National Bank of Serbia

August 2018

INFLATION REPORT

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Introductory note

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

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

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

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

The August *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 9 August 2018.

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

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Veselin Pješčić, Vice Governor

Diana Dragutinović, Vice Governor

Željko Jović, Vice Governor

ABBREVIATIONS

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

Other generally accepted abbreviations are not cited.

Contents

I Overview

Global economic growth outlook remains favourable, though, compared to the previous period, trade tensions gave rise to risks of growth being slower than expected. Although growth in the euro area, our key trade partner, has been dampened since the start of the year, the European Central Bank expects it to remain stable and broadly dispersed in the medium run. Central and South-Eastern Europe is also expected to retain high growth rates in 2018 as well, owing to improved labour market conditions and the rise in domestic investment and investment from European Union funds. As assessed by the European Commission, the main contributor to growth in the Western Balkans in 2018 is Serbia, with a favourable outlook for most other economies in the region, which are also our important trade partners. Driven by growing global oil prices, global inflation is higher than in the previous period, albeit it is still moderate in most countries. Euro area inflation hit the target in June, whereas core inflation remains low and is not indicative of a long-term rise in inflationary pressures. Monetary policies of leading central banks – the Federal Reserve System and European Central Bank – became more divergent, and global financial conditions, though somewhat tightened, remain favourable. This was aided by the announcement of the European Central Bank that it will keep its key interest rates unchanged at least through the summer of 2019, and that, once it concludes the quantitative easing programme in late 2018, it will continue to reinvest principal payments from maturing securities.

Developments in the international environment since the May Report were marked by the favourable global economic growth outlook, moderate global inflation, and increasingly diverging monetary policies of leading central banks.

In line with our expectations, year-on-year inflation started to gradually approach the target in the second quarter, standing at 2.3% in June. Unprocessed food and petroleum product prices rose faster than expected in the May *Inflation Report* due to still rising oil prices in the global market. In spite of this, inflationary pressures on account of the majority of factors remain low, as confirmed by core inflation, which has been standing at the lowest point on record of 0.8% year-on-year for four consecutive months, and by inflation expectations of the financial and corporate sectors, which have been anchored around the target midpoint of 3% for some time already. At quarterly level, the increase in consumer prices by 1.4% was driven by the rise in the prices of vegetables uncharacteristic for this time of year, higher petroleum product prices, and the seasonal growth in the prices of travel packages.

After reaching the lowest point in April, as expected, year-on-year inflation returned to the target band (3.0±1.5%) in May and measured 2.3% in June. Inflationary pressures on account of the majority of factors remain low, as confirmed by core inflation at the lowest point on record of 0.8%, and by inflation expectations anchored around the target midpoint of 3%.

Having cut the key policy rate by a total of 50 basis points in March and April to 3%, the Executive Board of the National Bank of Serbia kept it unchanged.

Closely following the developments in the domestic and international environment, the Executive Board has kept the key policy rate on hold since May (3.0%). In deciding on the level of the key policy rate, the Executive Board was guided by the fact that inflation would gradually approach the target, and remain within the target band in the next two years, i.e. until the end of the projection horizon. The Executive Board also assessed that the effects of past monetary easing are contributing to economic growth, which is gathering pace, driven by domestic demand. Also, monetary policy caution was still required, mainly on account of uncertainties in the international commodity and financial markets. Global oil prices picked up and their movement going forward is uncertain. In addition, leading central banks (the Federal Reserve System and European Central Bank) are expected to further normalise their monetary policies, with the risk that stems from the trade tensions between the world's leading economies.

Lending activity rose (by 7.6% year-on-year in June) on account of factors on both the supply and demand side. This and the efforts to resolve the issue of non-performing loans made the share of these loans in total loans fall further, to 7.8% in June, the lowest level since 2008, when this indicator of bank portfolio quality was introduced. Excluding the effect of the write-off and assignment of non-performing loans, lending activity rose by 14.1% year-on-year in June.

Interest rates in the government securities market continued down on the back of monetary policy easing and improved fiscal position of the country, as can be seen from the reduced need to finance current liabilities. Monetary policy easing also drove down interest rates on dinar loans to new lows. This and the effects of economic growth, along with labour market recovery, increased interbank competition, a decline in the country risk premium, and low interest rates in the euro area money market, all contributed to further growth in lending activity. The same can be concluded from banks' assessments in the bank lending survey of the National Bank of Serbia, which state that lending growth is also supported by relaxed credit standards and more favourable terms, as well as the rise in loan demand. Despite the considerable write-offs of non-performing loans, year-on-year growth in total loans (excluding the exchange rate effect) stepped up since the start of the year, amounting to 7.6% in June. Year-on-year growth in loans to corporates accelerated further (to 5.5%), while growth in loans to households slowed down slightly (to 11.1%). Owing to the successful implementation of the NPL Resolution Strategy and the rise in lending activity, the share of non-performing loans in total loans fell drastically, to 7.8% in June, the lowest level since 2008, when this indicator of bank portfolio quality was introduced.

Favourable fiscal trends – a budget surplus and the falling share of public debt – continued during 2018. The increase in government capital expenditure boosts investment, and the rise in public sector wages and pensions constitutes a source of consumption growth,

Consolidated budget recorded a surplus in April and May as well, which equalled RSD 9.3 billion from the start of the year. Excluding interest expenses, the surplus at the consolidated level came at RSD 66.2 billion. In the first five months of the year, consolidated revenue was higher

by 3.2% year-on-year in real terms, driven by higher social insurance contributions in response to the recovery of the formal labour market, profit tax revenue owing to greater profitability of corporates in 2017, and the rise in excise revenue. In 2017, all sectors of the economy posted a positive total financial result, demonstrating that economic recovery is not concentrated in isolated areas of the economy, but it instead has a broad base. At the same time, consolidated expenditure increased by 5.1% year-on-year in real terms, owing mainly to much higher capital expenditure and increased employee expenses, while a drop was recorded for interest and activated guarantee expenses. Central government public debt stood at EUR 24.0 billion in late June, and its share in projected gross domestic product was 59.7% (as opposed to 61.5% at the end of 2017). As a result of higher issues of dinar securities, the share of public debt in dinars rose (from 23.0% at the end of 2017 to 24.9% in June), which helps mitigate currency risk. Since the start of the year, fiscal trends have been more favourable than expected, suggesting that consolidated budget will record a better result than planned by the Fiscal Strategy this year as well.

though not to the extent that would cause significant inflationary pressures.

According to preliminary data, in the first half of 2018, the current account deficit equalled 5.4% of gross domestic product, which is 0.7 percentage points lower than in the same period last year. By structure, the higher trade in goods deficit was fully compensated by the higher trade in services and secondary income surplus, and by the lower primary income deficit. Export growth was driven by higher exports of all sectors of manufacturing, and in the second quarter by the recovery of agriculture exports as well. At the same time, the current investment cycle, spurred also by inflows of foreign direct investment, supported growth in imports of equipment and intermediate goods for industrial purposes, which was also the primary factor of import growth.

High growth rates of manufacturing exports continued (10.7% year-on-year), while the rise in imports (11.5% year-on-year) came mainly from increased needs of corporates for equipment and intermediate goods, in line with the current investment cycle.

Since the start of the year, the financial account posted a net capital inflow of EUR 1.8 billion. By structure, a project-diversified inflow of foreign direct investment continued, primarily channelled into tradable sectors. This inflow, measuring EUR 1.3 billion net (8.6% year-on-year growth) more than fully covered the current account deficit (by 128.5%), further adding to appreciation pressures in the foreign exchange market. The inflow in respect of portfolio investment equalled around EUR 154 million net, with higher investment of foreign investors in long-term dinar government securities issued in the domestic market, while there was a net outflow with respect to government securities issued

Appreciation pressures were supported by foreign capital inflow, mainly on account of foreign direct investment, which more than fully covered the current account deficit.

in the international market, chiefly owing to the early repayment of the remaining debt to London Club creditors. A capital inflow was recorded also with respect to financial loans taken out by the government, companies and banks. We estimate that the net inflow of foreign direct investment of around EUR 2.6 billion this year will fully cover the current account deficit. We expect this trend also in the coming period, which will be one of the factors of external sustainability in the medium run.

Robust gross domestic product growth diversified across sectors continued in the second quarter and, according to the preliminary estimate of the Statistical Office, it equalled 4.4% year-on-year, surpassing our expectations.

Gross domestic product growth exceeded our expectations in the second quarter as well, thanks to faster than expected growth in construction and agriculture on the production side, and in investment on the expenditure side. The highest contribution continued to come from service sectors, which were positively affected by the recovery in domestic demand, and construction, owing to continued implementation of infrastructure projects and a gradual recovery of the real estate market. Industry contributed to economic growth, though less so than in the first quarter, in part due to the base effect for mining and energy, and in part due to a slowdown in the rise in external demand on account of slower euro area growth. Agriculture was a positive factor both in the second quarter and at yearly level. According to our estimate, it should grow by around 11% in 2018. Such developments result mainly from extremely favourable agrometeorological conditions for the production of main crops in the current agricultural season, and in part from the low base effect due to last year's poor agricultural season. Continued seasonally-adjusted gross domestic product growth, present for eleven consecutive quarters, which we estimated to measure 0.5% in the second quarter, helped economic activity approach potential output.

The labour market is characterised by a rise in formal employment, a decline in unemployment to the twenty-year minimum and wage growth, mainly in the private sector.

Robust economic growth, through raised labour demand, has contributed to further labour market recovery, which is characterised by rising employment, a decline in unemployment in all occupational groups, and wage growth. As in the previous quarters, formal employment increased in the second quarter owing to higher private sector employment, while the public sector continued employment rightsizing. By activity, compared to last year, formal employment rose the most in manufacturing. Faster economic growth also reflects on the productivity of the overall economy.

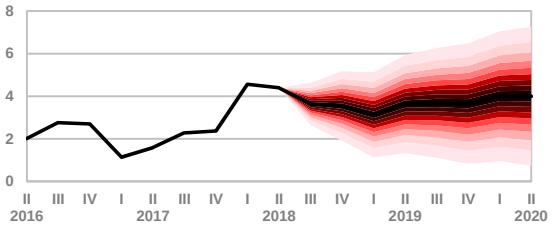
We revised our gross domestic product growth projection for 2018 to around 4%, up by 0.5 percentage points from the May projection. The forecast for 2019 remained

Guided by faster than expected growth in construction and agriculture on the production side, and investment on the expenditure side (singled out as positive risks in the May projection as well), we revised upward the gross

domestic product growth projection for 2018 to around 4%, up by 0.5 percentage points from the May projection. The gross domestic product growth forecast for 2019 remained unchanged (3.5%), partly also due to the high base on account of faster growth in 2018. We expect that the continuation of reforms will ensure that the pace of gross domestic product growth of around 4% remains sustainable in the medium run as well. Domestic demand, i.e. investment and household consumption, are estimated to be the drivers of gross domestic product growth this and next year. A favourable macroeconomic environment and growth outlook, continued intensive investment in infrastructure and favourable financing conditions should continue to positively affect fixed investment. It will, owing to vibrant growth, increase its share in gross domestic product to 22% this year, and prop up external competitiveness and productivity, i.e. ensure preconditions for sustainable growth in the medium run. Besides, favourable terms of borrowing, along with a continued rise in disposable income based on expected further wage and employment growth, and gradual recovery of consumer confidence, will continue to positively affect a rise in consumption. Exports are expected to grow at two-digit rates, led by past investment and elevated external demand. Imports of equipment and intermediate goods are also expected to rise owing to the continuation of the investment cycle. Risks to the economic growth projection are assessed to be symmetric and concern primarily developments in the international environment, i.e. the pace of growth in the euro area and our other important trade partners, including developments in the international commodity and financial markets.

unchanged (3.5%), partly also due to the high base on account of faster growth this year.

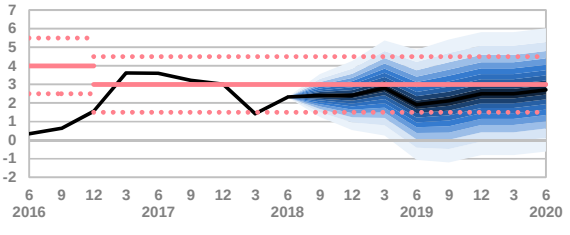
GDP growth projection
(y-o-y rates, in %)



Under the August central projection, year-on-year inflation is expected to continue to move within the target tolerance band in the next two years – below the target midpoint until the end of 2019, getting temporarily close to the midpoint in the first months of 2019 due to the low-base effect early this year. The main factors driving such movement in the medium run include rising aggregate demand and gradual weakening of disinflationary pressures on account of past appreciation of the dinar. A short-term disinflationary effect will be produced by low food production costs, with administered prices working in the opposite direction. In the course of 2019, year-on-year inflation will also be influenced by the high base for fruits, vegetables and petroleum products. Compared to the previous projection, the new medium-term inflation projection is temporarily, until the end of the first quarter of 2019, at a somewhat higher level due to higher than expected consumer price growth in the second quarter. **Thereafter, until the end of the projection horizon, it**

Under the new central projection as well, year-on-year inflation will remain low and stable within the target tolerance band (3.0±1.5%) until the end of the projection horizon, staying most probably below the target midpoint throughout 2019.

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



will be at a lower level due to the higher base for fruit and vegetable prices, lower food production costs and, to a lesser extent, continued appreciation of the dinar against the euro in the period from the previous projection. The risks to the inflation projection are assessed to be symmetric and associated primarily with further developments in the global commodity and financial markets and, to an extent, administered price growth.

We estimate that the key risks in the coming period emanate from the international environment and, as such, may affect the monetary policy stance.

Looking ahead, monetary policy decisions will continue to depend on the assessment of the impact of inflation factors from the domestic and international environment. As the key risks emanate from the international environment, the National Bank of Serbia will continue to closely monitor and analyse movements in the international financial market and the market of primary commodities, notably crude oil and primary agricultural commodities, and will assess their impact on economic developments in Serbia. The National Bank of Serbia will as so far use all available instruments to make sure inflation remains low and stable over the medium term which, together with the preservation of financial stability, will contribute to sustainable economic growth and stronger resilience to external uncertainties.

II Monetary policy since the May *Report*

Since the May Inflation Report, the key policy rate was kept on hold at 3.0%. In deciding on its level, the NBS Executive Board was guided by the fact that, after reaching this year's low in April, inflation would gradually approach the target, and remain within the target band in the next two years, i.e. until the end of the projection horizon. Such expectations were also indicated by core inflation, which, for the fourth consecutive month, in June stood at the lowest point on record – 0.8% y-o-y, and by inflation expectations of the financial and corporate sectors anchored around the NBS target of 3%, both for one and two years ahead.

The Executive Board also assessed that the effects of past monetary easing are contributing to economic growth, which is picking up driven by domestic demand. The high contribution of investment is underlined, which will continue to support diversified growth of export-oriented sectors of the economy in the coming period. Investment growth is also supported by lending growth, favourable financing terms, and by FDI inflows, which more than fully cover the current account deficit and support its reduction in the medium term.

Monetary policy caution was still required, mainly on account of uncertainties in the international commodity and financial markets. Global oil prices picked up and their movement going forward is uncertain. Also, leading central banks are expected to further normalise their monetary policies, and there is risk arising from trade tensions. Still, the Executive Board pointed out that the resilience of the Serbian economy to potential adverse effects from the international environment has increased owing to favourable macroeconomic fundamentals and outlook for the period ahead.

Having cut the key policy rate by a total of 50 bp in March and April, the NBS Executive Board kept it unchanged at 3.0%, its lowest level in the inflation targeting regime. The decisions on monetary policy in the period observed were based on the May inflation projection, which predicted that, after hitting this year's low in April, y-o-y inflation would gradually move towards the target, staying closer to the lower bound of the target tolerance band this year. It is projected to approach the 3.0% midpoint in H2 2019 and move steadily around the midpoint until the end of the projection horizon. The main factors underlying such inflation movements according to the May projection were the low base for some products, the waning of the effects of past appreciation of the dinar, rising aggregate demand and the past key policy rate cuts. Uncertainty surrounding the inflation projection related primarily to movements in the international commodity and financial markets and, to an extent, administered price growth and the success of this year's agricultural season.

As regards economic activity, it was expected to accelerate on the back of domestic demand, i.e. investment and household consumption, owing to the further improvement in the business environment, favourable financial conditions, continued implementation of infrastructure projects and positive labour market trends. GDP growth was expected to pick up to around 3.5% in 2018 and 2019, and to around 4% in the medium run. In fact, macroeconomic indicators at the beginning of the year were more favourable than expected, mainly with respect to construction on the production side, and investment on the expenditure side, which suggested that growth might be even faster in 2018.

As expected by the Executive Board, after hitting this year's low in April, inflation started to gradually approach the target. At the same time, core inflation has been stable since March, at the lowest value of 0.8%, pointing to low inflationary pressures. This was also indicated by inflation expectations of the financial and corporate sectors, which are anchored around the 3% target for both one and two years ahead.

As regards the factors that will drive inflation going forward, the Executive Board concluded that past dinar's strengthening had a disinflationary effect through lower import prices expressed in dinars, on which account

disinflationary pressures are expected to continue for some time, after which they will steadily wane. However, given the expected moderate price growth in the euro area, our most important trade partner, and the expected relative stability of the dinar exchange rate, the Executive Board emphasised that the rise in dinar-denominated import prices was likely to stay relatively low.

The Executive Board also took account of favourable fiscal movements since the start of this year, and of the fact that this year's budget is also highly likely to record better results than planned in the Fiscal Strategy. Favourable fiscal movements will ensure a sustained downward trajectory of public debt in GDP in the coming period, which should reflect positively on the country risk premium and credit rating. Together with high FDI inflows, which more than fully cover the current account deficit and support its reduction in the medium run, this will contribute to further relative stability in the FX market.

The Executive Board made decisions to keep the key policy rate on hold in consideration of the fact that aggregate demand will continue to grow in the period ahead. Further improvement in the business environment, a high and project-diversified FDI inflow, and past monetary policy easing are likely to lend a further impetus to private investment, which will remain one of the drivers of economic growth. Also, public investment grew at three-digit rates in Q1 2018 compared to Q1 2017, doubling its share in GDP and contributing to GDP by 1.6 pp in Q1. Fiscal policy will make its further increase a priority in the coming period.

In addition to investment, a higher positive contribution to economic activity should come from household consumption on account of further labour market recovery. The Executive Board assessed that positive labour market trends, mainly the continued growth in wages and employment, and higher public sector wages and pensions, would help gradually close the negative output gap by exerting a positive influence on household disposable income.

Disposable income is expected to rise also on account of the lower level of interest rates and the resulting decreased credit costs, achieved with past key policy rate cuts by the NBS to the lowest level in the inflation targeting regime. Lower dinar lending costs, along with effects of economic growth, positive labour market developments, increased interbank competition, reduced country risk premium and low euro area interest rates, contribute to a further rise in lending, which, excluding the exchange rate effect, came at 7.6% y-o-y in June (excluding the NPL write-off and sale effect – 14.1% y-o-y).

Besides domestic demand, the Executive Board assessed that external demand would recover further as well. Economic growth in the euro area and Central and South-Eastern Europe should boost exports, mainly of manufacturing, and help them retain high growth rates going forward. Still, caution was mandated by the risk of trade tensions and potential negative effects, not only on global economic growth (including the euro area), but also on volatility in commodity and financial markets.

Global commodity markets were characterised by uncertainty, mainly in terms of movements in global oil prices, which were 60% higher in June than a year before. Though futures suggest that these prices are not expected to rise further, but to stabilise by end-2018 and fall somewhat by end-2019, the Executive Board underscored the necessity for caution on these grounds. Also, the current rise in oil prices gave rise to expectations of somewhat higher inflation in the international environment.

Moreover, monetary policies of leading central banks, the Fed and ECB, continued to normalise. In June, the Fed raised its target range for the fed funds rate to 1.75–2.00%. The ECB announced that it would carry out the quantitative easing programme at the lower monthly amount of EUR 15 bn after September, until the end of 2018, after which the programme will conclude. Still, the ECB will continue to reinvest the principal payments from maturing securities thereafter. It also announced that the euro area benchmark interest rate would remain on hold at least by the end of summer of 2019.

Based on the August projection, in August the NBS Executive Board also voted to keep the key policy rate on hold. Looking ahead, monetary policy decisions will continue to depend on the assessment of the impact of inflation factors from the domestic and international environment. Also, the Executive Board emphasised that the resilience of the Serbian economy to potential adverse effects from the international environment has increased considerably, owing to favourable macroeconomic fundamentals and outlook for the period ahead.

Text box 1: The most important measures and results of the NBS in the past six years

In the past six years, during the first term of office of the current governor, Serbia has been transformed into a stable and promising economy with low and predictable inflation, balanced fiscal account, reduced external imbalances, downward trajectory of public and external debt, growing investment and recovered labour market. One of the important contributors to such an essential transformation of our economy was the National Bank of Serbia. By undertaking adequate measures, strengthening coordination with other policies and preserving price and financial stability, the NBS contributed to the creation of a stable and predictable environment, as confirmed by the significantly lower risk premium of the country, an upgrade in its credit rating and an upward movement on the international competitiveness lists. Progress is also reflected in lower costs of borrowing, sustainable lending growth, preservation of the value of the dinar and opening of possibilities for raising our income, all of which boosts investment, exports and production. Most importantly, the results achieved are long-term and lasting, despite strong challenges coming from the international environment. The most important results of the NBS can be presented in figures:

Inflation in Serbia has been low and stable for five years.

12.9% *October 2012* — 2.2% *October 2013* 2,0% *Average for the last five years* 4 ± 1.5% *Target until 2017* — 3 ± 1.5% *Target after 2017*	Inflation was reduced from two-digit levels to a level comparable with other European countries in less than a year... ... and maintained at a low level for the next five years. Inflation target was lowered, which best confirms the NBS's determination to keep Serbia in a group of countries with low, stable and predictable inflation and to push long-term dinar interest rates further down.

There is trust in the NBS that inflation will remain low in future as well.

