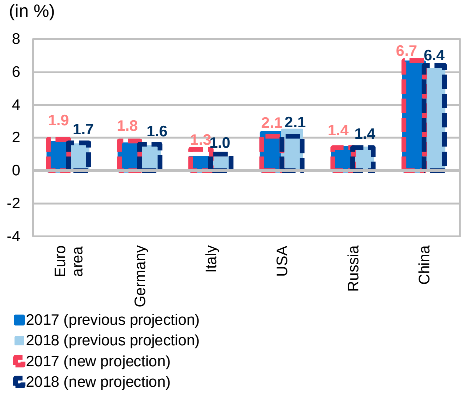
Source: Bureau of Labor Statistics.

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

	April 2017		July 2017	
	2017	2018	2017	2018
Poland	3.3	3.2	3.7	3.4
Czech Republic	2.5	2.6	2.9	2.6
Hungary	3.2	3.1	3.7	3.3
Albania	3.7	3.9	3.8	3.9
Bulgaria	3.1	3.0	3.3	3.2
Bosnia and Herzegovina	3.0	3.3	3.0	3.2
Macedonia	3.1	3.4	2.7	3.4
Romania	3.8	3.2	4.6	3.5
Slovenia	2.7	2.5	3.7	2.8
Croatia	3.0	2.7	2.8	2.6

Source: Consensus Forecast.

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



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

The recovery of investments and robust private consumption, prompted by favourable movements in the labour market and fiscal stimuli in some countries, led to faster **GDP growth in Central European countries** in Q1. An additional impetus came from external demand, largely on account of growth in the euro area. High growth, led by the same factors as in Q1, is anticipated in the coming period as well. Hence, the July Consensus Forecast estimate of growth in the region in 2017 was revised up by 0.4 pp to 3.5% relative to April, while growth of 3.2% is anticipated in 2018.

Domestic demand, notably private consumption, was the main driver of **GDP growth in Q1 in South East European countries** as well, where Romania stood out with the y-o-y growth rate of 5.7%. By contrast, though exports remained relatively high, the faster rise of imports in the majority of countries, triggered by higher consumption and investment, resulted in a negative contribution of net exports to GDP movements. According to the July Consensus Forecast estimate, in 2017 the region as a whole is expected to see a 3.8% rise in GDP, up by 0.4 pp from April, while estimated growth in 2018 is 3.3%.

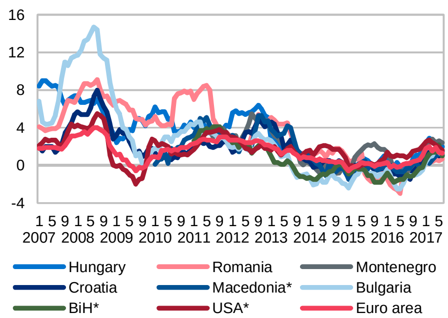
The recovery of **Russia's GDP** continued in 2017 (0.5% y-o-y in Q1) chiefly led by domestic demand. Private consumption continued to rise on the back of increased real wages, while investment growth was spurred by the loosening of monetary conditions. Rising industrial production and retail turnover indicate that GDP continued up in Q2 as well. According to the July Consensus Forecast, GDP growth estimate for 2017 was revised up by 0.2 pp to 1.4%, much like the IMF forecast, while the projection for 2018 was kept at 1.7%, which is higher than the IMF forecast (1.4%). To a degree, the growth rate in the period ahead will also be determined by movements in oil prices.

China's GDP growth in Q2 (1.7% s-a) was faster than in Q1 (1.3% s-a). On the expenditure side, GDP growth was propelled by higher private consumption, as indicated by increased retail trade, and exports led by higher external demand. On the other hand, investments exerted a drag on growth, largely due to smaller real estate investments, whereas infrastructure investments, supported by government measures, were higher than a quarter earlier. In y-o-y terms, GDP rose at the same pace as in Q1 (6.9%), hence H1 recorded speedier growth relative to the government's official forecast for 2017 (6.5%). This opens room for undertaking reforms to mitigate the current imbalances in the economy and enable sustainable economic growth. According to the IMF, China's GDP growth for 2017 is forecast at 6.7%, while a slowdown to 6.4% is expected in 2018.

Inflation movements

Faster global economic growth has not yet resulted in any major inflationary pressures. A majority of countries still boast a relatively low inflation, primarily due to dampened energy prices. Even so, core inflation remained low on account of the still moderate rise in wages and subdued pressures on the demand side. In the **euro area**, Serbia's key trade partner, inflation edged down from 1.9% y-o-y in April to 1.3% y-o-y in June. The decline in inflation in Q2 is chiefly attributable to the fall in energy prices. At the same time, core inflation ranged from 0.9% to 1.2% y-o-y. Taking oil futures into account, the ECB expects inflation to hover around current levels in the following several months. Inflationary pressures also remained low according to the ECB, with no plausible signs of increase given that cost-push pressures at home, including wage increase, are still weak.

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



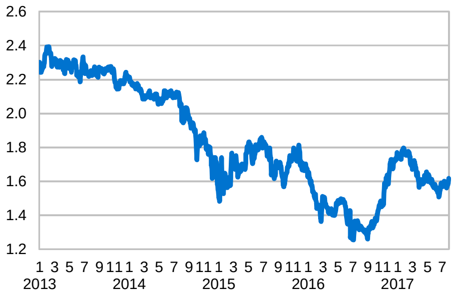
Sources: Eurostat, Bureau of Labor Statistics and statistical offices of selected countries.
* CPI.

Going forward, the ECB expects that monetary policy incentives, accelerated economic growth and the gradual absorption of economic slack will push euro area inflation slightly upwards, whereas the high base from energy prices will be the main factor working in the opposite direction. Relative to March, the ECB's June inflation projection for 2017 has been revised down by 0.2 pp to 1.5%, and for 2018 by 0.3 pp to 1.3%. Inflation expectations were lowered to similar levels according to the ECB Survey of Professional Forecasters published in July: to 1.5% for 2017 and to 1.4% for 2018, while in 2019 inflation is expected to speed up to 1.6%. Compared to the previous survey, expectations are lower by 0.1 pp for each year. Long-term inflation expectations (for 2022) are still at 1.8%. These survey-based expectations again came above long-term market expectations which fell to 1.6% in April and dipped further to 1.5% in June only to return to 1.6% in July.[22]

That inflationary pressures are still low across most **Central and Eastern European countries** as well is an estimate of the majority of analysts, despite the fact that in some of these countries Q2 saw the highest inflation levels in several years: Bosnia and Herzegovina 2.2% y-

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

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



Source: Thomson Reuters.

o-y in May, Bulgaria 1.7% y-o-y in April, Macedonia and Romania 1.5% and 0.7% y-o-y in June. Other countries recorded the highest y-o-y inflation rates in the past several years in Q1 but reduced them by the end of Q2: Croatia to 1.1%, Hungary to 2.0%, Montenegro to 2.4%. The main impact on inflation movements came from the y-o-y changes in oil prices – first a gradual waning of the low base effect and then a new fall in the global prices of oil. In most countries, core inflation remained relatively low due to the rising yet still relatively subdued pressures on the demand side. Though still high when compared to other countries in the region, inflation in Turkey dipped mildly in Q2 – to 10.9% y-o-y in June. In Russia, after measuring 4.1% y-o-y in April and May, inflation rose to 4.4% in June largely on account of the increase in the prices of fruit and vegetables. According to analysts, the central bank is easing its monetary policy and can still achieve its 4.0% inflation target by end-year given that core inflation slowed down to 3.5% in June.