8% *End-2012* — 2.8–3.0% *Today* *Financial sector* 10% *End-2012* — 2.7% *Today* *Corporate sector*	Inflation expectations of the financial and corporate sectors at end-2012 stood at 8% and 10%, respectively, with large oscillations.... … while as of October 2013 in case of the financial sector and as of February 2014 in case of corporates they turned low and stable and entered the NBS's target tolerance band.

Relative stability of the exchange rate has been preserved and the country's FX reserves increased.

6 August 2012 – 6 August 2018 *Appreciation:* 0.5% *Bought:* EUR 1.1 bn net *1 January 2008 – 6 August 2012* *Depreciation:* 33.1% *Sold:* EUR 5.7 bn net	The RSD/EUR exchange rate remained almost unchanged over the last six years, despite turbulences in the international environment, and the country's FX reserves increased based on interventions in the IFEM – net purchase of EUR 1.1 bn.
July 2012 – July 2018 *NBS FX reserves* +EUR 1.3 bn *Liabilities to banks:* -EUR 1.0 bn *Liabilities to the IMF:* -EUR 1.7 bn *Net FX reserves:* +EUR 4.0 bn	Net FX reserves of the NBS, that is of the Republic of Serbia, rose since the beginning of August 2012 till end-July 2018 by EUR 4.0 bn to EUR 9.5 bn, their highest level since 2000. This is an additional protection from potential external shocks.

Interest rates fell to their lowest levels.

Relative to May 2013

– Interest rates on dinar loans fell by:

11.4 pp *Corporates* 10.5 pp *Households*

– Lower interest rates on dinar government securities:
depending on maturity, around 7 pp

Interest rates on dinar loans recorded a strong drop relative to May 2013, which contributes to higher disposable income of corporates and households and growth in credit and economic activity.

Interest rates on government securities also dropped significantly, aiding successful fiscal consolidation. Today, interest rate on ten-year dinar government securities equals 4.8%, compared to 13% in October 2014, when they were first issued.

By reducing interest expenses and exchange rate losses, the NBS gave a significant contribution to the profitability of corporates.

Interest expenses of corporates

RSD 145 bn *2014* RSD 91 bn *2017*

–37%

Exchange rate losses of corporates

RSD 246 bn *2014* RSD 98 bn *2017*

–60%

Thanks to the NBS's monetary policy easing, lower country risk premium, increased interbank competition and the ECB's monetary policy accommodation, corporate interest expenses were reduced in the face of the rising stock of corporate loans.

At the same time, relative stability of the dinar exchange rate, resulting from successful implementation of monetary and fiscal policies, pushed down exchange rate losses of corporates.

In other words, both corporates and entrepreneurs feel the benefits of the achieved stability, as evidenced by their financial reports, especially taking into account that around 35% of profitability improvement in the period since 2015 stemmed from two positions that were significantly influenced by the central bank.

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

NPL share in bank loans

22.4% *July 2015* 7.8% *June 2018*

Capital adequacy ratio

22.9% (regulatory minimum 8%)

Liquidity ratio

2.1 (regulatory minimum 1.0)

As a result of a systemic approach, in the course of three-years, NPL share in total bank loans fell to its lowest level since this indicator was introduced, i.e. since end-2008. The stock of these loans dropped by over 60% over the last three years since the Strategy was adopted.

The banking system is stable, adequately capitalised and liquid. Owing to the continuous improvement of the regulatory framework governing operation of the financial sector, banks got the opportunity to align their business with the best international practice and standards, which resulted in the preservation and further strengthening of financial stability.

The right and only measure of success are the results achieved.

The results are numerous – and we achieved them by adopting appropriate and timely measures, in coordination with fiscal and other economic policies. **Let us briefly present the most important ones**.

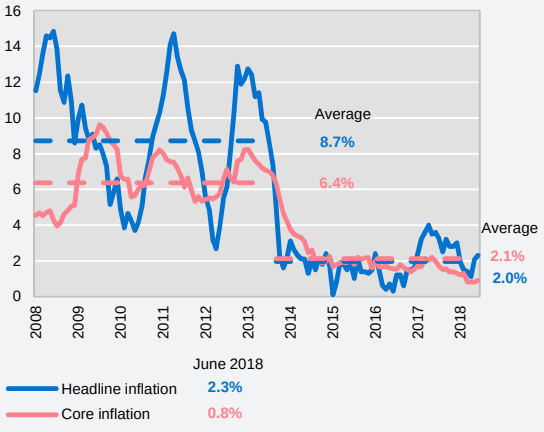
The first and most important result of implemented measures is reducing inflation from two-digit levels to a level comparable to that in European countries. The success achieved in preserving price stability laid the groundwork for the decision to lower the inflation target. The NBS managed, in less than a year, to bring inflation down from 12.9% in October 2012 to 2.2% in October 2013, and to maintain it over the next five years at an average level of around 2.0%. The intention to maintain what was achieved and to keep Serbia in this group of countries was clearly affirmed by the **lowering of the inflation target from 4±1.5% to 3±1.5% as of the start of 2017**. The justifiability of such decision was corroborated by the movements of inflation which in December 2017, as well as in 2017 overall, stood

at the 3.0% target midpoint, while averaging 1.7% in H1 2018. Also speaking in favour of the decision is the two-year ahead inflation projection forecasting continued movement within the new, lower target band.

That the suppression of inflationary pressures is of a lasting nature is indicated also by the movement of core inflation, which in the last five years averaged 2.1% y-o-y. Since August last year core inflation has revolved around the lower bound of the target tolerance band, only to touch the 0.8% y-o-y low in March this year and remain there for the following three months. Low inflationary pressures in the period since 2013 have been achieved by a responsible monetary, as well as by fiscal policy, anchored inflation expectations and relative stability of the exchange rate, and are partly the result of low cost-push pressures from the international environment.

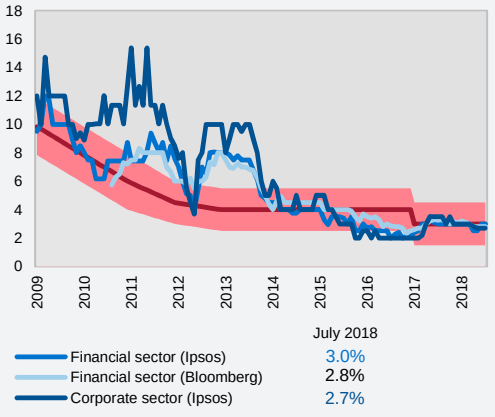
By preserving the ambience of low and predictable inflation, the NBS **provided the best support to economic growth, facilitating business and investment planning of companies and saving and spending decisions of citizens**. This is also a necessary precondition for an increase in production and exports, and in employment and wages on a sustainable basis. No less important is the **preservation of the value of household income and strengthening of the confidence in the dinar**.

Chart O.1.1 **Low and stable inflation**
(y-o-y rates, in %)



Sources: SORS and NBS calculation.

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



Sources: Gallup, Ninamedia, Ipsos and Bloomberg.

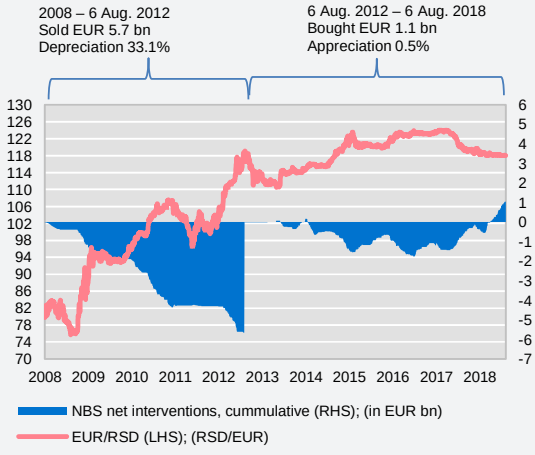
Both domestic economic agents and international financial organisations have expressed their confidence in the NBS's ability and commitment to keep inflation under control. Their expectations of inflation movements concur with the NBS's target which, among other things, testifies to the **growing credibility of monetary policy**.

Speaking of domestic economic agents, both the financial and corporate sector expect that price stability and, by extension, the predictability of business and investment conditions will be preserved in the short, as well as in medium term. Their inflation expectations at end-2012 stood at 8% and 10%, respectively, and were rather volatile. Today they are low and stable, anchored within the bounds of the new, lower target of the NBS, which is very important for the effectiveness of monetary policy. Financial sector's short-term inflation expectations have moved within the target since October 2013 and those of the corporate sector since February 2014. Medium-term inflation expectations of the financial sector have moved within the target bounds since the records began in March 2014, and of the corporate sector – since August that year.

The NBS's effectiveness in inflation curbing was underscored by international institutions as well – the European Commission, rating agencies, the IMF and similar. For example, in its last two press releases Standard&Poor's have stressed operational independence and strengthening of credibility of the NBS, supported by several consecutive years of low and stable inflation, which, in their opinion, is likely to stay within the bounds of the target in the medium-term as well. Another confirmation of the NBS's strong track record in keeping inflation under control is the report of the World Economic Forum which for several years in a row awarded top ranking for Serbia according to the achieved inflation level (the place it shares with some 35 other countries).

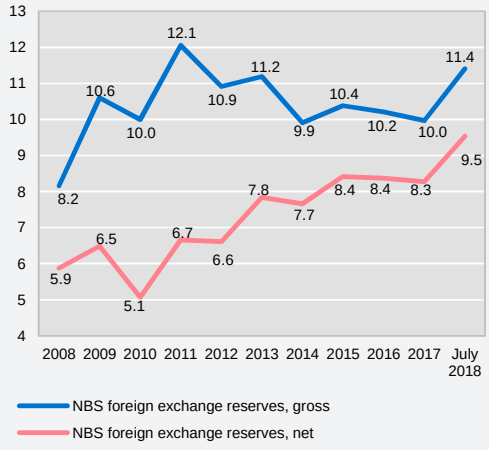
Amid significant turbulences in the international markets over the last six years, the NBS **preserved relative stability of the RSD/EUR exchange rate**. Observing the period from 6 August 2012 until 6 August 2018, the dinar gained 0.5% against the euro, while FX reserves increased by EUR 1.1 bn through the NBS's net FX purchase interventions. It should be noted that the period since 2012 to date was characterised by turbulent developments and significant challenges, both at home and in the international environment (Brexit, Fed's monetary policy normalisation, geopolitical tensions, marked volatility of oil prices, Asian stock market meltdown in early 2016, the Greek crisis, trade tensions among the leading global economies etc.).

Chart O.1.3 **Relative stability of the exchange rate in the past six years**



Source: NBS.

Chart O.1.4 **Increased level of FX reserves**
(in EUR bn)

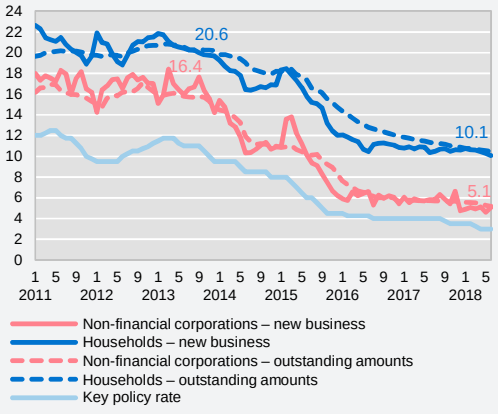


Source: NBS.

Given the level of euroisation of the domestic economy and the pass-through effect of the exchange rate to prices, the preserved relative stability of the exchange rate in the prior period was instrumental in the NBS's meeting its principal objectives – price and financial stability. **Relative stability of the exchange rate has made the business environment more predictable and thus conducive to the strengthening of investment, foreign trade and economic activity**. Since 2016 more than half of Serbia's production has been marketed abroad – the share of goods and services exports in GDP reached 52.5% in 2017, and as much as 54.4% in Q2 this year (for the sake of comparison, in 2012 it stood at 36.2% of GDP). Imports also rose in that period, but to a much lesser degree, mainly due to increased need for intermediate and investment goods. This shows that the relative stability of the dinar exchange rate was a good foundation for deepening and advancing our foreign trade cooperation on a lasting basis. That is also confirmed by a vibrant growth of goods and services exports which extended into this year as well, feeding back positively to the FX market and stabilising its movements. **In addition, the maintenance of low inflation and relative stability of the exchange rate supported the fiscal consolidation and the balancing of public finance, as monetary policy measures mitigated the effects of these necessary measures on the living standard of citizens**.

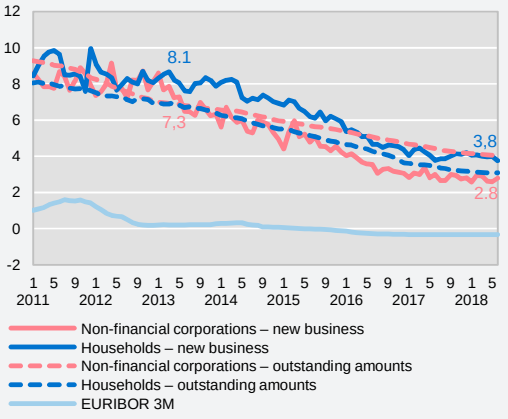
The resilience of our economy to external shocks is definitely increased by the reduction of internal and external imbalances and by an adequate level of FX reserves. By carefully calibrated interventions in the FX market, the NBS boosted FX reserves in the prior period. Relative to end-July 2012, gross FX reserves rose by EUR 1.3 bn to EUR 11.4 bn at end-July 2018. This level of FX reserves covers almost six months' worth of imports of goods and services, which is twice more than envisaged by the criterion on adequate FX reserves coverage. The NBS increased the quantity of gold in the structure of FX reserves – there are now 19.9 tonnes in the treasury, or 5.1 tonnes more than at end-July 2012. Even more important is the **increase in net FX reserves**, i.e. FX reserves less banks' FX balances on account of required reserves and other requirements. At end-July 2018, net FX reserves reached EUR 9.5 mn, which is **an increase of EUR 4.0 bn relative to end-July 2012 and their highest level since 2000**. There were increases in net FX reserves in prior periods as well, but mostly on account of privatisation proceeds.

Chart O.1.5 **Interest rates on dinar loans – at a minimum**
(annual level, in %)



Source: NBS.

Chart O.1.6 **Interest rates on euro-indexed loans are also lower**
(annual levely, in %)

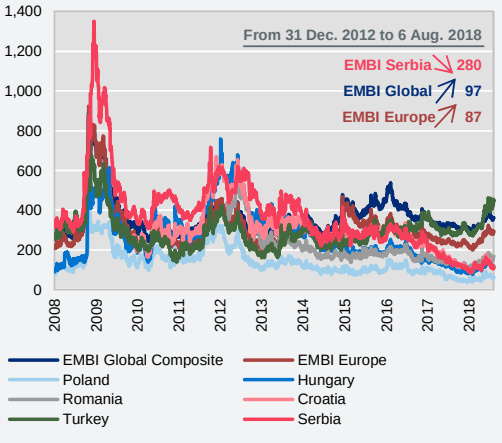


Source: NBS.

Monetary policy easing, initiated in May 2013, fully translated into reduced costs of borrowing of the government, corporates and households. Today interest rates on new corporate loans are more than 11 pp lower than in the prior period, while those on household loans more than halved (a decline by 10.5 pp). Interest rates on existing loans experienced a similar trend – dropping by 10.7 pp in the corporate and by 10.2 pp in the household sector relative to May 2013. In this way the NBS also significantly contributed to the rise in disposable income which, together with lending growth, boosted investment and economic activity.

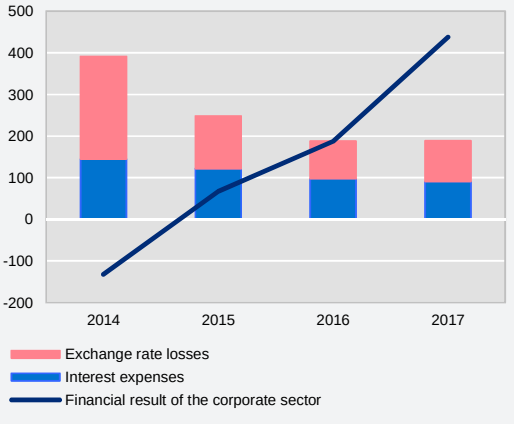
Interest rates on euro-indexed loans declined in the same period – by 4.5 pp on new corporate loans and by 4.3 pp on household loans. **Such fall is largely due to the lower country risk premium (by 2 pp)**. In part, it is also associated with lower interest rates in the euro money market – three-month EURIBOR declined by 0.5 pp in the observed period – and with higher interbank competition.

Chart O.1.7 **Sharp fall in Serbia's risk premium**
(daily data, in bp)



Source: JP Morgan.

Chart O.1.8 **Better financial result of the corporate sector**
(in RSD bn)



Source: Business Registers Agency.

Six years ago Serbia's risk premium was considerably above EMBI Global and EMBI Europe, and exceeded the risk premiums of the majority of regional peers. Today, **Serbia's risk premium** is below EMBI Global and EMBI Europe. Early this year it fell to 85 bp, its lowest level on record (since April 2005) and almost 400 bp lower from what it measured at end-2012. In the same period, EMBI Europe dropped by around 200 bp and EMBI Global by around 180 bp. Lower risk premium of the country confirms that the markets' growing confidence in the Serbian economy is grounded on lasting

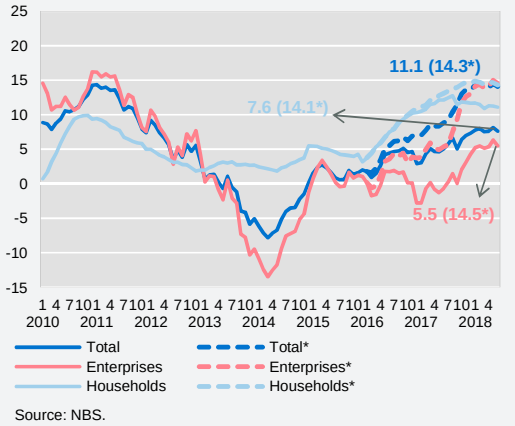
macroeconomic achievements. Further recognition of the results achieved came in 2017, in the form of the **country's credit rating upgrade by all three rating agencies** monitoring our development – by Moody's in March and by Standard&Poor's and Fitch Ratings in December.

Having ensured price and relative exchange rate stability, with lower costs of private sector financing, the NBS gave a **significant contribution to better profitability of the corporate sector**. The financial result of corporates was improved – by RSD 570 bn in 2017 compared to 2014 (RSD 437 bn profit in 2017 vs. RSD 132 bn loss in 2014). **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 owing to lower net interest expenses**. Thanks to the NBS's monetary policy easing, a decrease in the country risk premium and monetary policy accommodation by the ECB, corporate interest expenses were reduced by RSD 54 bn or 37% – falling from RSD 145 bn in 2014 to RSD 91 bn in 2017, despite the rising stock of corporate loans. In the last three years, corporate sector's cumulative savings on interest expenses reached RSD 125 bn. At the same time, owing to the relative stability of the exchange rate, stemming from successful implementation of macroeconomic policies, primarily monetary and fiscal policies, exchange rate losses of the corporate sector declined by RSD 148 bn (from RSD 246 bn in 2014 to RSD 98 bn in 2017). Overall, on both these grounds – interest expenses and exchange rate losses, corporates' financial result in 2017 was RSD 200 bn stronger compared to 2014. In other words, these two items accounted for over 35% of the overall profitability improvement. The end-result is higher profit, which, together with easier access to bank funding, in a more stable and predictable macroeconomic environment, corporates used in the right manner – to increase investment and grow their business.

The NBS contributed also to a significant decrease in the government's costs of dinar borrowing which, in the environment of more favourable economic conditions, low inflation and a broadly stable exchange rate, supported fiscal consolidation and a faster decline of the public debt-to-GDP ratio to below 60% in 2018. Interest rates on dinar government securities are today around 7 pp lower than in May 2013, depending on maturity. In 2018, amid strong interest in long-term investment in Serbia, successful auctions of 10-year government dinar securities were held. Today interest rate on those securities measures 4.85%, as opposed to 13% in October 2014 when they were first issued. It is noteworthy that the demand is high, which is why these securities now make up close to 15% of the overall portfolio of dinar government securities, though full sale of the issue started only this year. The decline in interest rates on government securities enabled the government to borrow in domestic currency at longer maturities and on much more favourable terms, to replace the costlier debt from the previous period with a cheaper one and to increase the share of dinar debt, thus reducing FX risk exposure. The fact that non-residents show great interest in government securities with longest maturities, at lower interest rates, confirms that Serbia is an attractive investment destination today.

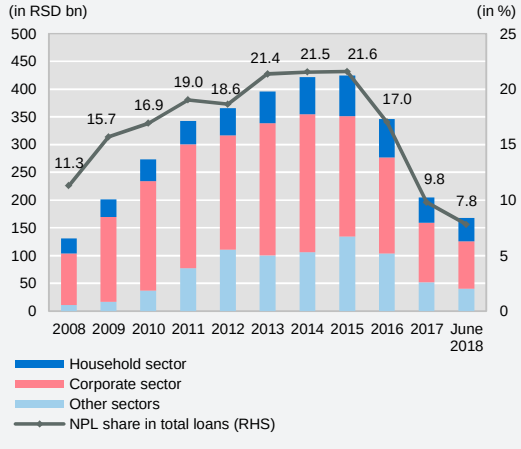
Monetary policy easing and falling interest rates effectively passed through to bank lending growth. Owing to significantly lower interest rates, the acceleration of economic activity and recovery of the labour market, **in early 2015 y-o-y lending growth entered positive territory**, despite the maturing of sizeable amounts from the government's 2014

Chart O.1.9 **Fall in borrowing costs encouraged lending activity**
(at constant exchange rate as at 30 Sept. 2014, y-o-y rates, in %)



Source: NBS.
* Excluding the effect of NPL write-off and sale since early 2016.

Chart O.1.10 **NPL share fell to its lowest level**
(gross principle)



Source: NBS.

subsidised lending scheme. Lending growth accelerated in subsequent years, despite the step-up in banks' NPL resolution activities through write-offs and sale to non-banking sector entities. The growth rates were similar to those from end-2011, which was one of the years the subsidised lending scheme was in place. Namely, in June 2018, excluding the exchange rate effect, total loans went up by 7.6%, of which corporate loans by 5.5% and household by 11.1%. Excluding the effect of NPL write-offs and sale, the growth is even more striking – 14.1% (14.5% in the corporate and 14.3% in the household segment).

Especially encouraging is the expansion of corporate investment financing. Since early 2015 granting of new investment loans particularly stepped up. Their total amount, in 2015 and 2016 only, reached the volume of investment loans approved in the previous four-year period (2011–2014). **Investment loans were one of the sources of financing in the new investment cycle, contributing to a pick-up in economic growth both in the short- and medium-term**. The fact that in the last three years new investment loans almost equalled the FDI inflow testifies to their importance. Lending was channelled mainly to sectors which posted the highest growth in economic and foreign trade activity, notably manufacturing. An additional **qualitative step forward in the credit market was recorded in the housing lending segment**. Together with cash loans, housing loans are the dominant category of household lending. Their growth was particularly pronounced in 2017 – it was 2.2 times higher than in 2016, and as such the sharpest since 2011, when the subsidised lending scheme was in place. Positive trends extended into H1 2018 as well, when housing lending growth reached the overall growth recorded in 2013–2016.

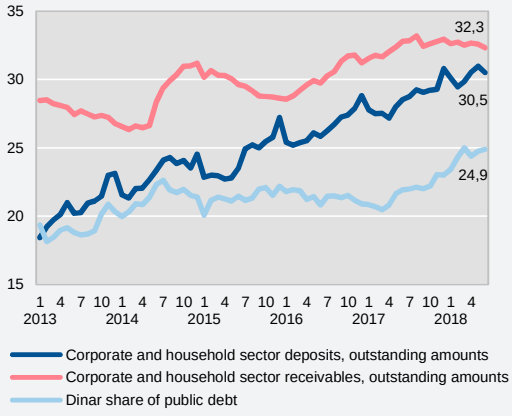
Thanks to a **systemic approach to the resolution of NPLs**, their share in total bank loans dropped by 14.6 pp in three years, from 22.4% in July 2015 to 7.8% in June 2018, **the lowest level** since the monitoring **of the NPL ratio** began in late 2008. Such success in the **NPL** resolution was achieved thanks to the combined effects of the implementation of the NPL Resolution Strategy and the Decision on the Accounting Write-off of Bank Balance Sheet Assets. A decrease in NPLs over the last three years was particularly pronounced in companies, mainly in sectors most severely hit by the crisis: in construction (down by 39.7 pp to 9.5%), real estate (by 26.7 pp to 11.2%), wholesale and retail trade (by 20.1 pp to 4.9%), and manufacturing (by 10.1 pp to 12.8%).

The results of macroeconomic stabilisation efforts, significantly lower interest rates on dinar loans, and specific measures promoting the use of the dinar laid the groundwork for progress in the process of dinarisation. Major steps forward were made on the deposit side, which is also a key factor for advancing the dinarisation of loans. The share of dinar deposits has increased to around 30.5%, from below 20% at end-2012. Particularly promising is the rising dinarisation of household deposits, which increased from 8.8% in December 2012 to 17.3% in June 2018. Also, **dinar savings of households reached their peak in June this year – RSD 52.7 bn, and are three times higher than in 2012**. Bearing in mind the deep roots of the euroisation of our system, we can be satisfied with the results achieved.

In case of bank lending, the progress is uneven. A rising trend was recorded in household loans, with dinarisation exceeding 50% in mid-2017 and reaching 52.8% in June 2018 (an increase of 17.7 pp relative to end-2012). That the NBS's measures have been effective in promoting household borrowing in dinars and that they have been further bolstered by a stable environment can also be illustrated by the fact that **since 2016 almost three fourths of new household loans have been approved in dinars**, compared to 60% on average in 2012. Headway in dinarisation was also registered in the housing loan segment because, thanks to the reduced interest rate differential on dinar and euro-indexed loans, the year 2016 saw first approvals of long-term housing loans in dinars. These loans are approved with up to 30 year repayment term and at a rate of 4–5%, at which, until a few years ago, euro-indexed loans were approved. It was in December 2016 that the domestic financial market saw the first issue of dinar securities by an international financial institution (EBRD), which thus confirmed its confidence in the long-term sustainability of the results achieved.

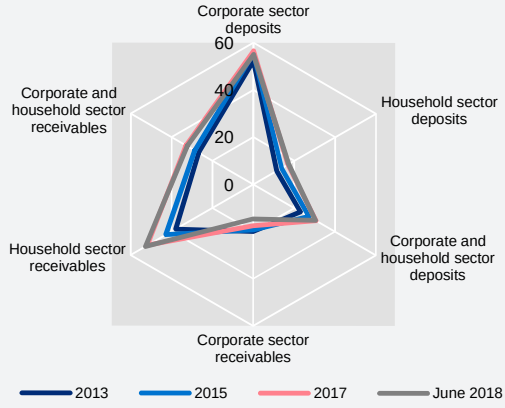
An important progress was also recorded in the domain of public debt, thanks to the government's increasing orientation towards issuing dinar securities. The dinar share of public debt rose from 19% at end-2012 to 25% at end-June 2018. We expect a further rise in the dinarisation of public debt by the end of the year, given the government's decision to use dinar borrowing to settle maturing dollar liabilities. The government's orientation to borrow in dinars at longer maturities is underpinned by a stable environment.

Chart O.1.11 **Higher dinarisation of corporate and household loans and deposits and of public debt**
(in %)



Source: NBS.

Chart O.1.12 **Increase in the dinarisation of corporate and household deposits and loans**
(stock, in %)

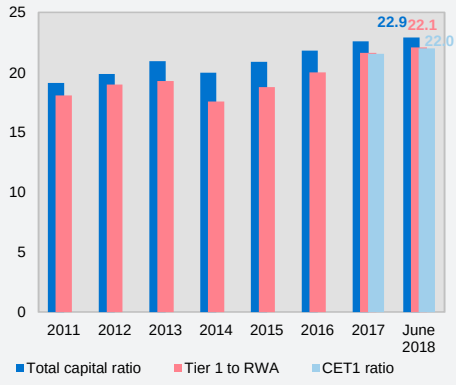


Source: NBS.

The resilience of the banking system to potential disturbances has been safeguarded and bolstered further, as evidenced by the adequacy and liquidity indicators which have been stable over a longer time period. As a result of the NBS's conservative prudential measures in the prior period, banks in Serbia have built up capital and liquidity buffers that make them resilient to potential macroeconomic shocks. High capitalisation of the Serbian banking sector is evidenced by the **capital adequacy ratio**, which after the introduction of Basel III standards remained high at 22.9% at end-June 2018, which is well above the regulatory minimum of 8%. Strategic orientation towards traditional banking and the absence of hybrid financial instruments created **high-quality capital** – the bulk of the capital (over 95%) is made of the highest quality Common Equity Tier 1 capital. High solvency of the banking sector can be demonstrated also by the **leverage ratio** that was introduced in Serbia's regulatory framework by the Basel III implementing regulations. Its value at end-June 2018 stood at 12.45%. Also, **liquidity ratios** have been high and stable over a longer time period, indicating that the necessary conditions for efficient and continuous operation of banks are in place.

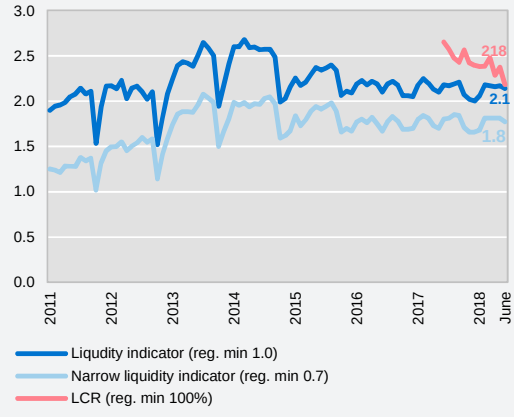
Since 2012 to date numerous measures and activities have been taken in order to achieve sustainable results. The NBS was a positive driving force within its scope of competence, steering positive changes in the economy in coordination with government measures, creating conditions for a sustainable economic growth, to the benefit of the Serbian economy and citizens. We intend to do so in the future as well.

Chart O.1.13 **High capitalisation of the banking sector**
(in %)



Source: NBS.

Chart O.1.14 **Liquidity ratios of the Serbian banking sector at high and stable levels**



Source: NBS.

The path toward results required adequate and timely measures and full coordination with other policies.

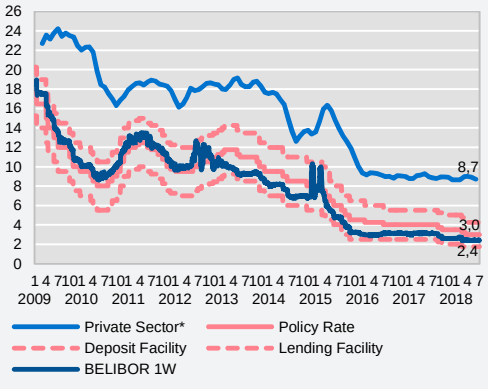
Let us give a brief overview of the most important measures and activities taken by the NBS in the past six years.

Remaining focused on the improvement of its monetary policy toolkit, the NBS first **switched to the model of liquidity mop-up auctions** in December 2012, in view of the structural excess liquidity in the Serbian banking sector. The NBS switched to the model of liquidity absorption **at a variable interest rate and with a limited volume absorbed**. Namely, before July 2012, repo operations of liquidity absorption were carried out at a fixed interest rate and with the absorption of the total excess liquidity offered by banks. After the change introduced in December 2012, the key policy rate became the maximum interest rate acceptable at the auction, with the pre-defined maximum amount of liquidity eligible for sterilisation. Thus, greater interbank competition in depositing idle funds with the central bank strengthened market operations, which, in the ensuing period, **led to a fall in the interest rates in the money and loan markets**. Furthermore, due to the fact that not the entire amount of dinar liquidity is withdrawn at all times, banks are additionally stimulated to lend a portion of liquid assets to the corporate and household sectors. Switching to the new model of repo auctions also enabled more efficient interventions in case of short-term shocks in the FX market, to which the NBS resorted in some periods.

Based on the analysis of inflation factors and assessment of risks in the domestic and international environment, in May 2013 the NBS assessed that it may embark on a cycle of monetary policy easing. Since then the key **policy rate has been reduced by 8.75 pp, to 3.0%**, which is its lowest level in the inflation targeting regime. Thanks to the curbing of inflation and inflation expectations from two-digit to low levels, the key policy rate was initially cut by 3.75 pp (from 11.75% to 8%) in the period May 2013 – November 2014, and then, after the adoption and implementation of the fiscal consolidation programme, monetary policy easing was stepped up further. In conditions of full coordination of monetary and fiscal policy measures – the key policy rate was additionally lowered: by 5.0 pp to 3.0% in April 2018. Rate cuts since 2016 were carried out at a cautious pace, taking into account the effects of past monetary policy easing, lowering of the inflation target as of the beginning of 2017, and above all, the uncertainty surrounding the international commodity and financial markets.

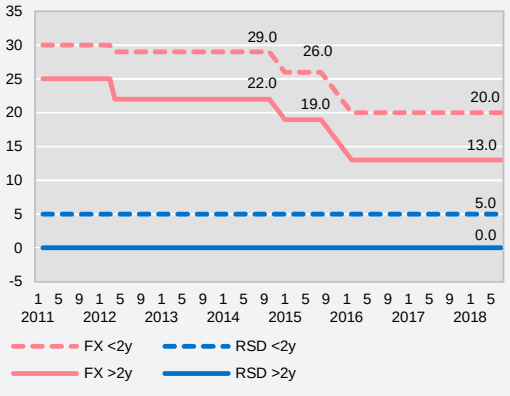
Owing to stable inflation running low for three years in a row, better macroeconomic fundamentals, anchored inflation expectations and a slower rise in administered prices compared to the previous period, at end-2016 the NBS made a decision t**o lower the inflation target from 4±1.5% to 3±1.5%**, the lowest level yet in the inflation targeting

Chart O.1.15 **Key policy rate at a minimum**
(annual level, in %)



Sources: Thomson Reuters and NBS.
* Weighted interest rate on RSD loans, 3-month moving average (up to September 2010 the data were exclusively used for research purposes of the NBS).

Chart O.1.16 **Monetary policy relaxation was also achieved through a reduction in the FX required reserves**
(in %)



Source: NBS.

regime. This decision attested to the NBS's resolution to keep Serbia within the group of countries with low, stable and predictable inflation and to push long-term interest rates further down – and with them also the costs and the currency risk in the financing of long-term needs of corporates, households and the government.

The NBS gave an additional monetary incentive to the economy by **gradually lowering the FX required reserve rates**. In the past six years, these rates were lowered by 9 pp to 20% and 13%, depending on the maturity of liabilities (up to and over two years), whereby around EUR 1 bn was released to banks. This boosted banks' lending potential and reduced the costs of financing, thus contributing to increased lending activity and a reduction of interest rates on bank loans. The adjustment of the required reserve rate was made by monitoring and assessing their impact on credit activity and price stability.

Over the past six years, in an ambience rife with turbulences in the international financial market, the NBS also **increased the efficiency of its interventions in the FX market**. We improved monitoring and assessment of market developments, meticulously estimating the intensity and type of pressures. As a result, interventions were measured, well-timed and balanced in terms of reaction to short-term depreciation and appreciation pressures. Another important contribution to increased efficiency of FX interventions came from the significantly improved communication and cooperation between the NBS and market participants in the domestic FX market (banks, companies, government institutions).

In order to **stimulate the development of interbank swap trading and make liquidity management more efficient for banks**, in the observed period the NBS successfully held its regular three-month and two-week FX swap auctions of FX purchase and sale for dinars thereby providing banks with an additional instrument for regulating liquidity. The NBS's timely response also included irregular foreign currency swap auctions with 28-day maturity in July 2015, the aim of which was to help banks with majority Greek capital to manage liquidity during the "Greek crisis" unfolding at the time. This instrument has proved to be efficient and flexible in assisting banks to overcome short-term liquidity issues.

Five new currencies have been introduced in the exchange rate list – the Russian ruble, Chinese yuan, Turkish lira, Bulgarian lev and Romanian leu, which enabled transactions in these currencies to be performed in the domestic FX market. Following the introduction of the Chinese yuan, the NBS concluded the first **swap arrangement with another central bank** – the People's Bank of China, allowing for an exchange of the Serbian and Chinese national currencies with the aim of enhancing economic cooperation and preserving financial stability. In the wake of these activities, at the end of 2016, the Bank of China arrived in the domestic banking market. Also, owing to changes in regulations in early 2018, **foreign exchange rates lists of commercial banks and the NBS were aligned**, thereby allowing for trade in the form of FX even when that involves currencies that had until now been traded only in the form of foreign cash (Hungarian forint, Polish zloty, Czech koruna, convertible mark and Croatian kuna). At the same time, the Kuwaiti dinar was again added to the NBS foreign exchange rate list given that loan agreements in this currency have been approved to budget beneficiaries.

The NBS continued to support dinarisation. First, by maintaining low and stable inflation and relative stability of the exchange rate, the NBS contributed significantly to the improvement in the macroeconomic ambience as the first (and the most important) pillar of dinarisation. Over the past six years, it additionally adjusted its monetary toolkit to stimulate dinar rather than FX sources of bank financing. By using the required reserve instrument, i.e. higher rates of required reserves on FX sources (20% for up to two-year maturities and 13% for over two-year maturities) than on dinar sources (5% and 0% for respective maturities), the NBS gave preferential treatment to dinar sources of funding. Also, **it raised the required reserve rates on banks' dinar liabilities indexed to the currency clause**, from 50% to 100%, in order to discourage their growth, and **expanded the list of assets eligible as collateral for monetary operations by introducing new dinar securities**. Dinarisation is one of the NBS's strategic commitments, which is why it supported the development of the dinar securities market by adding dinar bonds of international financial institutions with the highest rating (such as the dinar bond issued by the EBRD in December 2016) to dinar government securities, as possible collateral in monetary operations with banks. Also, **the systemic risk buffer rate was defined** at 3% in June 2017 for banks where the share of FX-indexed loans in total loans to corporates and households exceeds 10%. This way, banks were encouraged to reduce the degree of euroisation as their capital requirements are also reduced if they lower the share of FX and FX-indexed loans.

Together with other relevant institutions (Ministry of Finance, Serbian Chamber of Commerce, ACI Serbia, Association of Serbian Banks), for several years already the NBS **has also implemented additional activities to improve the other two pillars of the Dinarisation Strategy – promotion and further development of the market of dinar financial instruments for hedging against FX and other market risks**. A good deal of effort has been invested in the establishment and improvement of the regulatory framework to allow the financial market to continue developing. Thus, the **Law on Financial Collateral** eliminated all obstacles to the faster development of repo operations, which should also be conducive to an increase in secondary trading in the securities market. As a result, the **first local ISDA framework agreement** (standardised agreement on conducting operations with financial derivatives) was concluded, modelled after the best international practices. In addition to this, in the past six years the NBS **constantly improved communication with the public regarding dinarisation**. It held conferences and a number of educational panels to promote FX hedging instruments. In April 2018, together with the Serbian Chamber of Commerce, it held a conference themed "Hedging against Exchange Rate Risk – an Investment in Business Certainty", the aim of which was to raise awareness of the local business community about the need for FX risk hedging so as to increase the certainty of business.

In order to resolve the NPL issue in a systemic way, in cooperation with the Government, the NBS adopted the **NPL Resolution Strategy and the accompanying Action Plans** in August 2015. The NBS carried out all activities defined in its Action Plan within the deadline, and even went beyond the framework of the Action Plan by undertaking additional measures, resulting in a significant drop in NPLs (by more than 60% since the adoption of the Strategy). Specifically, the regulatory framework for the treatment of forborne receivables has been improved to stimulate sustainable resolution practices and prevent 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 Disclosure of Bank Data and Information Related to the Quality of Assets have been issued. Also, the Guidelines for IAS 39 have been published, banks' NPL reporting system has been improved, an analysis on obstacles and limitations in the NPL market has been carried out, and additional requirements for banks have been introduced regarding monitoring of the quality of collateral and appraisers' activities. In addition, at end-September 2017 the **Decision on the Accounting Write-Off of Bank Balance Sheet Assets** came into effect, aiming primarily to stimulate banks to continuously implement activities on NPL resolution by introducing mandatory transfer of NPLs with the lowest degree of collectibility to off-balance sheet records.

In the prior period the NBS paid special attention to the **development of macroprudential policy**, contributing to the preservation and strengthening of the stability of the financial system as a whole. In June 2017, it successfully concluded the third phase of the Strategy for **Implementation of Basel III Standards**, adopted in December 2013, which reflects the NBS's strategic determination to continuously improve the legal framework in accordance with international standards and EU regulations, mindful of the specificities of the local market. In addition to the minimum capital requirement, **capital buffers have been 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), as well as risks of systemic importance. Another key novel feature is the new liquidity standards which require first that a bank should 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. In addition, the legal framework for **bank resolution** has been improved – recovery and resolution plans have been introduced as important instruments for overcoming difficulties in business operations and crisis situations, while the NBS has been given the main role, i.e. that of a resolution authority.

That the Serbian banking system is stable, highly capitalised and liquid has been confirmed by regular off- and on-site supervision of bank operations in the past six years and the successfully implemented **complex procedure of special diagnostic studies which was conducted in Serbia for the first time**, and which included the majority of banks, covering more than 90% of total banking sector assets. **Stress-testing, carried out on a regular basis**, confirmed that the Serbian banking sector is still resilient to shocks from the domestic and international environment, despite the many challenges it was exposed to during and after the crisis.

The contribution of the NBS to the creation of a favourable business ambience in Serbia is also reflected in the strengthening of competition in the financial services market. **The period under review was marked by the licensing of two banks**, which represent the first greenfield investments in the Serbian banking sector since 2008 – the Bank of China Srbija and Mirabank. The arrival of leading international banks will help meet the growing needs of economic cooperation between Serbia and China and the United Arab Emirates.

By proposing a completely novel Law on Insurance, **the NBS launched a comprehensive reform of the insurance sector**. When the Law was adopted in December 2014, Serbia gained a basis for **a new, modern insurance market that meets European standards, offers services of improved quality and provides better protection to citizens and companies as beneficiaries**. Citizens now have a much better grasp of insurance services, which are easily available and better tailored to their needs. The **function of market conduct supervision** was also established within the insurance supervision in order to eliminate bad business practice. **Amendments to the Law on the Protection of Financial Services Consumers, which entered into force in March 2015, allowed for additional improvement of the consumer protection mechanism**. In addition to natural persons, the Law stipulates that high standards of consumer protection should also apply to farmers and entrepreneurs. In procedures under consumer complaints, authorisations of the NBS have been expanded, therefore it may now issue an order to a bank to remove identified irregularities and at the same time impose a fine on the bank. It is of particular importance that the NBS is now authorised to identify instances of unfair business practice, i.e. unfair provisions in contracts, as well as to impose a ban on such practice or on closing contracts with such provisions to all financial service providers. Amendments to the Law ensured that beneficiaries pay for their FX-indexed loans at the same type of the exchange rate as the one under which the loan was disbursed, whereby the principle of equality of parties to a contract has been effected.

In the previous period, the NBS also conducted a comprehensive reform of the payment system – the most up-to-date payment services have been introduced in the Serbian legal system and the use of modern payment instruments (e-banking, m-banking, use of all types of payment cards, digital wallets, etc.) has been enabled. The Law on Payment Services, in effect since October 2015, allowed for the establishment and operation of two new categories of payment service providers – electronic money institutions and payment institutions, which is a huge step towards modernisation of the national payment system, as it improves client safety, increases the efficiency of payment transactions and contributes to the development of innovative forms of payment. For the first time, the electronic money institution has been introduced in our legal system and regulated in detail, including the conditions under which it can be issued, used and purchased. This created the conditions for much stronger competition in the payment services market because, in addition to banks and the public postal operator, payment services can now be offered to citizens and corporates by payment institutions and electronic money institutions as well, which is a precondition for cheaper, faster and more efficient payment transactions.