US y-o-y inflation was lowered from 2.2% in April to 1.6% in June, the lowest level since October last year. This was due to the slower rise in energy prices and transportation costs, as well as the cost of health care services. Core inflation was also reduced in May – to 1.7% y-o-y, touching its two-year low, and remained there throughout June. Analysts estimate that despite new jobs which have been constantly on the rise for almost seven years and the unemployment rate of only 4.4%, there are still no signs of any significant inflationary pressures in the USA, either on the demand or the supply side, which would induce inflation to accelerate from the current relatively low levels. They also estimate that the current deceleration of inflation could also slow down the pace of the Fed's monetary policy normalisation.

Monetary policy

Most central banks in advanced countries keep their interest rates at historically low levels, and some of them, notably the ECB, still use unconventional monetary policy measures. Movements in the international financial market are also greatly affected by the Fed which continued with its monetary policy normalisation in Q2.

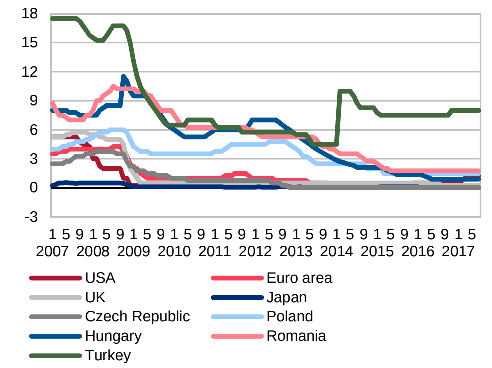
Keeping its key rate at 0% and its deposit facility rate below 0%, the **ECB** expects the rates to remain at present levels at least until the termination of the net asset purchases. The net asset purchases are made alongside reinvestments of the principal payments from maturing securities and will continue at the current monthly pace of EUR 60.0 bn until the end of the year or, according to ECB officials, beyond that point, if necessary, and in any case until inflation is on a sustainable path. ECB officials underlined that there is a strong impulse to growth in the euro area economy, but that an explicitly expansive monetary policy is still required for inflationary pressures to grow gradually and inflation to return to the target.

As expected, the **Fed** continued with monetary policy normalisation in Q2. In June, it again raised the target range of its benchmark rate by 25 bp to 1.0–1.25%, noting that the economic slowdown in Q1 was only temporary and that moderate growth in economic activity in the period ahead and the persisting favourable developments in the labour market will lead to a gradual increase in inflation and its approach to the 2% target. In July the Fed kept interest rates unchanged, however it announced that "relatively soon" it will start unwinding its balance sheet by gradually decreasing reinvestments in principal payments from maturing securities purchased during the QE programme. Market participants expect this to transpire in September.

By the end of the year, the Fed and market participants expect one more rate hike. The median interest rate projection of the FOMC members for 2017 did not change relative to the earlier one (1.4%). The projection is in line with market expectations which, based on end-July futures, project one more hike of 0.25 pp, most likely in December. However, the market expects only one increase of 0.25 pp in 2018, which is considerably below the median projection of the FOMC members for end-2018 (2.1%). Analysts estimate that market expectations will be adjusted if core inflation goes up. Proportionately, the yield on US Treasury bonds is expected to rise and the dollar to grow stronger.

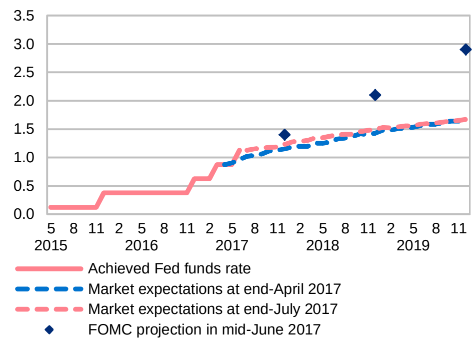
Most central banks in emerging countries are also providing monetary incentives to their economies. Central banks in the majority of **Central and Eastern European** countries did not change their interest rates that stand at their historic lows, nor did they hint at prospects of a hike any time soon. The dominant sentiment regarding economic growth is optimistic owing to the recovery of domestic demand and growth in the euro area; however, there are still no major inflationary pressures that would require a tighter monetary policy. Exceptions are the Czech Republic and Turkey. As of April, the central bank of the Czech Republic stopped intervening in the FX market to curb its currency appreciation over the target level and early in August it

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



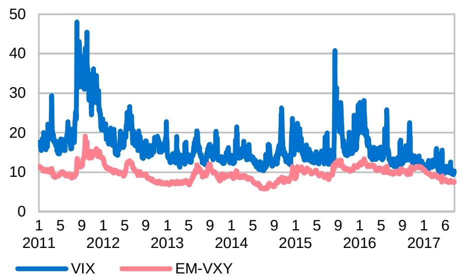
Sources: Central banks of selected countries.

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



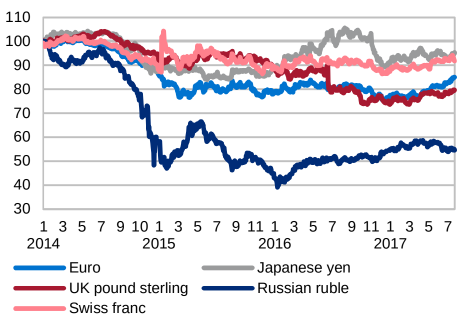
Sources: Bloomberg and Fed.
* Futures-based market expectations.

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



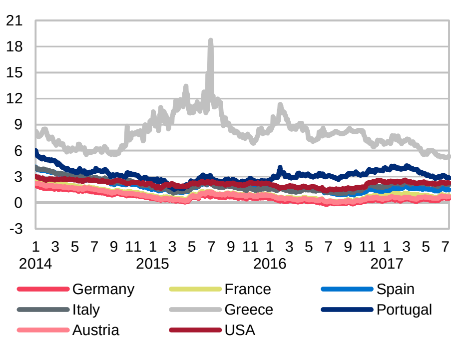
Source: Bloomberg.
* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM-VXY (JPMorgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

Chart IV.7.12 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



Source: IMF.
* Growth indicates appreciation.

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



Source: Bloomberg.

raised its interest rate by 20 bp to 0.25%. It also raised its lending facility rate by 25 bp to 0.5%, while the deposit facility rate was kept on hold (0.05%). The central bank of Turkey did not change its key policy rate, but it did increase interest rates on liquidity funds for banks in order to stabilise its currency and lower inflation. On the other hand, due to lower inflation and inflation expectations, the central bank of Russia eased its monetary policy further by cutting the key policy rate to 9.0% – down by 50 bp in April and 25 bp in June.

Financial and commodity markets

Investor sentiment in the international financial market improved in Q2 prompted by better prospects of global economic growth. Confidence in sustainability of the accelerated growth in the euro area is also on the rise. Euro area growth is supported by the ECB which confirmed that its measures will be stimulative for as long as it is necessary. The outcome of the French presidential elections had a favourable impact on euro area prospects, while elections in the United Kingdom heightened uncertainty regarding Brexit talks. Emerging countries continued to improve their macroeconomic fundamentals – many have reduced their public debt, interest rates are relatively low, inflation is contained and currencies stable.

The implicit measure of **financial market volatility** (VIX) hovered around the extremely low 10%, going above 15% only in mid-April and May. In several instances it even fell below 10% for the first time since January 2007. Additionally, the EM-VXY index – which tracks volatility in emerging market currencies – also declined from around 9% in end-March to around 7.5% in end-July. Another indicator of decreasing uncertainty is the price of gold which, having soared in Q1, remained almost unchanged in Q2 only to go up 2.0% in July.