The year 2017 saw the launch of the **project to introduce the instant payment system, the most up-to-date payment system that is being used in the world**. As of October 2018, citizens and corporates will be able to perform payments instantly, meaning that the funds will be transferred to the receiver within only a few seconds. The instant payment system is expected to help increase competition in the payment services market, as well as to enable payment by mobile phones at points-of-sale at prices that would be more favourable since there would be no fees for payment card transactions.

In 2017, at the initiative of the NBS Governor that was sent to the Governor of the People's Bank of China, business and technical cooperation was established between the national card payment systems DinaCard and China UnionPay, a global leader in terms of the number of issued contactless payment cards in over 160 countries and territories across the globe.

The NBS had another important role and contribution, namely participation in the conclusion and implementation of the stand-by precautionary arrangement with the IMF. The arrangement was signed in February 2015 and completed three years later, on 22 February 2018. The achieved results of the economic programme greatly exceeded expectations. Given that Serbia did not use the available funds (around EUR 1.2 bn), due to good macroeconomic results, there were no costs on interest and fees for drawing funds under the programme. The only cost

arising from this arrangement was the commitment fee that was paid annually, and for the three years of arrangement it amounted to around EUR 4 mn. In July this year, a **new cooperation programme supported by the Policy Coordination Instrument (PCI)** was approved. It is an advisory instrument and does not envisage the use of any financial resources. The PCI is designed for countries committed to reforms and is agreed with a view to obtaining support for a specific economic programme when the country has no current or potential balance of payments problems. The arrangement will last 30 months and Serbia's progress in its implementation will be monitored through five semi-annual reviews.

In the past six years, the NBS played **a very important role in EU integration both through the association and the accession process**. The NBS is the chair institution for the areas of Economic and Monetary Policies and Financial Services, the institution of the second order of competence in the area of the Free Movement of Capital, and it also participates in negotiations on another eight negotiating chapters. With its participation in the work of 11 of the 35 negotiating groups, based on the scope and the number of areas it is tasked with, the NBS is one of the leading institutions in EU negotiations. **Negotiating Group 17** ***Economic and Monetary Issues***, chaired by the NBS, prepared a proposal for the negotiating position, which the Government adopted in March 2018. The negotiating position was submitted to the EU Council and in the coming period we expect this chapter to be opened. Within **Negotiating Group 9** ***Financial Services***, which is also chaired by the NBS, a proposal for the negotiating position was also drafted, and the Government adopted it in October 2017. The negotiating position for this chapter was submitted to the EU Council in October 2017 and the quality of this document was confirmed in the consultation process with the European Commission. Within this negotiating group, preparations are already underway to begin the final stage of the negotiations.

In the past period, the NBS has achieved a good deal in terms of improving communication with the domestic and international community. **Frequent meetings with investors were very conducive to the expansion of the foreign portfolio investors' base**, improvement of mutual understanding and increase in confidence in the adopted measures and prospects for the coming period.

These are only some of the key measures and activities which the NBS undertook in the past six years, and which enabled not only the fulfilment of the NBS's statutory objective but also the achievement of a number of good results to the benefit of our citizens and the economy.

III Inflation movements

In line with our expectations, in Q2 inflation started to gradually approach the target, standing at 2.3% y-o-y in June. Compared to the expectations in the May Inflation Report, unprocessed food and petroleum product prices rose faster than anticipated. In spite of this, inflationary pressures on account of the majority of factors remain low, as confirmed by core inflation, which has been standing at the lowest point on record of 0.8% y-o-y for four consecutive months, and by inflation expectations of the financial and corporate sectors, which have been anchored around the target midpoint of 3% for some time already.

In quarterly terms, in Q2 inflation measured 1.4%. The quarterly increase in consumer prices was driven by a rise in the prices of vegetables uncharacteristic for this time of year, higher petroleum product prices, and the seasonal growth in the prices of travel packages.

Inflation movements in Q2

Consistent with the expectations stated in the *May Inflation Report*, **after reaching this year's lowest point in April, y-o-y inflation returned in May to the target band of 3.0%±1.5 pp, standing at 2.3% in June**. The low base effect was expected to lead to an increase in the contribution of petroleum product prices to y-o-y inflation in June compared to March, but it was higher than expected owing to the continued rise in global oil prices. Unexpectedly, there was a higher contribution of fresh vegetables, whose prices rose in Q2, which is unusual for this time of year. On the other hand, core inflation remained low, at the 0.8% y-o-y minimum for the fourth consecutive month in June. Also, prices of around 26.7% of products and services in the consumer basket rose in y-o-y terms in June in the target range of 1.5–4.5%, contributing to inflation by 0.7 pp. The prices of close to a half of consumer basket items rose by less than 1.5% y-o-y, which is another confirmation that inflationary pressures are still low.

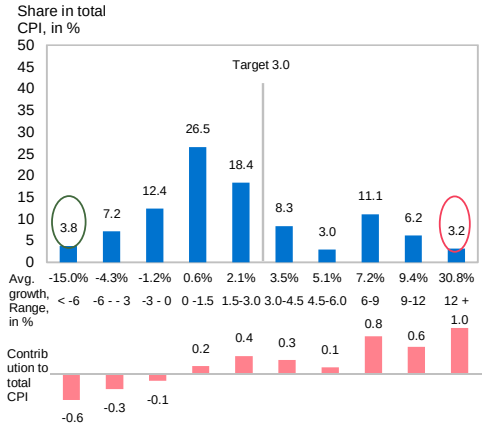
Consumer prices gained 1.4% in Q2. As in Q1, the greatest positive contribution to inflation came from **food and non-alcoholic beverages** (growth of 2.1%, contribution to inflation: 0.7 pp). This was primarily determined by the rise in the prices of **unprocessed food** by 5.5%, mostly due to the rise in the prices of fresh vegetables (9.7%, contribution: 0.4 pp), and, to an extent, in the prices of fresh fruit (4.7%) and fresh meat (3.3%), which contributed 0.1 pp each. **The prices of processed food rose negligibly** (0.3%, contribution: 0.1 pp).

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

	2018		Difference
	March	June	
Consumer prices (CPI)	1.4	2.3	0.9
Unprocessed food	0.3	0.5	0.2
Fruit and vegetables	*0.3*	*0.7*	*0.4*
Fresh meat	*0.1*	*-0.1*	*-0.2*
Processed food	0.2	0.2	0.0
Industrial products excluding food and energy	0.4	0.4	0.0
Energy	0.2	0.7	0.5
Petroleum products	*0.0*	*0.4*	*0.4*
Services	0.3	0.4	0.1

Sources: SORS and NBS calculation.

Chart III.0.1 **Distribution of y-o-y CPI growth rate in June 2018**



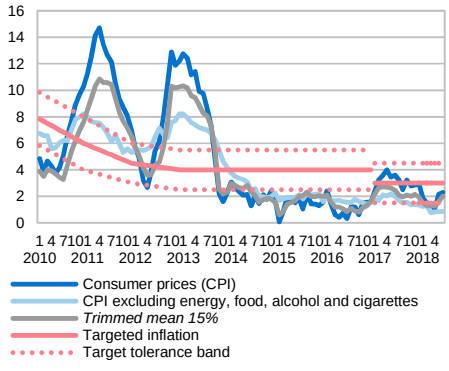
Sources: SORS and NBS calculation.

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

	Share in CPI	2017 III	2017 IV	2018 I	2018 II
Consumer prices (CPI)	100.0	-0.2	0.2	0.8	1.4
Unprocessed food	11.1	-2.5	-3.1	5.5	5.5
Processed food	20.6	0.1	0.2	0.5	0.3
Industrial products excluding food and energy	28.6	0.4	0.7	-0.1	0.5
Energy	15.5	0.0	1.8	0.6	2.3
Services	24.3	0.1	0.3	0.1	1.0
Core inflation indicators					
CPI excluding energy	84.5	-0.2	-0.1	0.8	1.2
CPI excluding energy and unprocessed food	73.5	0.2	0.4	0.2	0.6
CPI excluding energy, food, alcohol and cigarettes	45.9	-0.2	0.6	-0.4	0.8
Administered prices	18.4	1.1	0.6	1.2	0.0

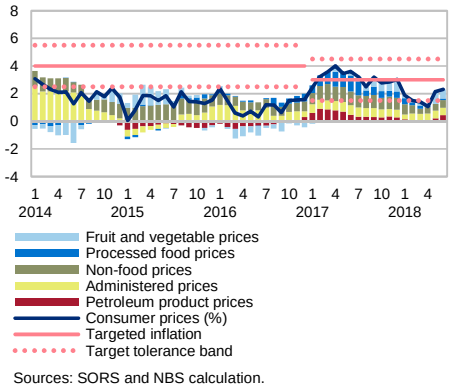
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

The continued rise in global oil prices (around 13.7% in Q2), and to a lesser degree the weakening of the dinar against the dollar due to the euro's depreciation against the dollar, led to the rise in the prices of **petroleum products** by 6.4% (contribution: 0.4 pp). Consumer prices in the **energy group** rose on this account by 2.3% in Q2. Working in the opposite direction were the expected lower prices of solid fuels (coal and firewood), which declined by 0.5%.

Prices of services rose by 1.0% (contribution: 0.2 pp), almost entirely owing to the expected seasonal increase in the prices of **travel packages** by 24.9%. Rents dropped slightly (0.2%), which did not reflect significantly on quarterly inflation.

Industrial product prices excluding food and energy picked up mildly in Q2 (0.5%, contribution: 0.1 pp), which was mostly driven by the seasonal increase in the prices of **clothes and footwear** by 5.9% (contribution: 0.1 pp). A positive contribution to inflation came also from the rise in the prices of pharmaceuticals (0.7%) and a slight increase in the prices of vehicles and automotive parts (0.4%). Working in the opposite direction were lower prices of audio and TV devices, while alcoholic beverages also made a negligible contribution to inflation.

Core inflation (measured by CPI excluding prices of energy, food, alcohol and cigarettes) **equalled 0.8% in Q2** (contribution: 0.4 pp). Its Q2 movement was mainly driven by the seasonal increase in the prices of travel packages, and clothes and footwear. In the same direction, though to a lesser extent, worked the prices of pharmaceuticals and household chemicals, and of catering services in hotels and restaurants.

Administered prices almost stagnated in Q2. They gained 2.9% y-o-y in June (contribution: 0.5 pp), same as in March, and rose almost entirely owing to the increase in cigarette prices (contribution: 0.4 pp), and to a lesser extent, in the prices of electricity (0.1 pp) in the last year.

Producer and external prices

Industrial producer prices in the domestic market rose by 1.6% in Q2. The rise in producer prices in industry was predominantly driven by the increase in the **prices in energy production** (6.1%) due to the higher costs of exploitation of crude oil and natural gas, and higher costs in the production of coke and petroleum products. The mild increase in the prices of **capital**

goods (0.6%) supported the rise in producer prices. Working in the opposite direction were lower prices of **intermediate goods** (0.5%) due to the decline in the prices of production of metal products and basic pharmaceutical products and preparations, as well as the prices of **durable consumer goods** (2.8%) and **non-durable consumer goods** (0.1%). In y-o-y terms, the rise in the **prices of energy production** was the primary driver of growth of producer prices in industry, pushing them up from 0.8% in March to 3.0% in June.

The prices of elements and materials incorporated in construction picked up by 3.2% in Q2, which, along with the low base effect, led to an increase in these prices from -0.2% y-o-y in March to 2.7% y-o-y in June.

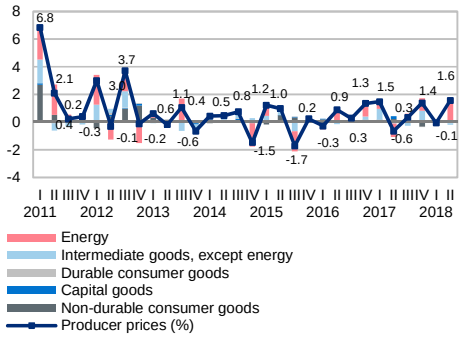
Compared to Q1, when they lost 0.4%, **dinar-denominated import prices**[1] grew by 1.8% in Q2. The primary reason for this was the rise in global oil prices expressed in USD, which were higher by 13.7% at end-Q2 than at end-Q1, primarily owing to higher oil demand worldwide, and the still present geopolitical tensions. Also, Q2 saw a pick-up in USD-denominated global food prices, which grew by 2.1% on average at quarterly level. Euro area consumer prices (used to approximate prices of imported services) also grew, as did the prices of German exports (by 0.7%, used to approximate external prices of equipment and intermediate goods). Import prices picked up in Q2 in part due to the dinar's weakening against the dollar, caused by the euro's depreciation against the dollar. In y-o-y terms, the decline in dinar-denominated import prices slowed down from 4.3% in Q1 to 1.7% in Q2. However, they are still in the negative territory (for the fourth consecutive quarter).

Inflation expectations

Both one- and two-year ahead inflation expectations of the financial and corporate sectors are anchored around the inflation target midpoint, indicating their confidence in the measures undertaken by the NBS, and in the preservation of achieved price stability in the medium term.

Stable and anchored **expectations of the financial sector** are suggested by the Bloomberg survey, which states that the financial sector has expected one-year ahead inflation to equal 2.8% since April. The Ipsos survey points to the

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



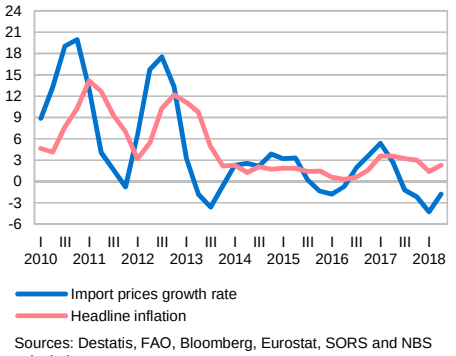
Sources: SORS and NBS calculation.
* Industrial producer prices for the domestic market.

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

	2017		2018	
	Sep.	Dec.	March	June
Consumer prices	3.2	3.0	1.4	2.3
Domestic industrial producer prices	3.3	2.6	0.8	3.0
Prices of elements and materials incorporated in construction	2.2	1.8	-0.2	2.7

Sources: SORS and NBS calculation.

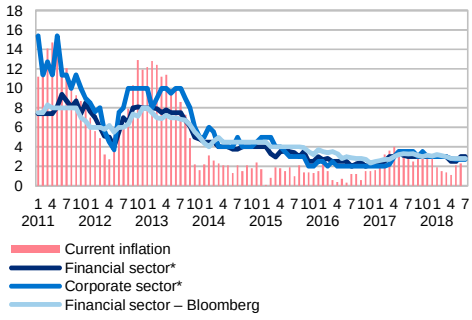
Chart III.0.5 **Domestic inflation and import prices**
(y-o-y rates, in %)



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

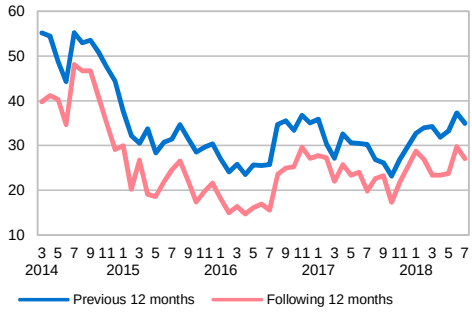
[1] The weighted average of the global oil and food price index (FAO index), euro area consumer prices, and export prices of Germany, one of Serbia's main trade partners, is used as an indicator of import prices.

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



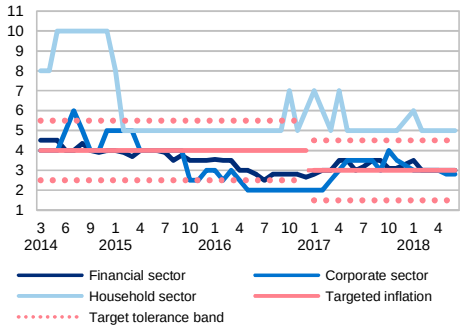
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ipsos and Gallup agencies until December 2014, Ninamedia agency since December 2014, and Ipsos agency since January 2018.

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



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

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



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

same conclusion. According to this survey, financial sector expectations ranged between 2.5% and 3.0% in Q2. Taking a longer view, the financial sector has expected inflation to move within the NBS target band for almost five years now, specifically since October 2013.

According to the Ipsos survey, short-term **inflation expectations of corporates** stood at 2.8% in April, after which they fell in May to 2.7%, where they stayed in June and July. Though the inflation expectations of the household sector were higher than those of other sectors, as usual, from last May until June they were stable at 5.0%, only to rise to 7% in July. The increase was most probably caused by the fact that food prices impact the expectations of the household sector more so than of other sectors, and this period was characterised by a rise in the prices of fresh meat and vegetables, which received extensive media coverage. On the other hand, the results of the qualitative survey[2] show that the index of perceived inflation has constantly been above the index of expected inflation for one year ahead, which means that households believe that price growth in the following 12 months will be lower than in the previous year.

Two-year ahead inflation expectations of the financial sector have been moving within the NBS target band since their monitoring began (March 2014). From February to June they rested at the target midpoint (3.0%) and edged up mildly in July to 3.2%. Medium-term expectations of corporates also equalled 3.0% from the start of the year until May, when they fell to 2.8%, where they stayed in June and July. Unlike short-term expectations, which rose in July, two-year ahead inflation expectations of the household sector remain stable at 5.0%.

The preserved price stability in the past five years and anchored inflation expectations contribute also to more favourable expectations for economic and lending growth, and there is growing optimism regarding the improvement of business and investment conditions in the following year. Since the start of the year, households have had positive expectations in terms of the rise in the standard of living in the following year.

[2] 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 trend

NBS monetary policy easing continued in March and April, resulting in Q2 in a further decline in interest rates in the interbank money market and the market of government securities, and in rates on dinar loans to the private sector.

Appreciation pressures, which prevailed in Q2 as well, were caused by more favourable balance of payments trends – continued dynamic exports and high FDI inflow.

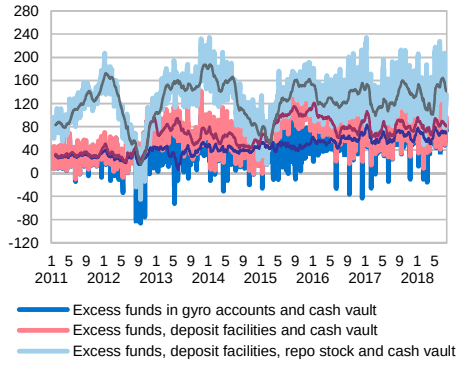
Interest rates

The average repo rate[3] recorded minimum volatility in Q2, standing at 2.4% at end-quarter. At the same time, interest rates in the interbank money market inched down. Specifically, BELIBOR rates of all maturities lost between 0.13 and 0.17 pp, depending on the maturity, ranging in June from 2.3% to 3.05%. Average daily trading volumes in the overnight money market fell in Q2 by 15% to RSD 2.4 bn, while the BEONIA rate declined, coming at 2.2% in June (0.1 pp less than in March).

In July, interest rates in the interbank money market recorded minimum volatility, remaining virtually unchanged relative to June.

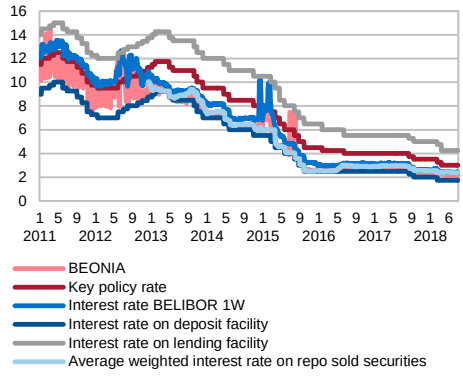
Interest rates in the primary market of government securities continued down on the back of further monetary policy easing and improved fiscal position of the country, as can be seen from the reduced need to finance current liabilities. In addition, auction performance in Q1 was high, with securities sales exceeding the planned amounts. Thus, the government's need to borrow was additionally reduced in Q2. In Q2, only auctions of benchmark bonds with five- and ten-year maturities were held. Relative to March, rates in these

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



Source: NBS.

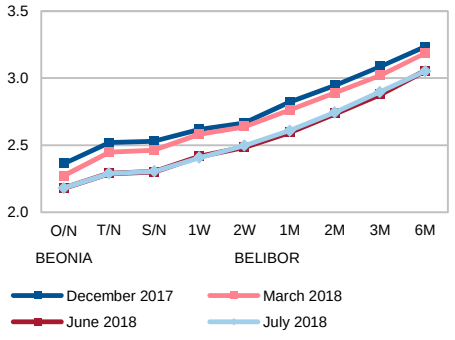
Chart IV.1.2 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

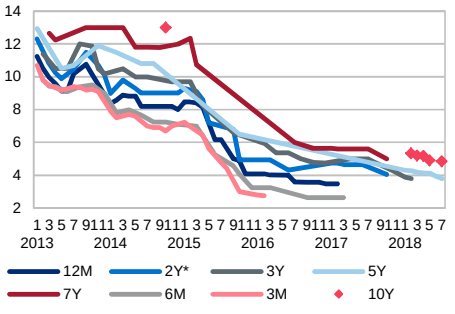
[3] The rate achieved at repo auctions weighted by the amount of sold securities.

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



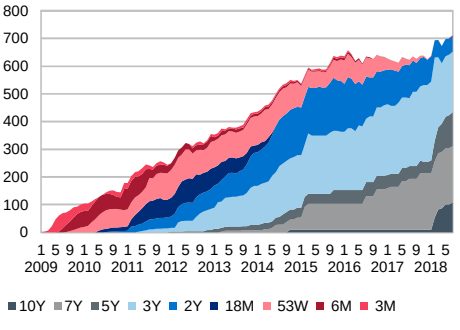
Sources: Thomson Reuters and NBS.

Chart IV.1.4 **Interest rates in the primary market of government securities**
(p.a., in %)



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

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



Source: Ministry of Finance.

auctions were lower by 0.2 pp (3.95%) for five-year bonds and by 0.3 pp (4.9%) for ten-year bonds.

In Q2, the nominal amount of securities sold was RSD 44.7 bn. Since large amounts matured in this period, the stock of sold dinar securities increased by RSD 4.2 bn to RSD 699.2 bn (stock at end-June). The maturing of three-year bonds in Q2 was offset by the sale of five- and ten-year bonds. Thus at end-June around 60% of total sold securities had the maturity of over five years, with the average weighted remaining maturity of sold securities rising to almost four years. As in Q1, non-residents mostly purchased ten-year dinar bonds, which is another indicator of their interest in long-term investment in Serbia.

Interest rates at auctions of **government euro-denominated securities** declined in Q2. The greatest decline was recorded at the reopening of the two-year bond issued in February, where the interest rate was reduced from 0.96% to 0.65%. At auctions with other maturities, rates on five-year securities dropped by 0.1 pp to 1.8%, while rates on one- and three-year maturities inched down to 0.45% and 1.2%, respectively. In addition, June saw the first auction of seven-year euro bonds, where the interest rate equalled the coupon rate (2.5%). At quarter level, the nominal amount of sold euro securities was EUR 195.2 mn, which was lower than the maturing amount, resulting in Q2 in a decline in the stock of sold euro securities by EUR 5.6 mn to EUR 3,187 mn.

At the two auctions held in July, rates on five- and ten-year benchmark securities were further reduced, standing at 3.8% and 4.85%, respectively, at end-July.

Consistent with movements in the primary securities market, yields continued to fall in the **secondary market** as well. In June, rates for maturities up to one year ranged from 2.9% (for 8 months) to 3% (for 11 months), declining by around 0.3 pp relative to March. Yields for longer maturities spanned from 3.3% (22 months) to 4.8% (115 months).

NBS monetary policy easing and the related decline in money market interest rates drove down the **average weighted interest rate on new dinar loans to corporates and households** to 8.7% in June**, down by 0.5 pp from March**. Interest rates on dinar household loans lost as much, falling to 10.1% in June. In the structure of new dinar household loans, rates on cash loans were reduced, from 10.9% in March to 10.4% in June, as were rates on dinar other loans (by 1 pp) to 8.8%,

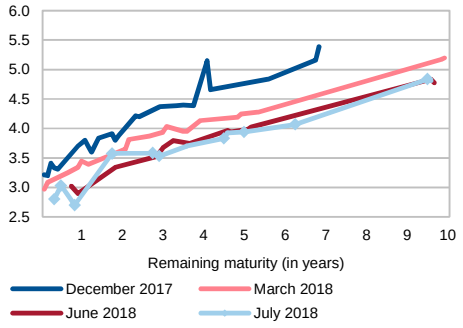
while rates on consumer loans gained 0.2 pp, coming at 8.5%. Significant bank competition in this market segment was another factor pushing down interest rates on dinar household loans.

Rates on dinar corporate loans measured 5.1% in June, slightly above the end-Q1 level. It should be noted that they touched a new record low in May – 4.6%. Rates on current assets loans were raised in Q2 (by 0.5 pp to 4.9%). On the other hand, rates on dinar investment loans were reduced by 1 pp to 5.9%, as were rates on other uncategorised dinar loans (by 0.1 pp to 5.1%).

Interest rates on new euro-indexed loans fell in Q2, averaging 3.8% for household loans and 2.8% for corporate loans. The drop in rates on household loans by 0.25 pp may be attributed to the reduction in interest rates on consumer and other loans, which lost 0.4 pp each relative to March, equalling 4.7% and 5.5% respectively in June, while rates on housing loans stayed at the March level of 2.8%. Rates on euro-indexed loans and euro loans to corporates lost 0.1 pp, with rates on current assets loans dropping by 0.2 pp to 2.6% and rates on investment loans staying unchanged compared to March (3.05%).

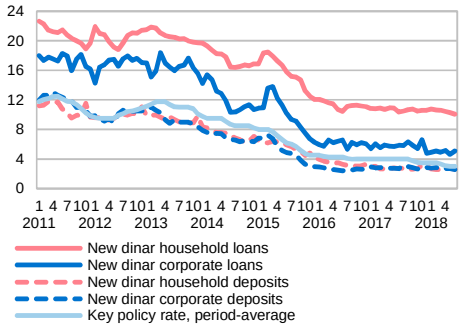
The average weighted interest rate on **dinar savings** of households remained virtually unchanged relative to March, coming at 2.6% in June, while rates on **FX savings** declined by 0.2 pp to 0.7% in the same period. On the other hand, rates on term deposits of corporates lost 0.1 pp each, falling in June to 2.6% for dinar deposits and 0.6% for FX deposits.

Chart IV.1.6 **Yield curve in the secondary government securities market**
(average values, p.a., in %)



Source: Central Security Depository and Clearing House.

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



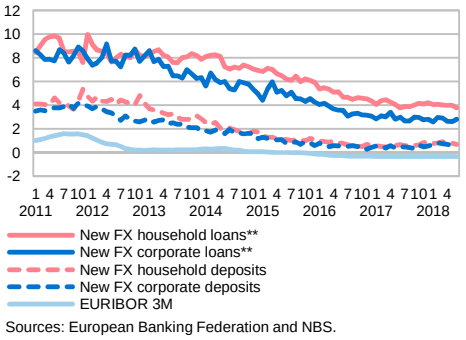
Source: NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

Risk premium

Risk premia of emerging economies rose in Q2 owing to global factors, mainly geopolitical tensions and tensions in international trade. The yields on government bonds of emerging economies rose more than the yields on ten-year US Treasuries. Consequently, EMBI Global, as a measure of risk premium, grew by 62 bp at quarterly level, and EMBI Europe by 57 bp.

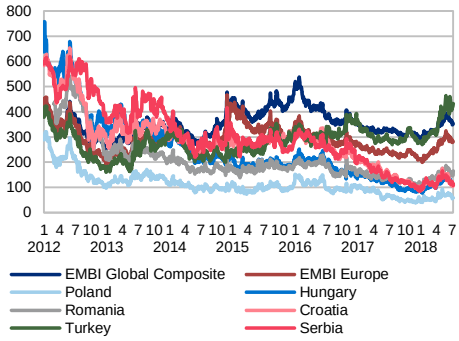
Among emerging economies, risk premia rose the most in countries with prominent external and fiscal imbalances (Venezuela, Argentina, Brazil, Ukraine), while the risk premia of CESEE countries, with the exception of Turkey, rose considerably less due to favourable domestic macroeconomic indicators and outlook for the period ahead. Owing to continued positive effects of domestic factors, Serbia was second

Chart IV.1.8 **Interest rates on FX loans and deposits of corporates and households***
(weighted average values, p.a., in %)



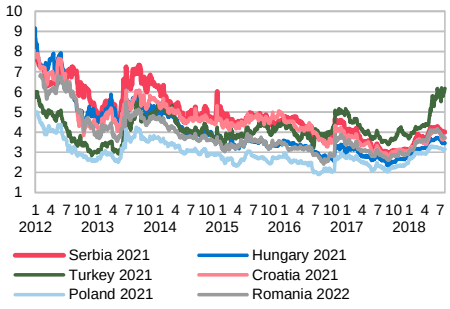
Sources: European Banking Federation and NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.
** Euro and euro-indexed.

Chart IV.1.9 **Risk premium indicator – EMBI by country**
(daily data, in bp)



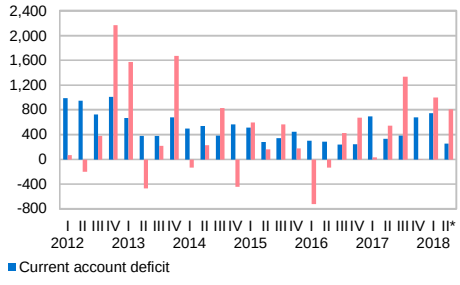
Source: JP Morgan.

Chart IV.1.10 **Yields on eurobonds of countries in the region**
(in %)



Source: Bloomberg.

Chart IV.1.11 **Current account deficit and net capital inflow**
(in EUR mn)



Sources: SORS and NBS.
* Preliminary data.

only to Poland in terms of the lowest increase in risk premium among the countries in the region (by 26 bp); at-end Q2 only Poland's risk premium was lower than that of Serbia. The average EMBI for Serbia in H1 2018 compared to the same period last year was lower by around 65 bp, which also confirms that the country risk premium, though somewhat above the lowest values on record from January, remains relatively low. Also, EMBI for Serbia fell by 31 bp in July, entirely offsetting the Q2 increase in the risk premium, while risk premia of most other countries in the region, along with EMBI Global and EMBI Europe, trended at end-July above the end-March level.

Domestic factors driving down Serbia's risk premium are mainly the considerably reduced internal and external imbalances, which reduced the need to borrow, as well as more favourable economic growth outlook going forward. This also buttressed Serbia's resilience to potential shocks from the international environment.

Foreign capital inflow

In Q2, the financial account again recorded a relatively high net capital inflow, more than sufficient to cover the current account deficit, which was considerably reduced from Q1, with May recording a surplus. Such trends increased appreciation pressures in the FX market. The majority of capital inflows in Q2 on account of FDI, and a considerable inflow related to higher borrowing from foreign creditors. On the other hand, there was an outflow with respect to portfolio investment mostly owing to the repayment of debt to London Club creditors.

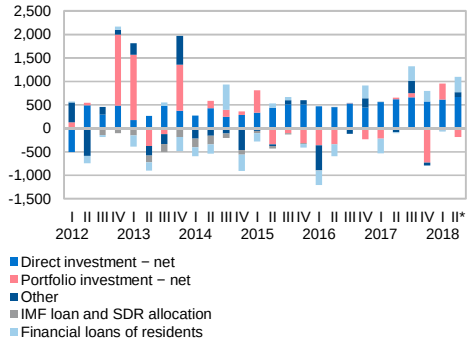
A high **FDI** inflow continued into Q2, amounting to EUR 666.7 mn according to preliminary data. H1 saw an inflow of close to EUR 1.3 bn on these grounds, which is 8.6% higher compared to the same period last year. Most of the investments were channelled into manufacturing (30.1%) and significant amounts were also invested in the financial sector (27.5%), trade (16.3%) and construction (10.1%). As usual, the majority of the inflows were investments from EU countries (around 84%), while around 10% of FDI came from Asian countries.

In 2018, the net FDI inflow is expected to measure around EUR 2.6 bn (6.6% of GDP), and to fully cover the current account deficit, as in the last three years.

Unlike Q1, Q2 saw an outflow of EUR 180.1 mn with respect to **portfolio investment**. The bulk of the outflow (EUR 141 mn) related to the repayment of debt to London Club creditors,[4] fully settling the liabilities of the Republic of Serbia to this group of creditors.

Q2 saw a net inflow of EUR 326.5 mn with respect to **financial loans**, of which EUR 175.2 mn related to the rise in enterprises' borrowing. Net foreign liabilities of banks with respect to financial loans gained EUR 81.4 mn, and government debt – EUR 69.9 mn.

Chart IV.1.12 **Structure of the financial account**
(in EUR mn)



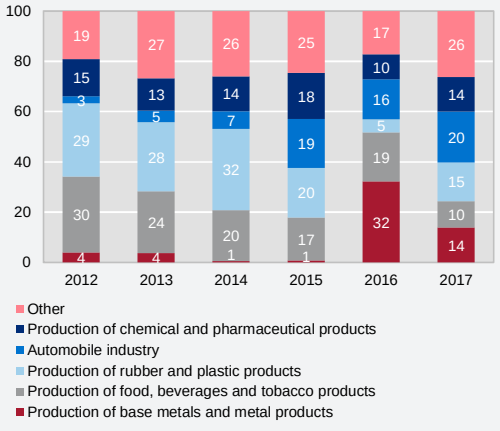
Sources: SORS and NBS.
* Preliminary data.

[4] Of which EUR 130.9 mn constitutes early repayment.

Text box 2: FDI, exports and employment in manufacturing

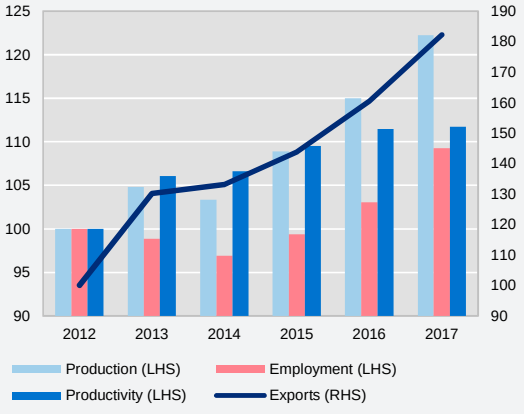
FDI provides transfer of new knowledge and technologies, boosting the productivity at the level of individual sectors and the overall economy. If directed in tradable sectors of the economy, its export potential increases. Compared to the pre-crisis period, when FDI was largely channelled to non-tradable sectors of the economy, the share of tradable sectors in the FDI inflow rose in the post-crisis period. In the past couple of years FDI was also more widely spread across projects and geographic areas. Over the past years the rise of FDI inflow was a result of improved macroeconomic indicators reflecting successful fiscal consolidation and its full coordination with the monetary policy, structural reforms and continued improvement of the investment ambience, as confirmed by the sustained progress of Serbia in the international competitiveness lists.

Chart O.2.1 **FDI composition by branches of manufacturing**
(in %)



Source NBS.

Chart O.2.2 **Exports, production and employment in manufacturing**
(2012 = 100)



Sources: SORS and NBS calculation.

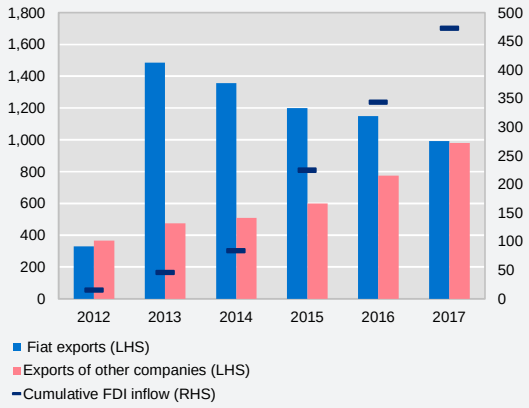
In tradable sectors, in the period 2012–2017 the largest portion of the FDI inflow went into **manufacturing (EUR 3.8 bn, or 35.5% of total FDI inflow)**, where, since 2015, **investment has been greatly dispersed both project-wise and geographically** (Chart O.2.1). This investment contributed to export base expansion in a great number of manufacturing areas and to a notable increase in its production and exports. Total **production growth** in manufacturing **in the period 2012–2017 amounted to 22.2%, while its exports were elevated by 82.2%, i.e. by around EUR 6 bn** (Chart O.2.2). In addition, **productivity in manufacturing rose by 11.7%** in the reference period **and since 2015 growth has been achieved** on a sounder basis, i.e. it was accompanied by **employment growth**. On this account manufacturing largely contributed to labour market recovery with the total employment increase of 9.3%, or by around 40,000 in the reference period. A positive impact of FDI on the labour market is also testified by the IBM Global Locations Trend report where Serbia ranked first in both 2016 and 2017, measured by the relative number of new jobs created from FDI projects, with estimated 3,000 jobs per million inhabitants.

A large number of manufacturing areas recorded such positive trends, the strongest performance being in the areas with high FDI inflows such as the automobile industry, production of rubber and plastic, base metals and metal products, and chemical, pharmaceutical and food industry.

Measured by exports, the automobile industry was particularly successful. It strongly pushed Serbia's exports up since mid-2012 and in the period 2012–2017, exports rose by 183.4%, i.e. from around EUR 700 mn in 2012 to close to EUR 2 bn in 2017. This was primarily a result of a joint investment of the government and Fiat in a new company Fiat automobiles Serbia, which is the top performer on the list of the largest individual exporters in Serbia. The said investment attracted new FDI in the production of motor vehicles which multiplied in the period 2015–2017 compared to previous years (Chart O.2.3). The investors were companies that are in the international chain of production of automobile parts and they export almost the entire volume of production. The dynamic exports growth of these companies compensated for the drop in exports of Fiat automobiles Serbia in 2016 and 2017. Lower exports of Fiat, amounting to EUR 52.2 mn in 2016

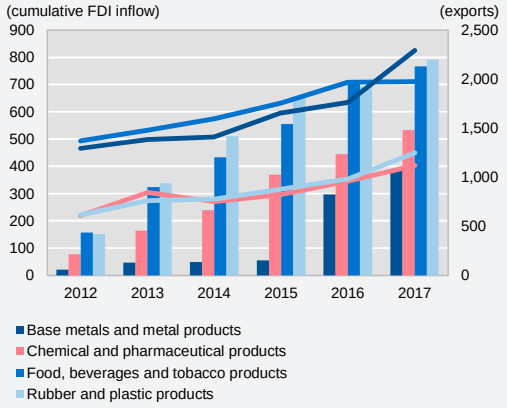
and EUR 156.0 mn in 2017 were compensated for and exceeded considerably by the rise in exports of other motor vehicles producers, reaching EUR 175.6 mn in 2016 and EUR 205.2 mn in 2017, and the exports of motor vehicles in these years continued to have a positive contribution to the increase in overall commodity exports.

Chart O.2.3 **FDI inflow to automobile industry and automobile industry exports**
(in EUR mn)



Sources: SORS, Ministry of Finance and NBS calculation.

Chart O.2.4 **FDI and exports in selected manufacturing areas**
(in EUR mn)



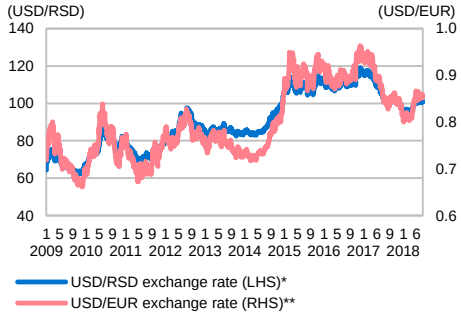
Sources: SORS and NBS calculation.

Greatly connected with the automobile industry is also the production of rubber and plastic products, which also attracted relatively significant FDI amounts in the past several years, mainly concentrated in the production of car tyres. In the period 2012–2017, the production in this area rose by 27.2%, and annual exports doubled in that period – from EUR 620 mn to EUR 1,250 mn. Relatively significant FDI inflows (around 10% of total inflows went to manufacturing) were recorded in the production of metal complex, i.e. base metals and metal products. The new investment in the Smederevo steel plant constitutes the largest portion of these FDI inflows since mid-2016, largely accounting for the rise in exports of iron and steel from EUR 447.3 mn in 2016 to EUR 656.5 mn in 2017. Chemical and pharmaceutical industries also recorded a relatively high FDI inflow in the reference period (around 14% of total inflow went to manufacturing) with exports increase of 83.5% (from EUR 610 mn to EUR 1,120 mn).

Exports of food, beverages and tobacco, i.e. areas also attracting relatively high FDI inflows accounted for a notable share in manufacturing exports (around 20% of total inflows to manufacturing), partly on account of comparative advantages of Serbia in agricultural and food production. In the period 2012–2017, exports in these areas picked up by 44% (from EUR 1,370 mn to EUR 1,974 mn). What should be noted here is the fact that production and exports were somewhat adversely affected by bad agricultural seasons in 2012, 2015 and 2017.

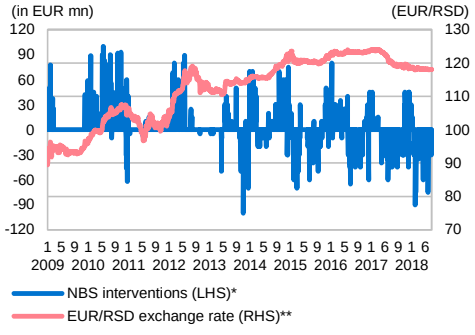
Positive developments in manufacturing continued into H1 2018, with maintained high FDI inflows (close to 30% of total inflows in H1) and the expansion of exports, production and employment. Total manufacturing exports grew by 10.7% y-o-y, with the largest contribution coming from exports of base metals, rubber and plastic products, and automobile industry, i.e. areas that were the main growth drivers in the past as well. It is worth noting here that exports growth remained broad-based and it occurred in all production areas. In H1 production growth continued in manufacturing (3.6% y-o-y), too. It was recorded in 20 out of 24 areas, while employment picked up by 5.1%, or by around 22,000 since the beginning of the year. Bearing in mind the sustained improvement of the investment environment, and implementation of the current and announced new investment projects, we expect positive trends in manufacturing to continue in the period ahead. The anticipation is also that manufacturing will remain the main driver of exports and sustainable economic growth and that it will give a significant contribution to continued labour market recovery.

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



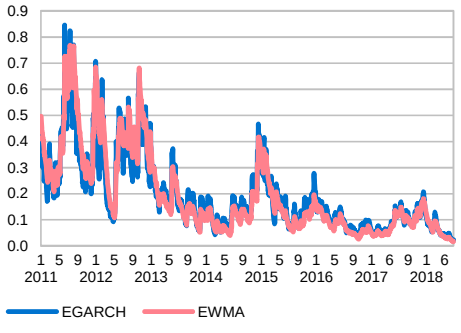
Source: NBS.
* USD 1 in RSD.
** USD 1 in EUR.

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.

Trends in the FX market and exchange rate

The dinar continued to appreciate slightly against the euro in Q2. End-of-period, the dinar strengthened against the euro by 0.3% and at the level of quarterly average it grew by 0.2%. Differences in economic growth outlooks and pace of normalisation of monetary policies of the USA and the euro area led to the euro's weakening against the dollar by 5.4% in Q2, end-of-period, which caused the dinar's weakening against the dollar at almost the same rate (5.2%).

Appreciation pressures, which prevailed in Q2 as well, reflected on more favourable balance of payments trends – continued dynamic exports and a high FDI inflow. By factor of the domestic FX market, the dinar's appreciation resulted mainly from the high purchases of foreign cash and the rise in bank lending (FX-indexed bank assets).[5] Purchases of foreign cash expanded compared to Q1, in part owing to higher inflows of remittances usual for the season. Also, the dinar strengthened owing to increased payments of non-residents by payment cards in Serbia. Total inflows significantly exceeded enterprises' FX demand and the demand of non-residents, which, despite the purchases in the primary market of government securities, were net FX purchasers from banks because of the maturing and sale of securities in the secondary market.

To ease excessive short-term volatility of the exchange rate, in Q2 the NBS intervened in the IFEM only by purchasing foreign currency. It bought a total of EUR 790.0 mn, with the highest volume of purchases recorded in June (EUR 365.0 mn).