Although the Fed increased its benchmark rate in June, markets expected a slower-paced monetary policy normalisation in the coming period in light of uncertainties regarding the announced economic reforms. With rosier prospects of euro area growth, this was mirrored in a weaker dollar and lower yields on US government bonds.

In Q2 (end of period), **the dollar weakened against the euro** by 6.3%, and again by 2.7% in July. In June, the yields on ten-year US securities touched their lowest since November last year. Moreover, the spread between US and German government securities was also reduced, whereas the previous period saw the widest spread since the euro was introduced.

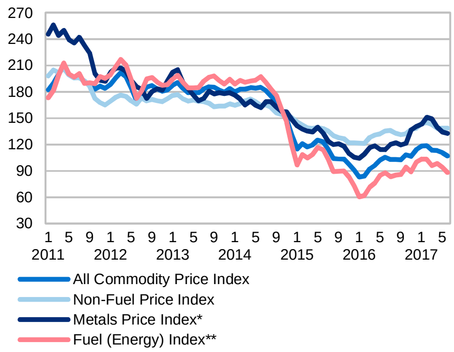
Global oil prices declined by 8.5% in Q2, ranging between USD 44 and USD 55 per barrel. The fall in oil prices comes as a result of increased supply in the global market. The agreement to cut oil production by around 1.8 mn barrels a day, reached between the OPEC countries and several non-member producers (Russia included), had effect at the start of the year, but then the production of shale oil in the USA rose, as well the supply from Nigeria and Libya, who were not included in the agreement, and from Iran, leading to a new fall in oil prices. Analysts estimate that after grappling with huge financial difficulties in 2015, US oil producers have now reorganised and seem able to "endure" lower prices. According to estimates of the American Petroleum Institute, the total number of well completions in the USA rose by 19% in Q2 relative to Q1 and by as much as 81% relative to the corresponding period a year earlier. In May, countries that agreed to cap production extended the term of the agreement until March 2018. However, inconsistent adherence to the agreement contributed to the fall in oil prices. Oil futures indicate that the price of oil in December 2017 will be USD 53 per barrel and will stay at that level until end-2018.

Based on the IMF's index which includes eight base metals, the **prices of metals** weakened by 11.4% in Q2. Still, given that they were on the rise during H2 2016, they are still 16.1% higher than a year earlier.

Measured by the FAO index, **world food prices** rose 2.1% in Q2, up by 6.9% relative to a year ago. Meat and cereal prices continued up (6.1% and 4.4% respectively). The prices of dairy products also rose (10.1%) and their index touched the highest level in three years, though in real terms it still remains 25.4% below the maximum from February 2014. Since the beginning of the year, meat prices posted the highest increase (11.6%), while the prices of cereals and dairy went up by 8.5%. As for cereals, which are Serbia's important export product, wheat recorded a significant rise in June due to worsened harvest conditions in the USA, while the record-high corn harvest in South America constrained the rise corn prices.

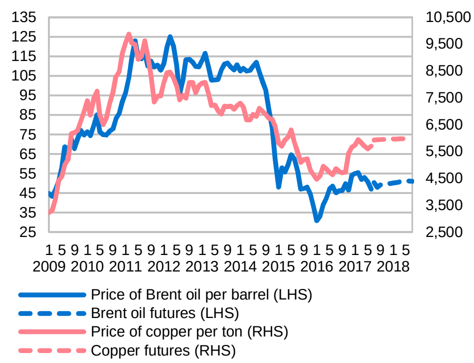
In contrast to that, sugar prices kept sliding down in the global market in Q2 – by 23.1% (28.5% y-o-y) reflecting high export surplus, notably in Brazil, as well as dampened import demand, particularly on the part of China, the leading global importer which introduced additional import quotas for the next three years in order to protect producers at home. After posting a rise last year, the price of vegetable oil struck a downward path since the start of the year (11.4%) and in June reached approximately the same levels as in the prior year.

Chart IV.7.14 **IMF Primary Commodity Prices Index**
(2005 = 100)



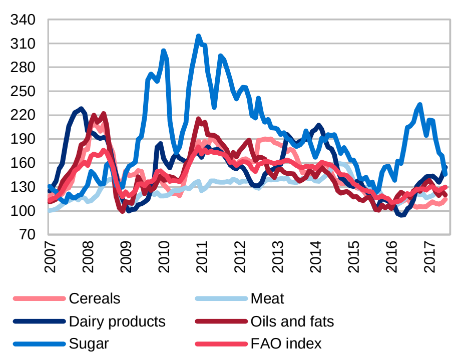
Source: IMF.
* Copper, aluminium, iron ore, tin, nickel, zinc, lead and uranium.
** Crude oil, natural gas and coal.

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



Source: Bloomberg.

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



Sources: FAO, UN.

V Inflation projection

Compared to May, projected inflation will be lower both this and next year. Under our central projection, y-o-y inflation will be relatively stable and 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 high base for petroleum product prices and, as of early 2018, the drop-out of this year's one-off price hikes from y-o-y calculation will act a damper in the coming period, guiding inflation to move at a lower than current level as of the start of next year. A gradual rise in global primary agricultural commodity prices and aggregate demand at home will work in the opposite direction. The risks to the projected inflation path are symmetric and relate primarily to future developments in the international commodity and financial markets, the success of this year's agricultural season and, to a degree, administered price growth.

GDP growth in 2017 is likely to be led by industry and service sectors on the production side, and investment and exports, with a rising contribution of household consumption on the expenditure side. Further recovery of household consumption and the continued rise in investment and exports on account of the improvement of the business environment and robust external demand should push up GDP growth in 2018. The risks to the projection for this year are asymmetric downward and are associated with the success of this year's agricultural season and the speed of recovery of the energy sector. The risks are judged to be symmetric in respect of the pace of euro area growth and developments in the global market of primary commodities (oil, base metals and cereals) and the international financial market. Given that the downward risks to the projection this year are driven by supply-side shocks, whose effects on economic activity will be offset once the conditions normalise, risks are asymmetric upward for next year on the same grounds.

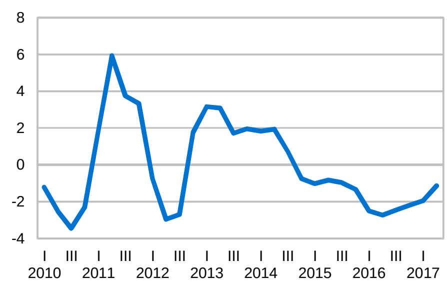
The medium-term inflation projection aims to show the expected inflation movements (CPI), the main factors behind such movements and the underlying risks. It is expressed both as a range for the CPI and as a central projection rate. The projection assumes an active monetary policy which seeks to keep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

Initial conditions

Moving within the target tolerance band since early 2017, inflation measured 3.6% y-o-y in June. Like in other countries in the region, inflation movements in this period were affected by the recovery of global oil prices, recorded as of H2 2016, and a temporary, higher than seasonally expected increase in vegetable and firewood prices due to very cold weather early in the year. Inflationary pressures remain low, as confirmed not only by inflation being driven by price increases of a small number of products and services over the past months, but also by low and stable core inflation, hovering around 2% since early year.

Appreciation pressures have prevailed since April. Since early year, at end-July the dinar gained 2.6% against the euro and 14.2% against the dollar, due to the simultaneous strengthening of the euro against the dollar. This was

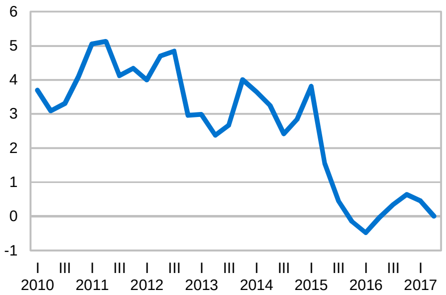
Chart V.0.1 **Monetary conditions index***
(in %)



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.