Appreciation pressures continued in July, with the dinar staying unchanged against the euro and the NBS intervening in the IFEM by purchasing EUR 220.0 mn.

Trading volumes in the IFEM[6] in Q2 averaged EUR 23.6 mn a day, with their average values ranging between EUR 24.9 mn in April and EUR 21.5 mn in June. Relative to Q1, average daily trading volumes were lower by EUR 13.8 mn, while compared to the same period in 2017, they were higher by EUR 1.6 mn.

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

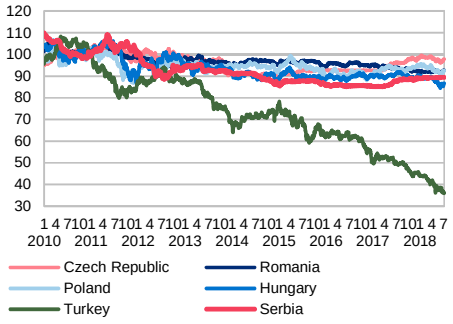
[6] Excluding the NBS.

Consistent with the reduced volumes in Q2, volatility of the dinar against the euro, measured by EWMA[7] and EGARCH[8], declined slightly.

The NBS bought and sold EUR 28.0 mn at three-month swap auctions and EUR 3.0 mn at two-week auctions.

Unlike the dinar, other currencies of countries in the region running similar exchange rate regimes weakened in Q2. The Romanian leu depreciated negligibly (0.1%), while the Czech koruna lost 2.3%, the Polish zloty 3.5%, the Hungarian forint 4.9% and the Turkish lira 7.7%.

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



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

2 Money and loans

Owing to economic and lending growth, the slowdown in y-o-y growth rates of monetary aggregates stopped in Q2. Despite the continued efforts made to resolve the issue of NPLs, y-o-y growth in domestic loans accelerated compared to end-2017, coming at 7.6% in June.

Monetary aggregates

The slowdown in y-o-y growth of monetary aggregates, which was characteristic for the previous year and the start of this year, stopped in Q2. The pick-up in economic and lending activity led to a nominal increase in y-o-y growth in M1, M2 and M3 to 13.5%, 13.7% and 7.9%, respectively, in June. Working in the opposite direction was the increase in government deposits with the NBS, owing to excellent fiscal policy results and successful auctions of dinar five- and ten-year securities.

Given the low opportunity costs of holding liquid assets, the highest contribution to the y-o-y rise in M3 was made by the most liquid components. Transaction deposits, particularly of corporates, have been gradually rising for almost a year, which is aided mainly by the acceleration in economic activity. The greatest increase in Q2 was recorded by deposits of companies in manufacturing (RSD 7.0 bn), trade (RSD 5.7 bn) and transport (RSD 4.3 bn).

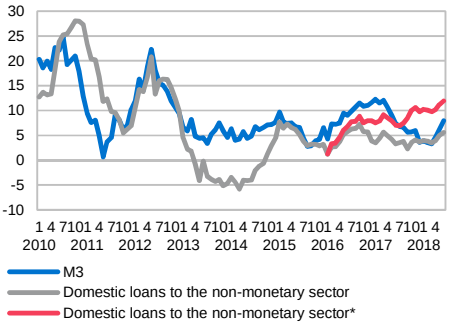
Term dinar deposits also contributed positively to M3 in Q2. The greatest increase was recorded by term deposits of

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

	2017		2018		Share in M3 June 2018 (in %)
	Sep.	Dec.	March	June	
M3	5.6	3.6	3.3	7.9	100.0
FX deposits	2.7	1.1	0.5	4.6	61.9
M2	11.2	7.9	8.5	13.7	38.1
Time and savings dinar deposits	20.4	0.9	6.0	14.4	9.5
M1	8.3	10.2	9.4	13.5	28.5
Demand deposits	10.8	12.7	11.3	14.9	21.8
Currency in circulation	1.4	2.9	3.8	9.5	6.8

Source: NBS.

Chart IV.2.1 **Domestic loans to the non-monetary sector and M3**
(nominal y-o-y rates, in %)

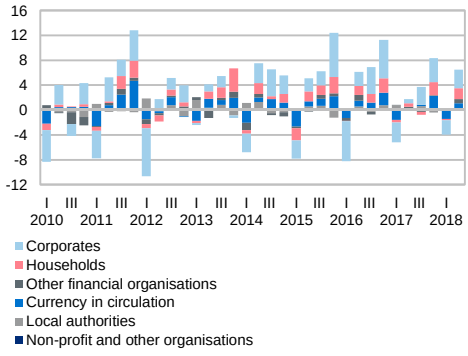


Source: NBS.
* Excluding the effect of NPL write-off and sale since early 2016.

[7] EWMA – Exponentially Weighted Moving Average.

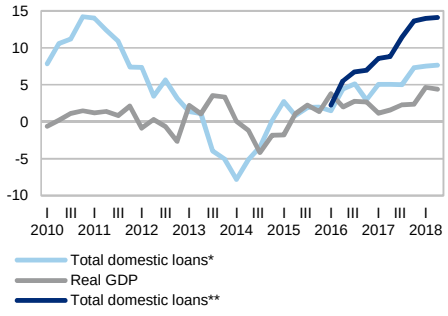
[8] EGARCH – Exponential General Autoregressive Conditional Heteroskedasticity.

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



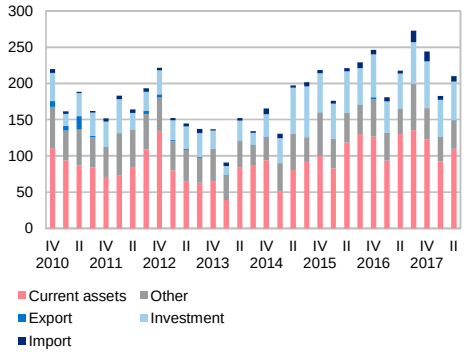
Source: NBS.

Chart IV.2.3 **Lending activity and GDP**
(y-o-y rates, in %)



Sources: NBS and SORS.
* Excluding the exchange rate effect.
** Excluding the effect of NPL write-off and sale since early 2016.

Chart IV.2.4 **Structure of new corporate loans**
(in RSD bn)



Source: NBS.

companies in manufacturing (RSD 6.2 bn), trade (RSD 5.0 bn) and agriculture (RSD 3.1 bn). Also, dinar household savings have been on the rise since the start of the year, having reached their peak of RSD 52.7 bn in June.

FX savings of households still make up the largest part of euro-denominated FX deposits, rising by EUR 120.0 mn to EUR 9.4 bn in Q2. Also, in Q2, FX corporate deposits grew by EUR 209.7 mn owing to good export performance and to inflows from FDI and foreign borrowing.

Loans

Excluding the exchange rate effect,[9] in Q2 **total domestic loans** gained 2.6%, with household loans rising by 4.2% and corporate loans by 1.2%. Y-o-y, growth in domestic loans picked up relative to end-2017, coming at 7.6% in June. Household loans slowed down to 11.1% and corporate loans sped up to 5.5%.

In Q2, banks continued NPL resolution activities by writing off NPLs worth RSD 15.0 bn and selling RSD 6.3 bn worth of NPLs to non-banking sector entities (RSD 3.4 bn of sold NPLs was in banks' balance sheets at the moment of sale). Despite these activities, loans to the private sector expanded, confirming further recovery of lending activity. Excluding the NPL write-off and sale effect,[10] y-o-y growth in domestic loans came at 14.1% in June (household loans – 14.3% and corporate loans – 14.5%).

Excluding the exchange rate effect, **corporate loans** increased by RSD 12.4 bn in Q2. The entire increase relates to the rise in loans to companies, while debt of public enterprises was lower than at end-Q1. Observed by activity, lending to manufacturing, construction and agriculture continued up, while lending to transport and trade companies went down the most. By purpose, current assets and liquidity loans (48.8%) and investment loans (31.5%) continued to account for the bulk of bank loans to the corporate sector.

The volume of new corporate loans grew by 14.9% in Q2 compared to Q1. Relative to the same period last year, the amount of new corporate loans declined by 3.4%.

[9] 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 monitoring the performance under the arrangement with the IMF), taking into account the currency structure of loan receivables.

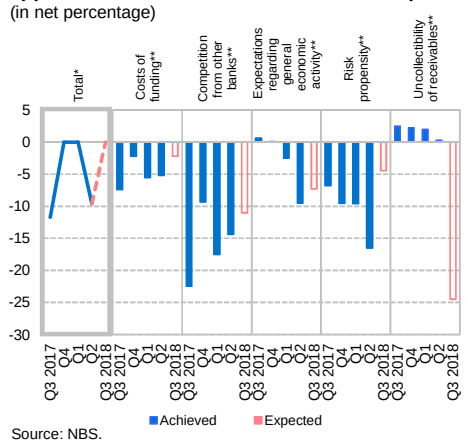
[10] Excluding the NPL write-off and sale effect, from the start of 2016 until June 2018, banks wrote off NPLs worth RSD 169.0 bn (RSD 128.6 bn of corporates and RSD 35.6 bn of households), and sold NPLs worth RSD 58.2 bn, which were in their balance sheets at the moment.

However, excluding the effect of loans refinanced with the same bank, these loans increased by 7.9%. It should be underlined that, relative to Q2 2017, investment loans were on the rise (which in June saw the highest disbursement since the start of the year), as were import and export loans, which confirms that investment is financed by bank loans as well. As so far, in Q2 most new corporate loans were current assets loans (52.4%) and investment loans (25.7%). At H1 level, investment loans grew at the rate of 15.3% y-o-y.

According to the July bank lending survey,[11] banks believe that corporate credit standards were eased in Q2 primarily owing to greater risk appetite of banks, banking sector competition and a positive assessment of the overall economic situation. The easing largely pertained to dinar loans, and was the most prominent for SMEs. As assessed by banks, corporate credit standards were more favourable both in terms of price (lower interest margins) and extended maturity and relaxed requirements with regard to collateral (especially for SMEs[12]). Banks do not expect credit standards to change in Q3. They do, however, expect positive trends in the factors influencing the standards to continue; many of them expect the level of NPLs to have a mitigating effect. Banks assess that loan demand of corporates rose in Q2, driven by the need to finance current assets and capital investment, along with activities related to mergers and acquisitions. The same factors should remain key drivers of demand in Q3. The EIB's CESEE Bank Lending Survey[13] from June points to similar conclusions regarding corporate demand. According to this survey, owing to favourable economic conditions, demand of corporates in Serbia grew faster than the regional average, on the back of higher demand of SMEs. Banks that responded to the survey assessed that the quality of loan applications improved considerably, especially of SMEs.

Excluding the exchange rate effect, in Q2 **lending to households** picked up by RSD 38.6 bn. Cash loans (including refinancing loans) and housing loans remained the most dominant categories of loans, going up by RSD 22.1 bn and RSD 7.1 bn respectively. Current account overdrafts were somewhat lower than in Q1, while household credit card borrowing increased mildly.

Chart IV.2.5 **Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to enterprises**
(in net percentage)

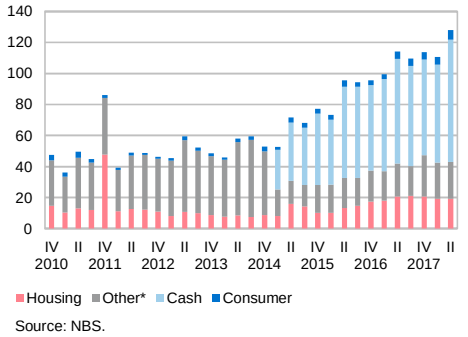


Source: NBS.

* 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.2.6 **Structure of new household loans**
(in RSD bn)



Source: NBS.

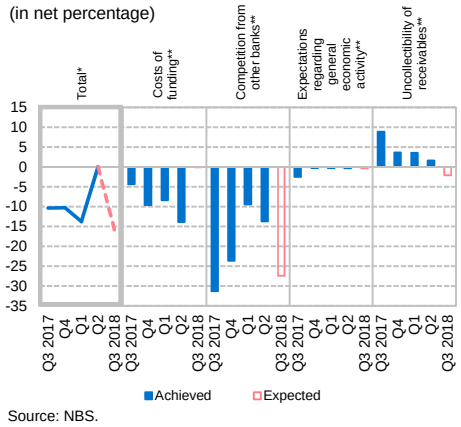
* Until December 2014, the 'Other loans' category included both cash and other loans.

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

[12] Owing to banks' increased participation in projects where international financial institutions provide a part of guarantee support.

[13] Respondents to the survey were ten banks from Serbia whose total assets make up somewhat under a half of total Serbian banking sector assets (http://www.eib.org/infocentre/publications/all/cesee-bls-2018-h1.htm).

Chart IV.2.7 **Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to households**
(in net percentage)

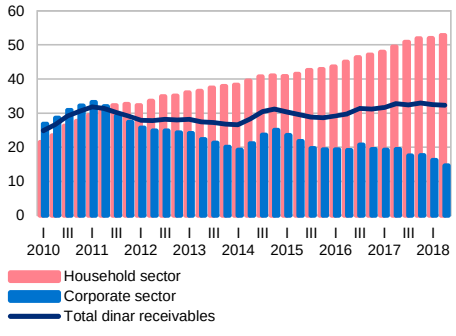


Source: NBS.
* Positive values indicate tightening and negative easing of credit standards relative to the previous quarter.
** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

The volume of new household loans in Q2 (RSD 127.9 bn) was 15.8% higher than in Q1 and 12.2% higher than in the same period last year. In Q2 citizens continued to predominantly use dinar cash loans and refinancing loans, which made up 61.2% of new household loans, with almost three-quarters of these loans having the repayment term over five years. The volume of new housing loans (RSD 19.1 bn) remained virtually unchanged from Q1, and was somewhat lower than in Q2 2017. However, excluding the effect of loans refinanced with the same bank, housing loans gained 2.1% y-o-y.

According to the July bank lending survey, banks assess that household credit standards remained the same for almost all loan categories, except dinar cash loans and refinancing loans, whose standards were eased. Interbank competition and cheaper sources of funding for dinar loans contributed to the easing, while other factors mostly had a neutral effect. Banks assessed that household borrowing terms were more favourable on account of lower interest margins and other accompanying costs, which related the most to dinar loans. Banks expect that credit standards will be eased in Q3 as a result of competition in the banking sector, anticipating prices of loans to be even more favourable, maturities to be extended and collateral requirements to be relaxed. Banks assessed that household demand for loans increased in Q2, driven by the need to refinance obligations and purchase real estate, which is further supported by the positive situation in the real estate market. Based on the survey results, banks expect the same factors to continue driving demand in Q3 as well.

Chart IV.2.8 **Share of dinar in total bank receivables from corporate and household sectors**
(in %)



Source: NBS.

At end-June, the share of dinar loans in total corporate and household loans stood at 32.3%. Specifically, in June dinarisation increased to 52.8% for household loans and declined to 14.6% for corporate loans (due to elevated FX and FX-indexed borrowing and partly due to the write-off of dinar receivables).

In close to three years since the adoption of the NPL Resolution Strategy, the amount of NPLs diminished by over 60%, and their share in total loans was reduced by 14.6 pp. Since the start of the year, the NPL share in total loans fell by 2.0 pp to 7.8% in June. Of this, the NPL share in the corporate sector fell by 2.3 pp to 8.1% in June,[14] and in the household sector it dropped by 0.7 pp to 4.9%.[15] Also, NPL coverage is still high – allowances

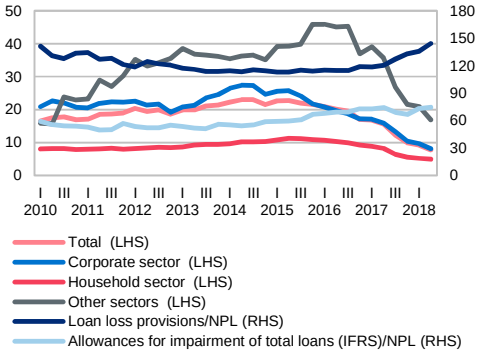
[14] Includes companies and public enterprises. Looking at companies only, the share of NPLs in total loans stood at 8.4% in June, down by 2.5 pp from December 2017.

[15] With entrepreneurs and private households included, the share decreased by 0.8 pp to 5.1%.

for loan impairment came at 74.8% of NPLs in June, and loan loss reserves continued to fully cover gross NPLs – by 144.2% in June. In addition, after the introduction of Basel III standards,[16] the capital adequacy ratio rose further, to 22.9% at end-Q2, indicating high capitalisation of the domestic banking sector.

The improvement of NPL ratios was also underscored in the EIB's CESEE Bank Lending Survey from June. According to the survey, NPLs are expected to continue to decline in the period ahead.

Chart IV.2.9 **NPL share in total loans**
(in %)



Source: NBS.

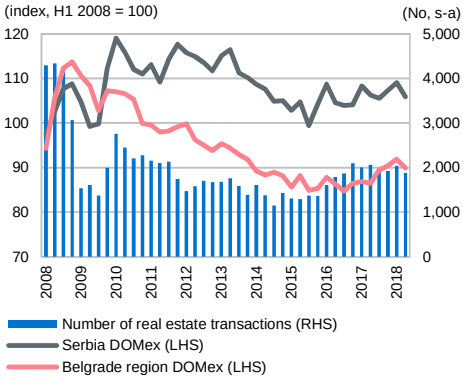
3 Real estate market

After rising in Q1, the average price of real estate dropped in Q2, and therefore since the beginning of the year, it is at a similar level as in H1 2017. In the coming period, positive developments may be expected in the real estate market also as a result of growing apartment supply and demand.

As measured by DOMex,[17] after rising in Q1, the average price of real estate in Serbia decreased by 2.9% in Q2 relative to Q1, which can be associated with a lower turnover (7.5% s-a). In Q2, the prices of real estate declined across all regions, most notably in Belgrade (2.1%).

The average real estate price in Serbia in Q2 equalled EUR 878.2 per square metre and stood at an almost unchanged level compared to the same period last year. As usual, the highest price was recorded in the Belgrade region, averaging EUR 1,171.4 per square metre. The ratio of prices in the Belgrade region and the average for the rest of the country is almost unchanged from Q1, equalling 1.83. Y-o-y, that ratio went up (from 1.76 in Q2 2017), because the rise in real estate prices in the last year was a result of higher prices in the Belgrade region.

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



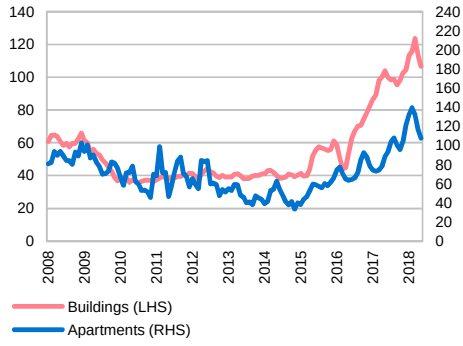
Source: National Mortgage Insurance Corporation.

Further positive developments can be expected in the real estate market, as indicated by the rise in the number of issued construction permits in April and May (20.8% y-o-y) and the number of built flats, which according to the data of the Statistical Office for 2017 reached the highest level in the last five years. Further expansion of the real estate supply should be accompanied by a continued rise in demand, given the expected increase in the disposable

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

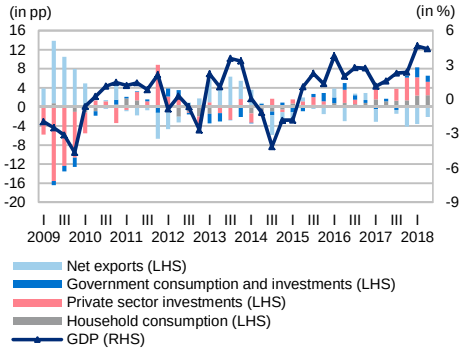
[17] The DOMex is published by the National Mortgage Insurance Corporation and relates only to real estate purchased by insured loans.

Chart IV.3.2 **Indices of the number of issued construction permits**
(quarterly averages s-a, 2017 = 100)



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.
* NBS estimate for Q2 2018.

household income on account of increased wages and pensions, as well as favourable financial conditions. Such expectations are in accordance with the results of the July Bank Lending Survey, in which banks estimated that household demand for housing loans increased in Q2 and that similar trends can be expected in Q3.

4 Aggregate demand

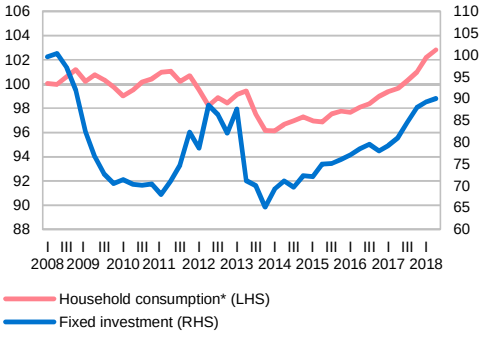
Robust GDP growth, driven by the rise in domestic demand, continued into Q2 (4.4% y-o-y according to the preliminary estimate of the Statistical Office). Fixed investment growth was supported by the favourable macroeconomic environment and growth outlook, continued implementation of infrastructure projects, along with favourable borrowing terms, which, together with sustained labour market recovery, buttressed household consumption growth. A boost to GDP came from the continued growth in exports of goods and services, but the contribution of net exports remained negative due to a faster rise in imports, primarily of equipment and intermediate goods, though less so than in Q1. According to our estimate, GDP growth continued, equalling 0.5% s-a relative to Q1.

Domestic demand

Driven by similar factors as in the previous period, i.e. the rise in private sector employment and wages and favourable financial conditions, according to our estimate, in Q2 **household consumption** continued to grow (0.6% s-a), positively contributing to GDP by 0.4 pp. This is indicated by retail trade turnover, which in Q2 remained on the upward path that began three years ago (0.9% s-a). Also, continued active measures taken by the government to promote domestic tourism led in Q2 to the fastest growth in the number of domestic tourist arrivals and overnight stays in the last year (3.3% s-a and 7.4% s-a, respectively). In y-o-y terms, household consumption gained 3.3%, positively contributing to GDP by 2.4 pp.