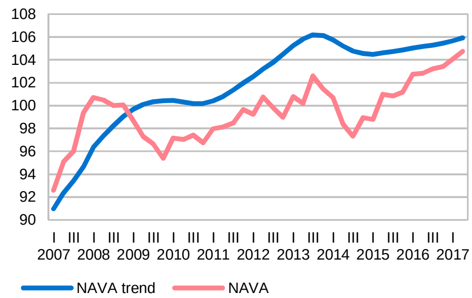
Chart V.0.2 **Real interest rate**
(in %)



Source: NBS.

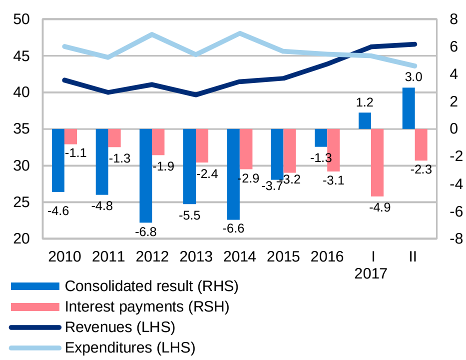
Note: Real interest rate is derived as the difference between one-week BELIBOR and one-year ahead inflation expectations of the financial sector measured by Bloomberg.

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



Sources: SORS and NBS calculation.

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



Source: Ministry of Finance.

prompted by better export results relative to Q1. At the same time, the high FDI inflow continued and in May, foreign investors significantly stepped up investment in government securities as well. A higher inflow of remittances, usual for the second quarter, reflected on elevated purchases of foreign cash from natural persons, which in June more than sufficed to cover net FX demand of domestic enterprises and foreign investors. Appreciation pressures were fuelled also by rising FX-indexed bank assets, which increased considerably in June. To ease excessive short-term strengthening of the dinar against the euro, in Q2 the NBS intervened in the IFEM by purchasing EUR 505.0 mn, most notably in June, including additional EUR 165.0 mn in July.

The Monetary Conditions Index, showing a combined impact of the real interest rate gap and the real exchange rate gap, continued to move below its neutral level, though to a lesser degree compared to Q1, mainly on account of the nominal appreciation of the dinar. Such movements are consistent with the gradual further reduction in the negative output gap[23], to around -1.1% in Q2.

GDP grew 0.3% s-a in Q2, owing to the recovery in the mining and energy sectors, continued positive trends in manufacturing driven by earlier investment, acceleration of euro area growth and the continued recovery of domestic demand, which positively impacted the growth in most service sectors. The recovery in the mining and energy sectors in Q2 also reflected on Q2 y-o-y economic growth of 1.3% (according to estimates of the Statistical Office) which outpaced that in Q1.

GDP growth in the euro area accelerated further in Q2. It was broad-based both geographically and sector-wise. Improvements in the labour market and increased consumer confidence fuelled household consumption, while favourable financing conditions and higher profitability of companies supported investment growth. However, still relatively low demand stands in the way of more notable price growth, as evident from core inflation moving below the long-term average, which is why the ECB continued its accommodative monetary policy. On the other hand, as it was expected, the Fed raised its fed funds rate again in June. The pace of its hikes in the period ahead will greatly influence movements in the international financial market.

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

Positive fiscal trends continued into Q2. In H2 the general government surplus came at RSD 44.1 bn (2.1% of GDP), vs. the deficit of 0.9% of GDP in the same period a year earlier. The quantitative criterion defined by the arrangement with the IMF permits a general government deficit of RSD 36.1 bn for H1. Excluding interest expenses, the general government surplus amounted to 5.7% of GDP. Central government public debt measured EUR 23.9 bn at end-June, almost EUR 1 bn below the end-2016 figure. Its share in projected GDP equalled 65.7% vs. 73.0% at end-2016.

Inflation projection assumptions

External assumptions

The assumption for euro area GDP growth in 2017 was again revised upward in the current projection, by 0.2 pp to 1.9%. The assumption for 2018 was also revised upward, by the same amount – to 1.7%.[24] New data signal the recovery in the euro area is accelerating and spreading across sectors and countries in the euro area. Unemployment rates declined more than expected and confidence continued up. Economic growth will be driven primarily by domestic demand, supported by the ECB's monetary accommodation and sustained improvement in labour market conditions. Investment recovery will continue to be aided by very favourable financing conditions and improved profitability of corporates. An impetus will be given also by net exports on account of the expected recovery of global trade.

Inflation in the euro area, our most important trade partner, is expected to move below the medium-term target (below, but close to 2%) this and next year, with the ECB keeping its main refinancing rate on hold until the end of the projection horizon. The assumption for euro area inflation in 2017 (according to Consensus Forecast) was revised slightly downward from the May projection to 1.5%. Somewhat lower inflation is expected in 2018 (1.4%), the same as in the May projection.

Growth in prices of primary agricultural commodities (corn, wheat, soya bean)[25] in the global market, begun in Q1, continued into Q2 – in June prices were 1.7% higher compared to March. The rise continued into July, when these prices picked up by 5.6%. More substantial growth was recorded for wheat prices, notably in June, due to a

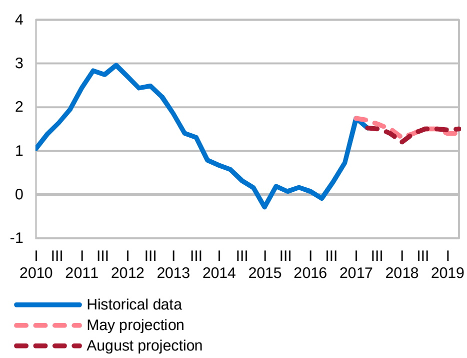
Table V.0.1 **Projection assumptions**

	2017		2018	
External assumptions	May	Aug	May	Aug
Euro area inflation (annual average)	1.6%	1.5%	1.4%	1.4%
ECB policy rate (year-end)	0.0%	0.0%	0.0%	0.0%
Euro area GDP growth	1.7%	1.9%	1.5%	1.7%
International prices of primary agricult. commodities (Q4 to Q4)*	14.2%	15.6%	5.5%	9.4%
Brent oil price per barrel (year-end, USD)	50	53	51	53
Internal assumptions				
Administered prices (Dec to Dec)	3.8%	4.3%	4.0%	4.0%
Trends				
Appreciation trend of the real exchange rate (average)	0.6%	0.5%	0.7%	0.6%
Real interest rate trend (average)	1.0%	0.9%	0.8%	0.5%

Source: NBS.

* Composite index of soya bean, wheat and corn prices.

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

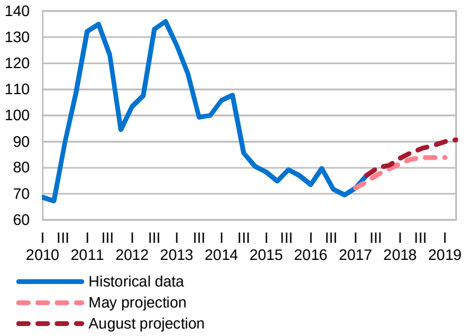


Sources: Consensus Forecast and NBS estimate.

[24] The assumption for euro area GDP growth in 2017 and 2018 is consistent with the July Consensus Forecast.

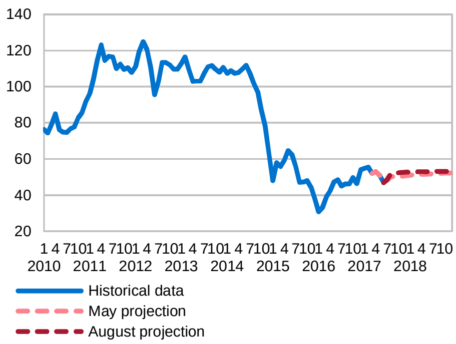
[25] Measured by the composite index which comprises dollar prices of corn, wheat and soya bean on benchmark commodity markets.

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



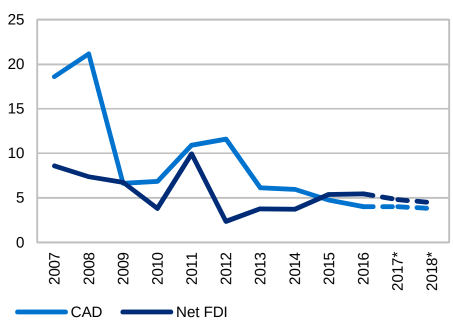
Sources: BSE, CBOT and NBS.

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



Sources: Bloomberg and NBS.

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



Source: NBS.
* NBS projection.

poor harvest in the US, while the record harvest of corn in South America constrained its price growth. As their futures indicate, primary agricultural commodities prices are expected to grow by close to 16%, which is higher than expected in the May projection (14.2%), and to slow down to 9.4% in 2018[26] (more than assumed in May).

In the past months, global oil prices were under the strongest impact of supply, which is likely to remain the case in the period ahead. On the one hand, an increase in supply is supported by the development of technology in the US, contributing to the reduction in oil exploitation costs and the opening of new oil wells. These factors are expected to support the US to continue to increase oil production in the coming period. On the other hand, in May OPEC countries extended the deal to cut 1.8 mn barrels per day off their combined output over the following nine months. Consistent with this, it seems that oil prices will stay at a relatively low level within the forecast horizon. This is indicated also by the latest available futures, which led us to assume that oil prices will reach around USD 53 per barrel at end-2017 and stay at that level in 2018,[26] which is slightly above the expectations stated in May.

Internal assumptions

In view of the outlook for international prices of primary agricultural commodities, in accordance with futures movements, and the influence they have on their counterparts in Serbia, we have assumed that domestic primary agricultural commodity prices will increase this year. Their growth will continue next year, though at a slower pace.

Under the new projection, administered price growth is assumed at 4.3% in 2017 (0.8 pp contribution to inflation), which is slightly more than projected in May. A half of administered price growth this year is due to the January and July cigarette price hike (0.4 pp contribution to inflation). In addition, for this year we have assumed the adjustment of natural gas prices due to rising global oil prices in the past period (0.1 pp contribution to inflation) and electricity price hike which will match last year's (0.2 pp contribution to inflation). Administered prices are assumed to record similar growth in 2018 as well (close to 4.0%).

Serbia's risk premium entered a steep downward path in early 2017, reaching its lowest level on record in July. As positive macroeconomic trends are expected to be

[26] Brent.

sustained in the coming period, the country's risk premium should stay relatively stable in terms of domestic factors, whilst the impact of international factors may be more volatile and is currently difficult to estimate. In addition, relative stability in the FX market in the period ahead will be further supported by the expected continuation of export growth and FDI which will continue to be more than sufficient to cover the current account deficit.

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

Projection

Inflation projection

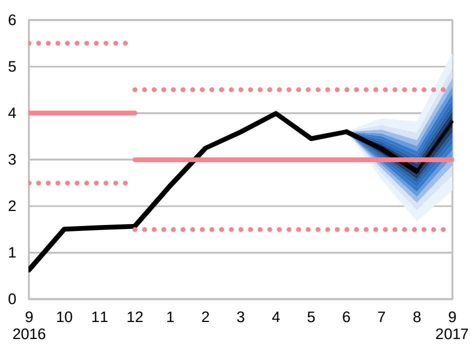
Under our new central projection, y-o-y inflation will continue to be within the target tolerance band of 3.0±1.5% until the end of the projection horizon. Inflation will move around its current level until the end of this year. It will decline as of early 2018 once this year's one-off price hikes of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

Short-term inflation projection

Under the central short-term projection, after falling in August due to the base effect of meat prices (drop-out from y-o-y comparison of the meat price increase from August last year), at end-Q3 y-o-y inflation will touch a slightly higher level than at end-Q2. At the quarterly level, consumer price growth will be slightly lower than in Q2 and under the strongest impact of the July cigarette price hike (0.2 pp contribution to inflation). Food prices are likely to provide a moderate positive contribution on account of fresh meat and processed food, while the prices of fruit and vegetables, taken together, will decline. Still, we believe that the drop in fruit and vegetable prices will be lower than usual for the season given the relatively unfavourable agrometeorological conditions – cold weather early in the year and in April, and drought in summer months.

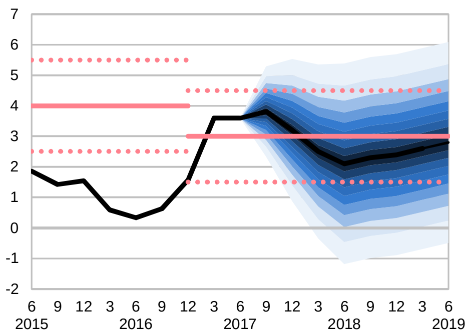
Y-o-y core inflation (i.e. change in CPI excluding food, energy, alcohol and cigarettes) will be stable in Q3 and continue to move around 2%. In quarterly terms, core

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



Source: NBS.

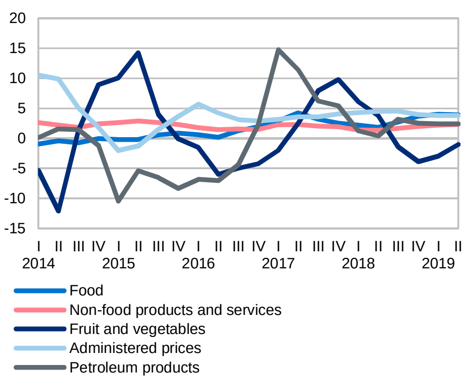
Chart V.0.10 **Inflation projection**
(y-o-y, in %)



Source: NBS.

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

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



Source: NBS.

inflation growth will be lower than in Q2 and will be guided by the seasonal increase in prices of textbooks and school stationery, as well as prices of travel packages.

Medium-term inflation projection

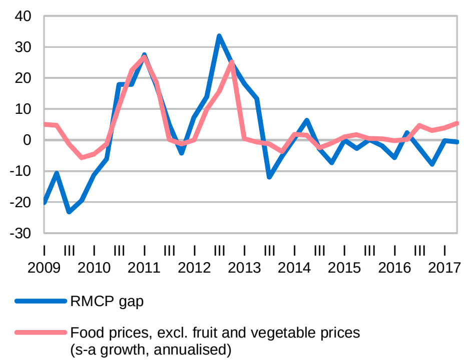
We expect y-o-y inflation to continue to move within the target tolerance band (3.0±1.5%) until the end of the projection horizon, though it will decline as of early 2018 as this year's one-off price hikes of some products and services drop out of the y-o-y comparison. The high base for petroleum product prices will work in the same direction, while a more inflationary impact will arise from prices of primary agricultural commodities and a gradual increase in aggregate demand in Serbia.