Positive trends in household consumption can also be seen from the movement of its main sources. Driven by the continued rise in employment and average wage, in Q2 the total wage bill continued to grow in nominal terms, by 3.2% s-a according to our estimates. Remittances from abroad also continued up, rising in Q2 by 15.0% y-o-y, as did new consumer loans.

Chart IV.4.2 **Components of domestic demand***
(s-a data, H1 2008 = 100)



Sources: SORS and NBS calculation.
* NBS estimate for Q2 2018.

Besides household consumption, a positive contribution to GDP in Q2 (0.1 pp) continued to come from **final government consumption**, which increased by 0.3% s-a according to our estimates. At the same time, wage expenditures fell compared to Q1, while government outlays for the purchase of goods and services grew. In Q2, final government consumption continued up at a similar y-o-y pace as in the previous quarter (1.9%), bolstering GDP growth by 0.3 pp.

Further improvement of the business environment, continued implementation of infrastructure projects and favourable financial conditions reflected positively on investment in Q2 as well. Fixed investment continued to perform well in Q2 and, according to our estimate, reached the highest quarterly level since the onset of the crisis. This was largely supported by **government investment**, which, according to our estimate, remained on an upward path in Q2 (2.7% s-a), as suggested by continued intensive government capital expenditure. Positive developments also continued in **private investment**, as primarily indicated by sustained good performance in construction. The production of construction materials expanded by 3.0% s-a in Q2, and the value of the executed works also continued up (1.0 % s-a), as did employment in construction. A further rise in the domestic production of capital goods by 1.4% s-a in Q2 also points to favourable trends in investment. In y-o-y terms, fixed investment remained a strong factor of GDP growth (2.5 pp) in Q2, coming from both government (0.9 pp) and private investment (1.6 pp), which rose by 28.0% and 9.1% y-o-y, respectively.

An improved macroeconomic environment and a more favourable outlook for the period ahead continued to have a positive effect on FDI inflows, which, along with positive business results of corporates last year,[18] contributed to an improvement of enterprises' investment base from own sources. High FDI inflow continued in Q2, amounting to EUR 666.7 mn (higher by 6.5% than in the same period last year). In addition to own sources, corporates funded a part of investment by new investment loans, which rose by 11.5% y-o-y in Q2.

According to our estimate, a positive contribution to y-o-y GDP growth in Q2 (1.2 pp) came from a rise in **inventories**. This is suggested by the movement of inventories of finished industrial products, which, driven by growing inventories in the production of motor vehicles and the food and chemical industries, rose by 9.5% on average in Q2 compared to the same period last year.

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

	2017		2018	
	Q3	Q4	Q1	Q2
Household consumption	**1.8**	**1.8**	**3.0**	**3.3***
Indicators				
Retail trade	4.1	2.2	3.3	3.3
Catering turnover	7.3	6.1	9.6	11.2**
Number of domestic tourists	7.6	9.8	10.1	8.7
Number of overnight stays of domestic tourists	7.5	11.3	9.2	13.6
Consumer goods imports (BEC classification), nominal	4.7	6.0	12.3	6.3
Sources				
Total wage bill, nominal	6.7	5.9	7.5	9.3**
Net remittances inflow, nominal	0.9	22.7	12.0	15.0
New cash loans, nominal	9.6	11.5	6.2	16.7

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

Table IV.4.2 **Investment indicators**

	2017			2018	
	Q2	Q3	Q4	Q1	Q2
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Industrial inventories	3.9	-0.3	3.6	3.8	0.9
Industrial production of capital goods	-4.0	2.2	-4.7	5.6	1.4
Exports of equipment*	9.5	-1.7	12.0	6.9	-3.2
Imports of equipment*	9.5	-1.7	12.0	6.9	-3.2
Inventories of capital goods	-0.1	-0.5	1.2	-5.3	8.0
Industrial production of intermediate goods	5.9	0.5	0.1	3.1	-2.1
Exports of intermediate goods*	8.0	1.5	2.4	6.4	-1.3
Imports of intermediate goods*	5.2	0.5	4.6	8.7	-3.7
Inventories of intermediate goods	6.4	-2.9	5.8	8.9	-6.4
Industrial production of construction materials	4.4	-5.0	1.2	2.3	3.0
Inventories of construction materials	1.3	-2.3	3.0	4.7	0.6
Government investment**	10.9	6.8	7.8	8.6	2.7

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

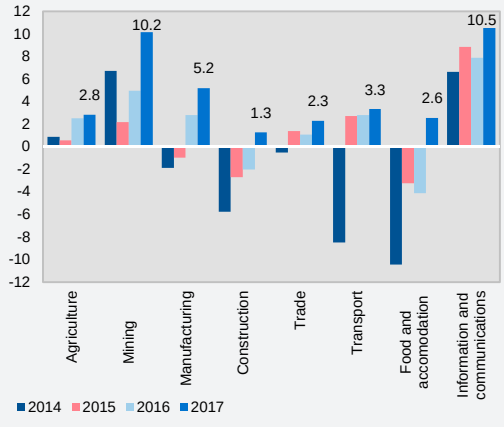
[18] See Text Box 3, p 42.

Text box 3: Analysis of corporate sector financial results in the 2014–2017 period

According to the data of the Business Registers Agency, in 2017 companies in Serbia made net income after tax in the amount of RSD 437.2 bn, which is a notably more favourable result compared to the past years. It is important also to stress that the reference year saw a **positive overall financial result of all economic sectors**, indicating that economic recovery was not concentrated in individual economic areas but was broad-based.

Favourable financial results are also indicated by the net income rate, i.e. ratio of net income (after tax) and total income (Chart O.3.1). Measured by this ratio, all economic sectors have good track record in the past four years, with the most successful examples recorded in manufacturing, construction, transportation and food and accommodation. The achieved increase in corporate profitability is the best confirmation of the fact that economic growth at the level of companies was driven by investment and exports, sustainable and broad based, suggesting a good economic outlook in coming period, too.

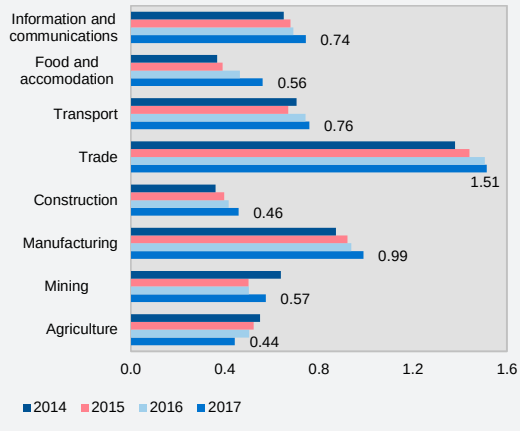
Chart O.3.1 **Net income rate (after tax) in selected economic sectors**
(in %)



Sources: Business Registers Agency, NBS calculation.

Overall financial result of the corporate sector in 2017 is the reflection of successful asset management, unequivocally attesting to acceleration of business asset turnover. Business asset turnover for the entire corporate sector rose from 0.71 in 2014 to 0.76, as result of a faster increase in total income (19.0%) in relation to business asset value (13.1%). Since the speed of business asset turnover depends on a series of market and technological specificities, it is important to stress that in the reference years it was rising in all sectors, with the exception of agriculture and mining, as they were disrupted by unfavourable weather conditions in some years (Chart O.3.2).

Chart O.3.2 **Operating assets turnover ratio in selected economic sectors**



Sources: Business Registers Agency, NBS calculation.

Overall financial result of companies improved by RSD 569.8 bn in 2017 compared to 2014, owing to more favourable results in all business segments. **Operating activity result** is more favourable by RSD 160.1 bn, contributing to improvement of overall financial result of companies with 28.1 pp. **Financial activity result** is also more favourable by RSD 307.3 bn, with a 53.9 pp contribution to improvement of cumulative financial result. **Other activity result** (including corporate profit tax payments) is better by RSD 102.5 bn (18.0 pp contribution). **All of the above points to the significance of macroeconomic stability for successful economic performance, to which the NBS is also an important contributor**.

Judging by the data on financial results of corporates for the 2014–2017 period, **the monetary policy easing of the NBS contributed to more favourable borrowing conditions and promotion of lending to the private sector**. On this account, interest expenses in 2017 were at the level of 63% of their amount from 2014, even though long-term and short-term financial liabilities rose by 10.0% – long-term liabilities by 14.1%, and short-term liabilities by 4.9%.

Predictable conditions are conducive to intensification of business activity, and coupled with favourable financing conditions to investment growth as well. Macroeconomic indicators also point to investment growth – the share of private investment in fixed funds and changing value in inventories in GDP rose from 17.4% in 2014 to 20.8% in 2017 which can also be seen in final accounts of corporates through an increase in business assets value. What significantly contributes to higher income of companies is their exports – the rise in total and operating income in the reference period amounted to around 19.0%, and the rise in exports value to around 39.5% in the dinar equivalent calculated at the average exchange rate. **The corporate sector responded to stable and predictable conditions and improvement of the business and investment ambience by increasing foreign currency inflows, thus providing a second-round effect to stabilisation of the domestic market and to lowering of the currency risk, as can also be seen in the reduction of exchange rate losses**.

Table O.3.1 **Manufacturing sector financial and operating results**

Year	**Net income** (after tax) (in RSD bn)	**Total revenue** (in RSD bn)	**Operating assets** (in RSD bn)	**Net income rate*** (after tax)	**Operating assets** turnover ratio**
2014	-43.4	2,343.2	2,657.7	-1.85%	0.87
2015	-24.2	2,520.2	2,809.1	-0.96%	0.92
2016	76.2	2,717.8	2,981.7	2.80%	0.94
2017	157.0	3,019.0	3,124.0	5.20%	0.99

Sources: Business Registers Agency, NBS calculation.

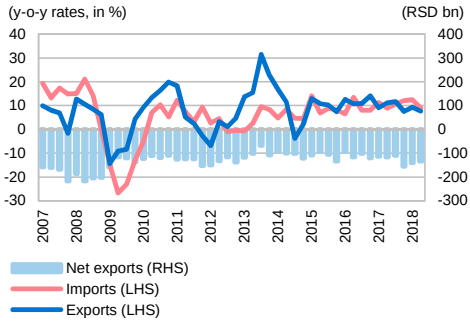
* Net income rate (after tax) is calculated by dividing net income by total revenue.

** Operating assets turnover ratio is calculated by dividing total revenue by average operating assests.

Consideration of financial results of companies in **manufacturing** is also important for the assessment of the competitiveness of corporates given their share in GDP and foreign trade activities (Table O.3.1). In 2017 net income of manufacturing reached RSD 157 bn, or 35.9% of the total net income of the corporate sector. The said result was achieved owing to the increase in total income of 28.8% in the 2014–2017 period, driven by the rising physical volume of production by 18.3% and the increase in exports by 36.9%, expressed in euros. On the other hand, companies in manufacturing used favourable financing opportunities, including higher owner's equity for these purposes, to invest and thus the value of business assets rose by 17.5% in the same period. As a result, the manufacturing sector recorded a rise in business asset turnover by 13.2% compared to 2014, whereby the exposure of companies in this sector towards operating risk gradually reduced.

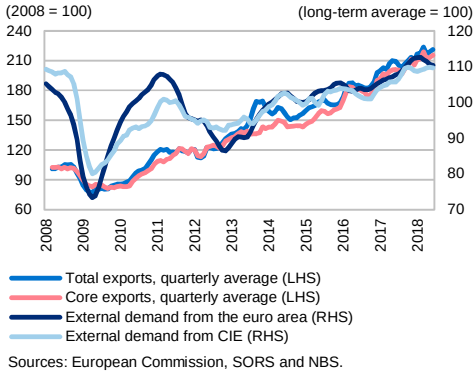
The above is indicative of the change of the behavioural model and clear orientation of companies towards sustainable investment and exports-based growth, which has been facilitated by strengthening macroeconomic stability and favourable growth outlook.

Chart IV.4.3 **Exports and imports of goods and services**
(in previous-year constant prices, ref. 2010)



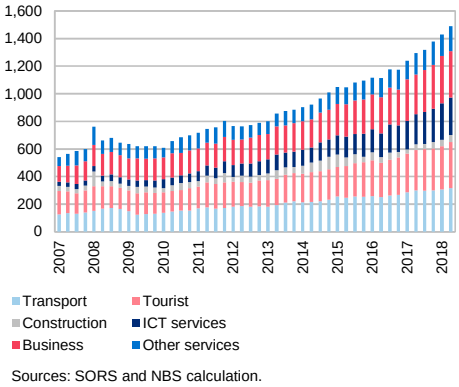
Sources: SORS and NBS calculation.
* NBS estimate for Q2 2018.

Chart IV.4.4 **Movement of indicators of external demand for Serbian exports**
(quarterly moving avarage, s-a)



Sources: European Commission, SORS and NBS.

Chart IV.4.5 **Exports of services**
(s-a data, in EUR mn)



Sources: SORS and NBS calculation.

Net external demand

After soaring in Q1 (6.4% s-a), exports of goods and services in Q2, according to our estimate, recorded a mild quarterly fall (0.6% s-a) in real terms. In the same period a real fall was also recorded in the imports of goods and services (0.6% s-a). Due to a bigger share of imports in GDP, the contribution of net exports to GDP in Q2 was mildly positive (0.1 pp). At a y-o-y level, the contribution of net exports to GDP movements in Q2 was negative (2.1 pp), but lower than in Q1.

After stepping up in Q1 (7.0% s-a), euro-denominated commodity exports fell slightly in Q2 (1.1% s-a), according to data on foreign trade. This fall mainly reflected the softening of external demand growth on account of a slower rise of the euro area since the beginning of the year, causing lower exports in manufacturing (1.3% s-a in Q2). At the same time, positive movements continued in the exports of food and beverages, machinery and equipment, paper products, furniture and wood, with recovered petroleum product exports. On the other hand, the exports went down in those manufacturing areas that recorded relatively high growth rates in Q1, such as chemical and pharmaceutical products, base metals, rubber and plastic products and electrical equipment.

In Q2, the exports of agricultural commodities rose by 13.9% s-a. This was mainly due to higher exports of corn and wheat. Given that this year's agricultural season could be above-average[19] and that this could boost the export potential of agriculture, positive developments may be expected in the coming period in terms of exports of agricultural commodities.

That the mild quarterly fall in commodity exports in Q2 is probably temporary is indicated by the pace of their movement in y-o-y terms. **The broad-based growth of manufacturing exports measured 9.2% y-o-y in Q2 (growth in 22 of 23 sectors) and 10.7% y-o-y since the beginning of the year (growth in all sectors)**. The greatest contribution in H1 came from motor vehicle exports, while lower Fiat exports (by 15.5% y-o-y or EUR 88.9 mn) were more than offset by the exports of other manufacturers from this sector which increased by 29.2% (EUR 231.3 mn).

Continued growth was also recorded in exports of services, which, according to preliminary data for Q2, went up by 3.0% s-a. Similar to the previous period,

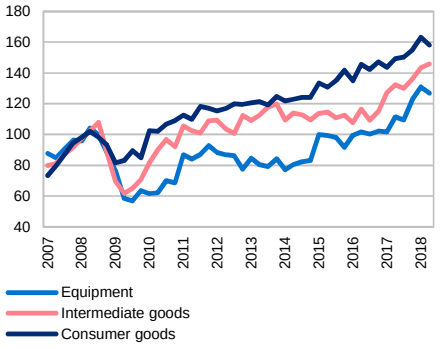
[19] See Text box 4, p. 49.

growth of exports continued in information and communications services (2.0% s-a), tourism and transport services (6.3% and 2.8% s-a, respectively), with recovery recorded in construction services (14.9% s-a). On the other hand, after three quarters of growth, exports of business services declined in Q2 (1.5% s-a).

According to foreign trade data, the rise in euro-denominated commodity imports in Q2 (1.6% s-a) reflected higher imports of intermediate goods (1.7% s-a). After recording their quarterly historical maximum in Q1, equipment imports decreased by 3.2% s-a in Q2. It should be borne in mind that a part of equipment was in non-classified goods, the imports of which rose. Hence, after reclassification, a rise in equipment imports may as well be expected in Q2. Lower imports in Q2 (3.2% s-a) were also recorded in consumer goods. Similar trends are also confirmed by the structure of imports observed by the EU economic destination, which shows a rise in imports of energy and a fall in imports of capital goods, durable and non-durable consumer goods.

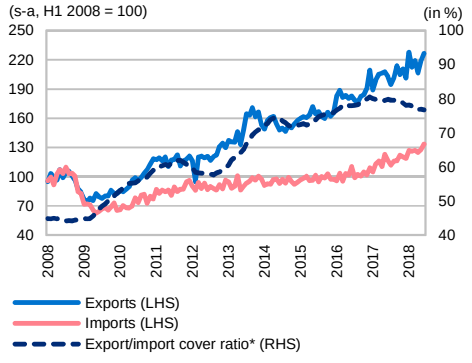
The exports-to-imports ratio, measured by a 12-month moving average, stood at 76.8% in June, or 85.5% if services are included, which is close to the March level. Exports of goods in June exceeded their pre-crisis level by 126.5%[20], while, on the other hand, imports of goods surpassed their pre-crisis level by 33.6%.

Chart IV.4.6 **Imports by key components**
(s-a data, H1 2008=100)



Sources: SORS and NBS calculation.

Chart IV.4.7 **Commodity trade in euros**
(s-a, H1 2008 = 100) (in %)



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

5 Economic activity

Robust GDP growth diversified across sectors continued in Q2 and, according to the preliminary estimate of the Statistical Office, it equalled 4.4% y-o-y. Faster implementation of infrastructure projects and continued recovery of domestic demand reflected positively on further growth in construction and service sectors, which gave the highest contribution to GDP growth in Q2. In quarterly terms, GDP grew by 0.5% s-a in Q2, owing to continued positive trends in construction, energy and service sectors. Supported by positive developments in all economic sectors, according to our estimate, GDP growth should accelerate to around 4.0% in 2018, i.e. 0.5 pp more than according to our previous projection, as a result of significantly more favourable trends in construction and agriculture in the year so far.

Robust GDP growth from Q1 (4.6% y-o-y) persisted in Q2 and, according to the preliminary estimate of the Statistical Office, equalled 4.4% y-o-y. **As estimated by**

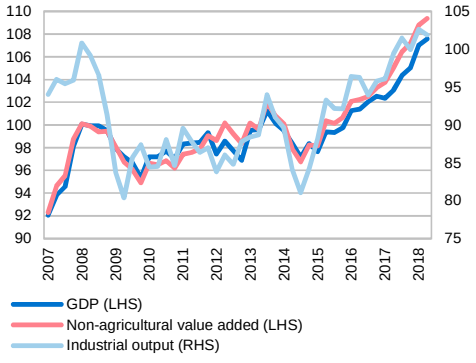
Table IV.5.1 **Contributions to quarterly GDP growth**
(in pp)

	2017			2018	
	Q2	Q3	Q4	Q1	Q2*
GDP (in %, s-a)	**0.7**	**1.3**	**0.6**	**1.9**	**0.5**
Agriculture	-0.3	0.2	0.0	0.5	0.2
Industry	0.5	0.5	-0.4	0.4	-0.1
Construction	0.1	0.3	0.3	0.1	0.1
Services	0.4	0.4	0.3	0.5	0.4
Net taxes	0.1	0.1	0.1	0.2	0.0

Sources: SORS and NBS calculation.
* NBS estimate.

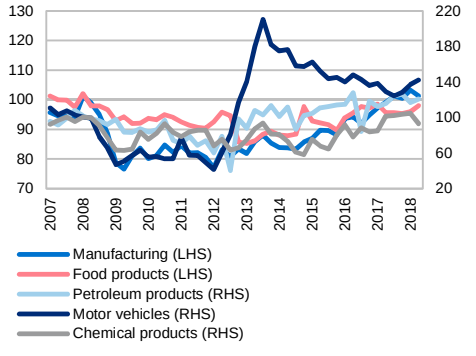
[20] Level from H1 2008.

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



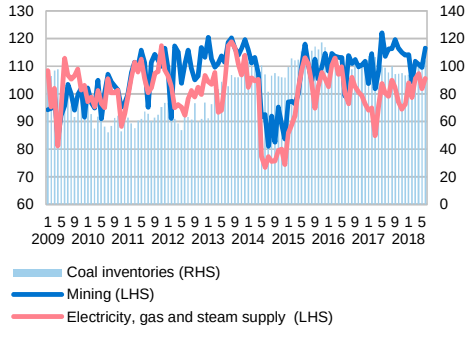
Sources: SORS and NBS calculation.

Chart IV.5.2 **Physical volume of production by branch of manufacturing**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

the NBS, GDP growth remained widely diversified, given that all sectors of the economy gave a positive contribution. The highest contribution to GDP growth continued to come from service sectors (1.8 pp), which were positively affected by a recovery in domestic demand, and construction (1.0 pp), owing to continued implementation of infrastructure projects and a gradual recovery of the real estate market. Also, a positive contribution to GDP in Q2 came from agriculture (0.8 pp). Industry contributed less to GDP growth in Q2 (0.4 pp) than in Q1, in part due to the base effect for mining and energy, and in part due to a slower rise in external demand on account of slower euro area growth.

In quarterly terms, GDP grew by 0.5% s-a in Q2, with the positive contribution of most sectors, the highest contribution coming from service sectors (0.4 pp), followed by agriculture (0.2 pp) and construction (0.1 pp). On the other hand, manufacturing contributed negatively to GDP growth in Q2 due to the slower rise in external demand. Economic activity stayed above the pre-crisis level[21] in Q2 – 7.6% in terms of GDP, or 9.4% as measured by NAVA.

After rising in Q1 (2.2% s-a), we estimate **that industrial production** fell in quarterly terms (0.5% s-a), dragging down GDP (0.1 pp). This mostly resulted from somewhat less favourable trends in manufacturing, whose physical volume of production lost 1.8% s-a in Q2 (contribution to overall industry: -1.3 pp), which may be linked to a slowdown in the rise in external demand on account of slackened euro area growth. Quarterly decline in the physical volume of production in manufacturing occurred mostly due to contracted production in chemical industry, production of metal products and of rubber and plastic products. On the other hand, output continued to grow in the food industry, production of base metals, electrical equipment and construction materials. **In y-o-y terms, growth in the physical volume of production in manufacturing continued for the fourteenth consecutive quarter, coming at 2.2% in Q2 (contribution to overall industry: 1.7 pp), with positive trends enduring in most areas of production (17 out of 24)**.