The analysis of inflation components shows that y-o-y food price growth will slow down in the period ahead, notably in H1 2018 due to the high base for pork prices. Thereafter, food inflation is expected to rise moderately, on account of the forecast growth in primary agricultural commodity prices and the waning of disinflationary pressures in respect of domestic demand. However, until the end of the projection horizon, food inflation will stay below the current level. Y-o-y non-food inflation will be relatively stable in the period ahead, moving around its current level. The recovery of domestic demand will generate more inflationary pressures, while the growth in prices of non-food products and services will slow down the expected weaker growth in import prices in the coming period. Y-o-y growth in fruit and vegetable prices this year is determined by unfavourable weather conditions and their low levels last year. However, given the high base, we expect a considerable slowdown in the y-o-y rise in fruit and vegetable prices early next year. They are likely to enter a y-o-y decline with the onset of the new agricultural season.

According to our estimate, domestic demand will continue to recover in 2017, while disinflationary pressures generated by the negative output gap are weakening. This gap opened in 2008 when the effects of the global financial crisis spilled over to Serbia. It has, however, exhibited a closing trend for more than two years already, primarily on account of the recovery of private sector employment and wages and elevated external demand. The reduction in the gap will be supported by past NBS monetary policy easing and the ECB's monetary accommodation. At the same time, the ECB's accommodation contributes to economic growth in Serbia through higher external demand, i.e. higher demand for our exports, and through low interest rates on euro-indexed loans, which encourage lending, and by extension, economic activity. Still, we do not expect that the negative output gap will be fully closed until the end of the projection horizon, i.e. that the disinflationary effects from domestic demand will be fully depleted.

Global prices of primary agricultural commodities (corn, wheat and soya bean), by which we approximate the prices of inputs in food production, continued up from Q1. However, the rise in these prices in the domestic market was much more moderate, also on account of nominal appreciation of the dinar against the dollar, largely as the consequence of the dollar's moving down from 1.07 to 1.14 against the euro in Q2. On that basis, we estimate that the costs of food production inputs (measured by the RMCP gap[27]) in Q2 stayed roughly below the neutral level. In the coming period, we expect their gradual rise above the neutral level. However, we estimate that food inflation (excluding fruit and vegetables) will slow down in the remainder of 2017 and the major part of 2018.

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



Source: NBS.

As we announced in the previous *Report*, due to the high base effect, y-o-y growth in domestic prices of petroleum products slowed down in Q2, which is why their contribution to y-o-y inflation fell from 0.9 pp in March to 0.5 pp in June. Assuming relatively stable oil prices, y-o-y inflation will continue to slow down on these grounds in the coming period. However, the contribution of petroleum products to y-o-y inflation should remain positive until the end of the projection horizon.

The risks to the projected inflation path relate primarily to future developments in the international commodity and financial markets and, by extension, to prices of petroleum products and food at home, as well as to agrometeorological conditions (success of this year's agricultural season) and, to a degree, to administered price growth this and next year.

Based on the latest available data from the futures markets, we assumed that global oil prices would be relatively stable in the rest of this year and next year. However, as these prices are generally very volatile and are currently decisively determined by supply which is difficult to forecast, there is a likelihood of their

[27] 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.

departure from the assumed path. With regard to prices of primary agricultural commodities in the global market, they have been rising from November 2016 onwards and are likely to continue up this and next year, aided by the expanding demand of emerging markets and, to some extent, smaller supply due to a weaker agricultural season in the world compared to the previous one. However, as in the case of oil prices, prices of primary agricultural commodities may deviate in either direction – both upward and downward. Having in mind the impact of these prices on prices in Serbia, we may assume that actual inflation could also deviate from the projected path in either direction. The effect on domestic food prices, notably fruit and vegetable prices, will also depend on the success of the agricultural season at home, which may be weaker than assumed.

The risks to the projected inflation path are also associated with developments in the international financial markets, mainly because of the expected further normalisation of the Fed's monetary policy. In June, the Fed again raised its target range for the fed funds rate by 25 bp to 1.0–1.25%. In addition, it is expected that the Fed could soon start with balance sheet normalisation by gradually decreasing its reinvestment of the principal payments it receives from securities purchased as part of the QE programme, provided current movements are in line with expectations. This could reduce portfolio investment in emerging economies, Serbia included, possibly leading to depreciation pressures and ultimately some upward pressure on prices at home. The ECB's monetary accommodation works in the opposite direction given that the ECB will most probably implement the QE programme in the current amount of EUR 60 bn per month until the end of this year, and longer if necessary according to statements of ECB officials.

The projection operates on the assumption that administered prices will grow by 4.3% this year and will largely reflect the rise in cigarette, electricity and natural gas prices. At this point, however, it remains uncertain whether electricity prices will be raised in 2017 and by how much (for the needs of the projection, we used the 2016 growth rate). Absent this increase, y-o-y inflation would fall short of the projected trajectory by around 0.2 pp. Administered price growth of around 4% is assumed for 2018 as well.

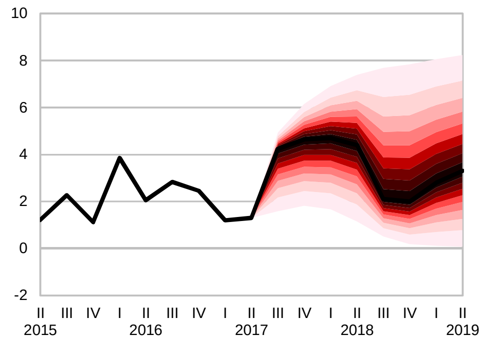
On balance, the risks to the projected inflation path are judged to be symmetric.

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

GDP projection

Since early year, economic activity has been under a strong negative sway of supply-side factors, which reflected primarily on the energy sector and agriculture, whilst domestic and external demand continued to produce positive effects. However, we estimate that economic growth will accelerate in the period ahead. Our GDP growth projection for 2017 and 2018 remained unchanged from the May projection at around 3% and 3.5% respectively.

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

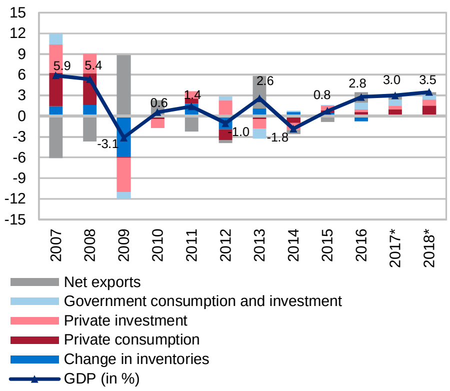


Source: NBS.

Stepped-up implementation of infrastructure projects and continued improvement of the business environment will support the expected growth acceleration in the coming period, which should, along with favourable financing conditions, higher profitability of the economy and a continued FDI inflow, contribute to investment growth. The effect of investment, including improved global growth outlook, i.e. continued positive effects from external demand, are likely to power a further rise in exports of goods and services. Still, the contribution of net exports will be lower than last year due to the increased imports of equipment and intermediate goods for corporate needs, and to some extent higher imports of consumer goods on account of the recovery of final consumption.

Labour market recovery, reflected in employment and wage growth, notably in the private sector, continued in H1 2017 and positively affected real disposable income of households. We expect similar movements in the period ahead, which, along with lower costs of household borrowing, gives a positive impetus to growth in household consumption.

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



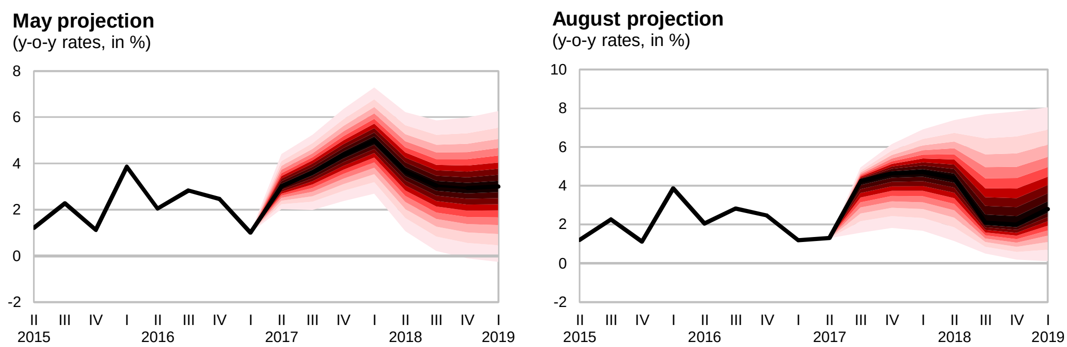
Sources: SORS and NBS calculation.
* NBS estimate.

The expected rise in household consumption should reflect also on higher activity in most service sectors which will, according to our estimate, give a positive contribution to GDP growth in 2017, on the production side. In addition to services, a positive contribution should come from manufacturing, as indicated by movements recorded since the start of the year, as well as the expected continuation of growth in the euro area and our other important foreign trade partners. A smaller positive contribution to GDP is expected from construction on account of the anticipated acceleration of infrastructure and other construction projects, as signalled by a higher number of issued construction permits and the envisaged value of works in the year so far. On the other hand, a negative contribution to GDP will come from the expected reduction in agricultural production based on last year's record yields. In addition, agrometeorological conditions are relatively unfavourable this year, which will negatively affect crop yields. However, as we currently do not have official estimates of the expected yields of corn and industrial plants, at the time of preparing the projection we retained the assumption that they will be at the level of multi-annual averages.

GDP growth is expected to step up to around 3.5% in 2018, supported by sustained recovery of household consumption and a continued rise in investment and exports, which should reflect on faster growth in industry and service sectors. Further improvement of the business environment and sustained growth in the euro area and our other important foreign trade partners ought to contribute to the acceleration of GDP growth.

The risks to the projection for this year are asymmetric downward and are associated with the success of this

Chart V.0.15 **Current vs. previous GDP growth projection**



Source: NBS.

year's agricultural season and the speed of recovery of the energy sector. The risks are judged to be symmetric in respect of the pace of euro area growth and developments in the global market of primary commodities (oil, base metals and cereals) and the international financial market. Given that the downward risks to the projection this year are driven by supply-side shocks, whose effects on economic activity will be offset once the conditions normalise, risks are asymmetric upward for next year on the same grounds.

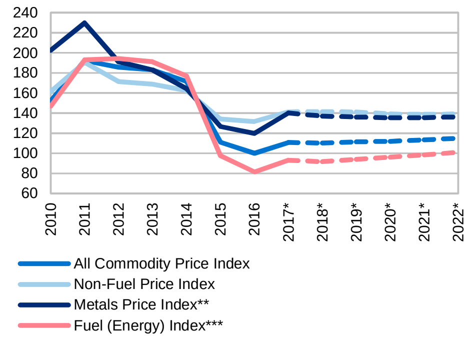
The greatest uncertainty surrounding the current projection concerns the results of this year's agricultural season. Although agriculture was expected to contract in 2017 owing to the exceptionally good last year's season, an additional negative effect could be generated by unfavourable agrometeorological conditions prevailing this year. This concerns primarily the insufficient moisture of soil, which was affected by a cold and relatively dry winter early in the year – already at the time of the spring sowing there was a soil moisture deficit. Less rain compared to multi-annual averages was recorded in June and July, which are the key months for the vegetation of corn and industrial plants. Given the high temperatures at the time, this could further reduce the yield outlook for the said crops in the current season. Such trends could lead to a larger than assumed drop in agricultural production and a higher than expected negative contribution of agriculture to GDP.

In addition, the risks to the projection are associated with developments in the mining-energy complex, which were also impacted by the cold weather in Q1. Although the recovery in the mining and energy sectors was noted already in April, there is risk that it will not continue at the earlier expected pace due to the unfavourable hydrological situation. This could lead, to an extent, to a smaller than anticipated positive contribution of industry to GDP in 2017.

On the other hand, better economic results in the euro area in H1 and improved growth outlook for the current and next year could bolster demand for our exports and result in higher investment, i.e. contribute to faster than expected GDP growth.

As in the prior period, GDP trends will be affected, to an extent, also by developments in the international commodity and financial markets. Movements in global oil prices in the period ahead are a source of uncertainty. A drop in these prices could positively impact disposable income and GDP growth in countries that are net

Chart V.0.16 **Projection of movement in primary commodity prices**
(2005 = 100)



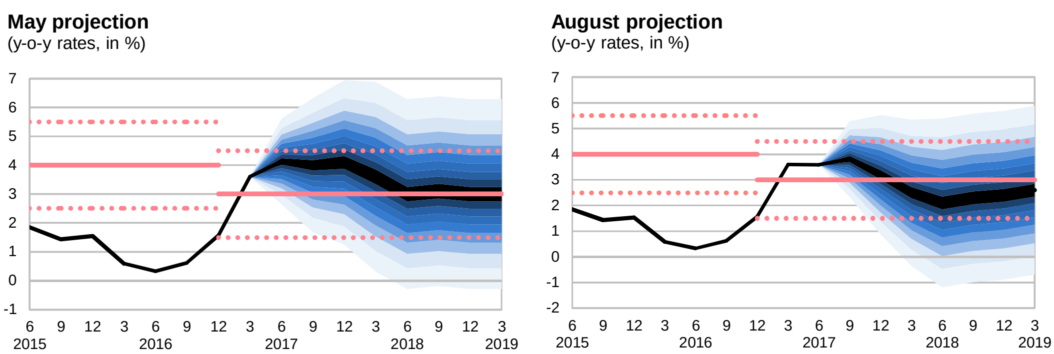
Source: IMF.
* IMF projection.
** Copper, aluminium, iron ore, tin, nickel, zinc, lead and uranium.
*** Crude oil, natural gas and coal.

importers, including Serbia, while their increase would work in the opposite direction. Important for Serbia are also movements in global prices of cereals and base metals, as our country is their net exporter. A possibly higher rise in these prices in the global market would thus have a positive and their possible fall a negative effect on Serbia's GDP. Moreover, developments in the international financial market, which will remain largely determined by the character of monetary policies of the Fed and ECB, could reflect on capital flows to emerging economies, including Serbia. This could affect economic activity through the change in conditions and the availability of external sources of finance both for the government and the private sector.

Comparison and outcome of inflation projections

The new medium-term inflation projection is lower than in May, both for this and next year. The lower inflation projection for 2017 primarily reflects weaker than expected CPI growth in Q2, as well as reduced marginal costs of importers and lower prices of primary agricultural commodities in the domestic market (with the nominal appreciation of the dinar against the dollar also providing a contribution) compared to the previous projection. In addition, although oil prices expressed in US dollars were assumed at a somewhat higher level for the end of this year, they are now lower expressed in dinars. On the other hand, somewhat stronger

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

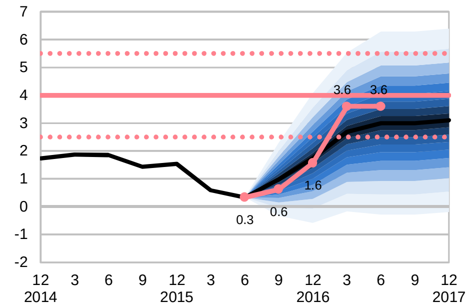


Source: NBS.

administered price growth is assumed for this year compared to the May projection.

In the past year inflation has been moving within the range projected in August 2016. Until end-2016 it hovered slightly below the central projection rate due to lower than expected administered price growth.[28] Since the start of the year, inflation has been somewhat above the central projection rate from August 2016, mostly as a result of a faster than expected increase in the prices of petroleum products, fuelled by rallying global oil prices, a higher than expected increase in fruit and vegetable prices early this year resulting from extremely cold weather, and the unexpected increase in the prices of mobile telephony services.

Chart V.0.18 **Actual inflation vs. the August 2016 inflation projection**
(y-o-y rates, in %)



Source: NBS.

[28] 2.2% vs. 3.5% as expected in August 2016.

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Q1 2017	Q2 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	5.7	5.5[2)]
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.8	237.4	268.7	294.5	261.4	233.2	230.1	
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	29.9	28.3	27.8
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	13.0	9.9	
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	19.2
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	77.8	76.2	
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	12.8	12.3	
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	153.3	147.5	
FINANCIAL RISK EXPOSURE INDICATORS (in %)														
FX reserves/M1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	330.4	278.1	250.2	207.3	208.4	198.2
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
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	109.1	121.5	121.1
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	34,115	7,859	8,808[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	26,549	26,174	
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,727	4,041	4,432	776	947.8
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
Short-term debt[3)]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	679	540	
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	-1,370	-732	-287.8[2)]

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

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) − ratio of end-of-period foreign exchange reserves to average monthly imports of goods and services during the 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 the 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 the 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 the 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 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 the 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. In September 2010, the methodology of external debt statistics was changed – public sector external debt now includes liabilities under SDR allocation (EUR 484.1 mn) used in December 2009. Private sector external debt excludes loans concluded before 20 December 2000 in respect of which no payments are made (EUR 1,022.0 mn, of which EUR 445.6 mn relates to domestic banks and EUR 576.4 mn to domestic enterprises).

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

Table B
Key Macroeconomic Indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Q1 2017	Q2 2017
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	1.2	1.3
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
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
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	17,314	4,378	4,925
- 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	10.8	10.9	12.9
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	19,895	5,170	5,737
- 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	5.3	14.6	12.3
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	-1577	-1,370	-732	-288
in % of GDP	-8.4	-9.6	-18.6	-21.1	-6.6	-6.8	-10.9	-11.6	-6.1	-6.0	-4.7	-4.0	-9.3	-3.3
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	
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
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
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
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	73.0	69.2	65.7
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
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
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
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
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	34,115	7,859	8,808[6]

1) At constant prices of the 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 the 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 the Labour Force Survey.

Notes:

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

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Executive Board meetings and changes in the key policy rate

2016

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

2017

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

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 8 June 2017

In its meeting today, the NBS Executive Board decided to keep the key policy rate at 4.0 percent.

In making the decision, the NBS Executive Board was guided by inflation factors, the effects of past monetary easing and inflation projection according to which inflation will continue to move within the target tolerance band of 3.0%±1.5 percentage points in the next two years.

Since the start of the year, inflation has moved within the target tolerance band. Similarly to other countries, such inflation movements were impacted, as expected, by the recovery of global oil prices which began in the second half of 2016. However, the increase in vegetable and firewood prices caused by adverse weather conditions early this year, as well as the rise in fruit and fresh meat prices in April triggered by the price hikes in the global market, were higher than seasonally expected. Since the beginning of this year, inflation movements have been under the influence of one-off factors, as indicated by low and relatively stable core inflation of 2.0% year-on-year.

The NBS Executive Board expects inflation to continue to move within the target tolerance band in the coming period. Upward pressure will come mainly from the gradual recovery of domestic demand and inflation abroad, while the high base effect for petroleum product prices will slow inflation down. As the one-off unprocessed food and firewood price hikes drop out from the annual comparison, inflation will stabilise at a lower level than currently as of the start of next year, but will stay within the target tolerance band.

The international environment is still fraught with uncertainties as to the developments in international commodity and financial markets. Uncertainties also surround global primary commodity prices, particularly oil prices, which are under the impact of strengthened geopolitical tensions. In addition, uncertainties in the international financial market stem largely from the diverging monetary policies of the leading central banks, the Fed and ECB, which may impact global capital flows to emerging economies, including Serbia. As underscored by the NBS Executive Board, it is owing to the significant narrowing in internal and external imbalances and more favourable macroeconomic prospects going forward that Serbia is today more resilient to potentially adverse influences from the international environment.

The next rate-setting meeting will be held on 10 July 2017.

Press release from Executive Board meeting held on 10 July 2017

At its meeting today, the NBS Executive Board decided to keep the key policy rate at 4.0%.

In making the decision, the NBS Executive Board was guided by inflation factors, inflation projection and the effects of past monetary policy easing.

Since the start of the year, inflation has been moving within the target tolerance band. Similarly to other countries, inflation movements were led by the recovery of global oil prices as of the second half of 2016, as well as the prices of vegetables and firewood which were higher than seasonally expected due to adverse weather early this year. Reflecting a drop in these prices, in accordance with our expectations, year-on-year inflation fell to 3.5% in May. Inflationary pressures remain low, as confirmed by low and relatively stable core inflation, moving at around 2% year-on-year since early 2017, as well by financial and corporate sector inflation expectations trending within the target band both one- and two-years ahead.

The NBS Executive Board expects inflation to continue moving within the bounds of the target tolerance band of 3.0%±1.5 percentage points in the period ahead. According to expectations, inflation target will be achieved owing to the gradual recovery of domestic demand and inflation abroad, and the high base effect from the prices of petroleum products.

The international environment is still fraught with uncertainties as to the developments in international commodity and financial markets. Uncertainties also surround global primary commodity prices, particularly oil prices, which are under the impact of heightened geopolitical tensions. Uncertainties in the international financial market continue to stem largely from the diverging monetary policies of leading central banks, the Fed and the ECB, which may affect capital flows to emerging economies. As underscored by the NBS Executive Board, the resilience of Serbia's economy to potential negative shocks from the international environment increased owing to the significant narrowing in internal and external imbalances and more favourable macroeconomic prospects.

The next rate-setting meeting will be held on 10 August 2017.

Press release from Executive Board meeting held on 10 August 2017

At its meeting today, the NBS Executive Board decided to keep the key policy rate at 4.0%.

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

Uncertainties still prevail in the international commodity and financial markets. This pertains to movements in the global prices of primary commodities, notably oil. As for the international financial market, uncertainties are still fuelled mainly by the divergent monetary policies of the leading central banks – the Fed and ECB, which may impact capital flows to emerging economies.

Since the start of the year, inflation has been moving within the target tolerance band. Its movement in the second quarter confirms that early in 2017 it was led by the price growth of a smaller number of products and services. Low and stable core inflation of around 2% y-o-y and the inflation expectations of the financial sector and corporates, which are within the target both one and two years ahead, also suggest that inflationary pressures are still low.

The NBS Executive Board expects inflation to remain within the tolerance band of 3.0%±1.5 pp in the period ahead. The high base from the prices of petroleum products will exert a drag on inflation while, as of early 2018, this year's one-off price hikes of certain products and services will drop out of the y-o-y comparison pushing inflation below the current level. A gradual increase in the global prices of primary agricultural commodities and aggregate demand in Serbia will work in the opposite direction.

At today's meeting, the NBS Executive Board adopted the August Inflation Report, which will be presented to the public on Wednesday, 16 August, when monetary policy decisions and the underlying macroeconomic developments will be discussed in more detail.

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

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