A positive contribution to the quarterly physical volume of total industrial output came from electricity, gas and steam supply (0.4 pp), which continued the recovery from Q1, and whose physical volume of production gained

[21] H1 2008.

2.1% s-a in Q2. The physical volume of production in the mining sector also grew in Q2, as a result of higher exploitation of metal ores. In y-o-y terms, the physical volume of production in electricity, gas and steam supply expanded by 5.7% in Q2, contributing positively to growth in total industry by 1.0 pp, while in the mining sector it fell in y-o-y terms (2.1%), negatively contributing to total industry by 0.3 pp.

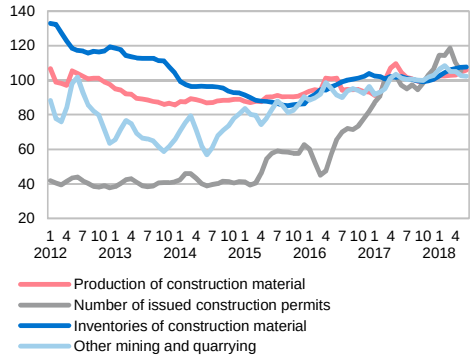
Sustained positive trends in Q2 were recorded in **construction** as well, supported by faster implementation of infrastructure projects and the recovery of the real estate market. The NBS estimates that growth in construction activity in Q2 measured 2.8% s-a, positively contributing to GDP growth by 0.1 pp. Such developments are indicated by higher production of construction materials (3.0% s-a) and the higher value of executed works (1.0% s-a) in Q2. Also, employment in construction rose in Q2. **In y-o-y terms, growth in construction remained strong in Q2 (around 23%), contributing to GDP by 1.0 pp**.

Q2 saw continued positive trends in most **service sectors**, which, according to our estimate, grew by 0.8% s-a in aggregate terms, contributing to GDP growth by 0.4 pp. This is shown by the movement of available short-term indicators, mainly in the area of trade and tourism. Retail trade turnover continued up, rising by 0.9% s-a in Q2. Over the same period, the number of tourist arrivals and overnight stays also continued to grow (by 4.4% s-a and 7.0% s-a respectively). In addition, in step with rising service sector activity, formal employment also rose, since employment increased in most service sectors in Q2. Y-o-y, activity in service sectors grew by 3.4% in Q2, contributing to GDP growth by 1.8 pp.

Agriculture was also a positive factor in Q2, and will remain one in 2018. According to our estimates, it should grow by around 11% this year and contribute to GDP by around 0.8 pp.[22] Such developments result mainly from extremely favourable agrometeorological conditions for the production of all main crops in the current agricultural season, and in part from the low base effect due to last year's poor agricultural season.

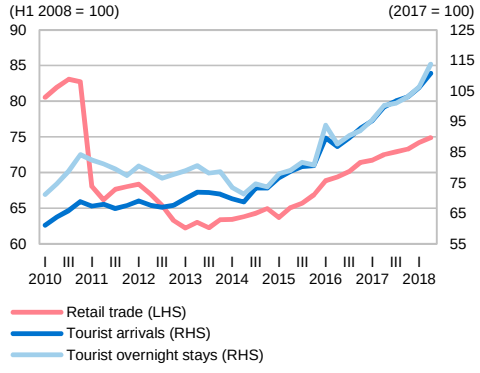
At year level, in 2018 we expect GDP growth to accelerate to around 4.0%, i.e. 0.5 pp more than according to our previous projection, owing to notably better developments in construction and agriculture since the

Chart IV.5.4. **Construction activity indicators**
(quarterly averages s-a, 2017 = 100)



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

[22] See Text Box 4, p. 49.

start of the year. Thus, upward risks to the growth rate that we communicated to the public in May materialised. We expect construction to continue to record positive tendencies for the rest of the year, as indicated mainly by the continued rise in the number of issued construction permits, while we anticipate that agriculture will show results better than the multi-year average. Besides these two sectors, industry and service sectors will continue to provide a strong contribution to GDP growth on account of the further recovery of domestic demand.

Text box 4: The first assessments of this year's agricultural season and its impact on economic and foreign trade activity

Judged by the data on expected production of wheat and areas sowed with corn and industrial plants, published by the Statistical Office, this year's agricultural season will be more successful than indicated in our preliminary estimates from the last Report. Since at the time we did not have indicators for a more precise assessment of agricultural production, we assumed then that the production of main crops this year would be at the level of ten year's average (2008–2017), and the volume of activities in animal husbandry at the 2017 level. Under these assumptions, agricultural production was supposed to grow by around 5 % and to have a positive contribution to GDP with 0.3 pp.

Given the new estimates of the Statistical Office, 2018 is expected to see wheat production growth by as much as 34.9%, as a result of larger cropped areas (by around 17%) and better yields (around 16%) than in 2017. When it comes to other major crops, the published preliminary data on estimated cropped areas indicate a rise in areas under sunflower (9.0%) and sugar beet (5.9%), and a reduction of areas under corn (9.5%) and soya (2.6%) in 2018. Such developments are partly expected, given that corn and soya were affected by the last year's drought the most. Starting from officially published data on cropped areas and assuming that this year's yields of corn and industrial plants will be at the level of multi-year average, the expectation for 2018 is that the production of these crops will pick up compared to 2017. This growth should be the most pronounced in the case of corn (35.4%), while growth expectation for industrial plants is at the level of 10% to 12%. In addition to soil cultivation, fruit production will also record more favourable developments as judged by the data of the Statistical Office. Namely, the production of sour cherries and raspberries is expected to pick up by 37.5% and 15.7%, respectively. In the new projection we also kept the assumption that activity in animal husbandry should remain at the last year's level.

Table O.4.1 **Agricultural production in 2018**

Agricultural crops/plants	Cropped areas in 2017 (in thousand hectares)	Average yields in 2017 (in tonne/ /hectare)	Cropped areas in 2018 (in thousand hectares)	Average yields in 2018* (in tonne/ /hectare)	Expected production in 2018 (in thousand tonnes)	Annual growth in 2018 (in %)
Wheat	556.1	4.1	648.1	4.7	3,069.3	34.9
Corn	1,002.3	4.0	906.8	6.0*	5,393.2	35.4
Soyabean	201.7	2.3	196.5	2.6*	516.5	12.0
Sunflower	219.3	2.5	239.1	2.5*	605.8	12.1
Sugar beet	53.9	46.7	57.0	48.6*	2,770.4	10.2
Raspberry	21.9	5.0	22.4	5.7	127.0	15.7
Sour cherry	17.6	5.2	18.2	6.9	126.0	37.5

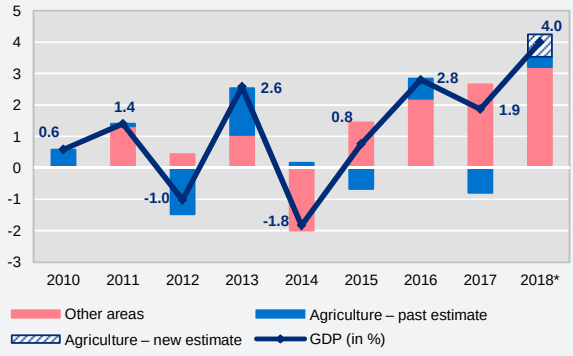
Sources: SORS and NBS calculation.
* NBS estimate based on 10-year yield.

Actual growth in the production of wheat, raspberries and sour cherries and expected growth in the production of corn and industrial plants, coupled with the preservation of the last year's level of activity in animal husbandry would result in the rise in agricultural production by around 11% in 2018, along with positive contribution to GDP growth of around 0.8 pp, i.e. up by around 0.5 pp compared to our previous expectations. Given that weather conditions in July and early August have been conducive to autumn crops, we judge that materialisation of the assumption on this year's yields of corn and industrial plants at the level of multi-year average is realistic.

The importance of agriculture for the Serbian economy is reflected not only in its relatively high share in GDP (around 8%) and direct contribution to value added, but also in the fact that it is the basis for the food industry which constitutes around one quarter of manufacturing. Accordingly, years with unfavourable agricultural season usually saw the stagnation or deterioration of the food production, as was the case in 2017 (0.3% fall). Hence, we expect the ripple effect of good results of this year's agricultural season on the rise in the food industry and accordingly indirect contribution to GDP growth, in addition to direct contribution.

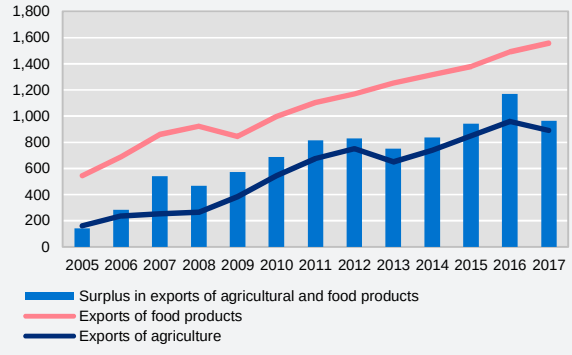
Expectedly stronger production of major agricultural crops should give a positive contribution to exports growth, too, given that Serbia is a net exporter of agricultural and food products. The ascending trend in exports of food products (Chart O.4.2) has been present since 2010, and similar developments have also been recorded in the exports of agricultural products. Foreign trade surplus in agricultural and food production doubled in the past ten years and has constantly contributed to the reduction in external imbalance. Owing to excellent results in agricultural production, in 2016 surplus exceeded EUR 1 bn. On the other hand, a temporary reduction in surplus in 2017 is the consequence of the combined effect of cold weather at the beginning of the year and the drought during the summer months. Last year's adverse agricultural season pushed down exports of agricultural and food products in H1 2018. However, despite such conditions agricultural complex continued to record foreign trade surplus, which amounted to EUR 392 mn in the January–June period. In accordance with expected growth in agricultural production, primarily cereals and fruit, the rise in exports of agricultural products is expected to accelerate in H2 2018. In y-o-y terms, exports of agricultural products in 2018 are expected to outperform its last year's level. Furthermore, as always after a good agricultural season, we expect activity in the food industry to intensify and give an impetus to commodity exports in the remainder of the year.

Chart O.4.1 **Contribution of agriculture to GDP**
(in pp)



Sources: SORS and NBS calculation.
* NBS estimate.

Chart O.4.2 **Export performance in agriculture and food production**
(in EUR mn)



Sources: SORS and NBS calculation.

6 Labour market developments

Labour market recovery continued into Q2 driven by accelerated employment growth in non-public sector entities, unemployment drop and wage increase. The rise in the whole-economy productivity was uninterrupted from the previous period and it occurred in the environment of employment growth lagging behind GDP growth.

Wages and labour productivity

A further rise in economic activity and higher minimum net wage brought about the continuation of positive labour market developments. The nominal net wage in April and May was up by 6.8% on average compared to the same period the year before.[23] The average wage increase is a result of rising wages in non-public sector and public sector entities (6.4% and 8.0%, respectively).

In April and May almost all economic sectors recorded y-o-y growth in the nominal net wage, except for the financial sector where it slightly softened. The most prominent rise in wages was recorded in accommodation and food services, construction, trade, and manufacturing where employment also picked up in Q2. The nominal net wage also increased in the sectors of health and social protection, public administration, and education, primarily as a result of the public sector wage increase since the beginning of this year.

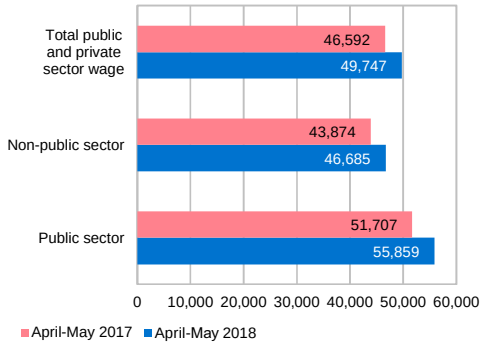
Accelerated employment growth and a higher average wage pushed up the nominal net wage bill in the non-public sector entities. We estimate that it was up by 11.1% in April and May relative to the same period the year before. Nominal net wage bill rose in the public sector, too (6.4% y-o-y).

The whole-economy productivity rise by 1.2% y-o-y in Q2, by our estimate, occurred as in Q1 in the environment of GDP growth picking up faster than employment growth.

Employment

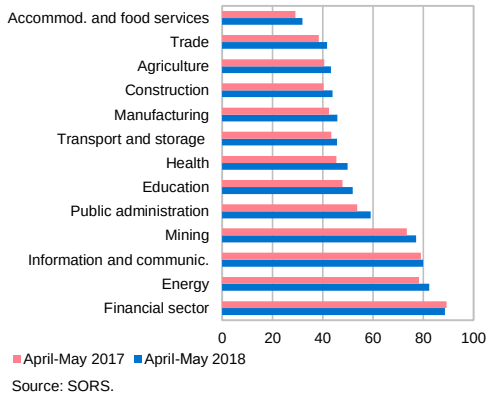
Favourable economic developments pushed formal employment further up since the beginning of the year and in Q2 it was up by 3.2% y-o-y on average. According to the data of the Statistical Office obtained from the Central Registry of Mandatory Social Insurance, formal

Chart IV.6.1 **Average nominal net wage**
(in RSD)



Source: SORS.

Chart IV.6.2 **Nominal net wage by economic sector**
(in RSD thousand)



Source: SORS.

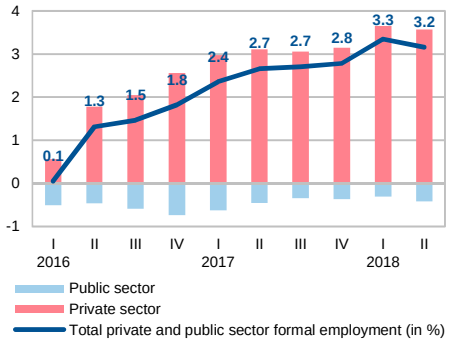
Table IV.6.1 **Movements in formal employment and unemployment**
(y-o-y growth rates, period average)

	2017		2018	
	Q3	Q4	Q1	Q2
Total number of formally employed	2.7	2.8	3.3	3.2
Employed with legal persons	2.5	2.7	3.3	3.1
Entrepreneurs and their employees	5.7	5.5	6.2	6.2
Individual farmers	-4.4	-5.9	-7.3	-7.7
The unemployed	-9.0	-10.7	-10.1	-10.1
First-time job seekers	-9.8	-11.5	-10.7	-10.8
Used to be employed	-8.6	-10.4	-9.8	-9.7

Sources: SORS and National Employment Service.

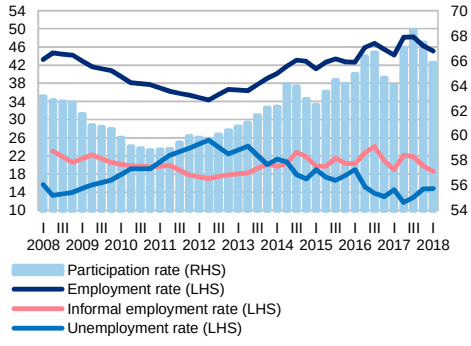
[23] As of January 2018 the Statistical Office uses a new methodology for monitoring wages in the Republic of Serbia.

Chart IV.6.3 **Composition of y-o-y rise in formal employment**
(in pp, period average)



Sources: SORS and NBS calculation.

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



Source: SORS.

employment growth is a result of a further increase in employment with legal persons, and in the number of private entrepreneurs and their employees, while the number of individual farmers continued to fall into Q2.

As in previous quarters, rising formal employment in Q2 was driven by higher employment in the private sector while the public sector continued with the downsizing process. By industry, the strongest y-o-y increase in formal employment occurred in manufacturing. Employment also picked up in trade, construction and transport and almost all other service sectors. On the other hand, employment dropped first and foremost in the sectors of energy supply, water supply, and public administration, followed by agriculture, and mining.

Recruitment needs of corporates and implementation of active labour market policies[24] keep on working towards a further decline in unemployment. **According to the National Employment Service records, unemployment fell to its lowest level in the past 20 years, amounting to 579,072 in Q2, which was lower by 66,354 than in the same period last year**. In y-o-y terms, unemployment was cut in all occupational groups, the largest reduction being in occupations related to manufacturing, trade, catering and tourism which is consistent with the employment rise in the said sectors. Furthermore, in Q2 unemployment continued to decline in occupations related to agriculture and food production and processing.

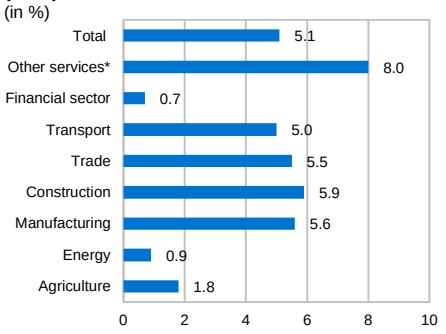
The Labour Force Survey, which also covers the informal labour market developments, indicates further labour market recovery. According to the available data for Q1, the participation rate for the working age population (15–64) was up by 1.8 pp relative to the same period the year before and it stood at 65.8%. In Q1 the employment rate also went up by 0.9 pp to 45.1% entirely as a result of the increase in formal employment. Even though the unemployment rate slightly rose, by 0.2 pp to 14.8%, long-term unemployment was unchanged (8.8%). Positive tendencies in terms of unemployment were also recorded among young generation (15–24) as the unemployment rate was reduced by 2.5 pp (34.6%). The NEET rate also records a 1.4 pp fall (17.3%). This rate measures the share of the youth who are neither in employment nor in education or training, in the total youth population.

[24] The following active labour market policies are implemented: job matching service, career guidance and councelling, support to self-employment, employment subsidies, further education and training, etc.

According to the Employer Survey, the gross job creation rate[25] in 2017 stood at 14.8%, and the gross job destruction rate at 11.8%. The said results may be associated with the continued investment cycle, which is also indicated by the IBM Global Locations Trend report where Serbia ranked first in both 2016 and 2017, measured by the relative number of new jobs created from FDI projects, with estimated 3,000 jobs per million inhabitants.

Positive developments, according to the Employer Survey, are expected for the remainder of 2018, with the acceleration of the net job creation rate to 5.1% (the gross job creation and destruction rates of 10.4% и 5.3%, respectively). Job creation is expected, first and foremost, in the sectors of construction, manufacturing, trade and transport, and in other service sectors which is in congruence with past employment growth in the said sectors. Somewhat subdued growth in 2018 is expected in the sectors of agriculture and energy as well as in financial sector.

Chart IV.6.5 **Expected net job creation rates (NES) for 2018**
(in %)



Sources: Central Registry of Mandatory Social Insurance, Employer Survey (NES).

* Other services include: professional activities, administration, health and art.

7 International environment

Global economic growth remained stable in Q1 2018, though less balanced among countries, with increased risk in terms of prospects for the coming period primarily with regard to tensions in international trade. Following somewhat weaker performance early in the year, US economic growth picked up in Q2, whereas euro area growth slowed down to 0.3% s-a.

Despite this year's slower growth in the euro area, Serbia's largest foreign trade partner, the ECB expects it to proceed along a solid and broad-based path in the medium term. Also, the region of Central and Southeast Europe is expected to maintain its high growth rate in 2018 on account of improved conditions in the labour market and a rise in domestic and EU-funded investments. The latest report of the European Commission indicates that growth in the Western Balkan region accelerated in Q1 from 2.7% to 3.5% y-o-y and was largely driven by the faster-paced growth recorded in Serbia.

In Q2 inflation in the international environment posted an increase, primarily under the impact of rising oil

[25] The gross job creation/destruction rate is the ratio of the number of newly employed/dismissed persons and the total establishment employment observed at the beginning of a year. The net job creation rate is the difference between the gross job creation and gross job destruction rates.

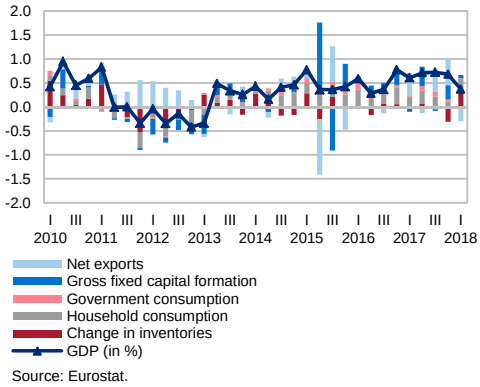
prices, though it still remained moderate in most countries. The monetary policies of the ECB and Fed diverged further, while global financial conditions, though slightly tighter, are still favourable. During Q2 the dollar gained on all leading global currencies, largely in response to different stages of the economic cycle and growth in the interest rate differential.

Economic activity

The IMF's July projections of global growth did not change since April (3.9% in 2018 and 2019), though they state that growth is no longer as balanced across countries as before. The projections indicate that the economic gap between the USA and other leading economies, as well as between advanced and emerging economies, is widening.

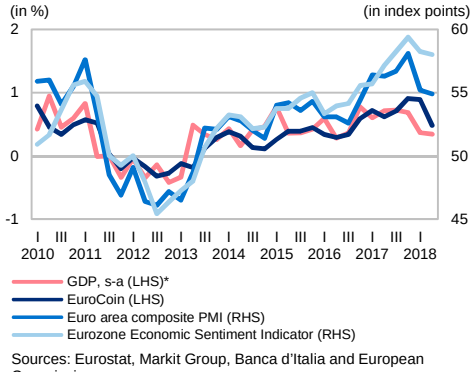
Having risen at the 0.7% s-a rate for three consecutive quarters, **euro area** GDP slowed down to 0.4% s-a in Q1 2018, though it remained broadly dispersed across countries. To a degree, the deceleration of economic growth reflects a correction towards a level sustainable in the long run, given that for quite some time already the euro area economy has been rising at rates higher than those sustainable in the long term, while on the other hand, the slowdown is partly a consequence of temporary factors such as poor weather conditions, strikes, etc. Economic growth also decelerated in Germany and Italy (to 0.3% s-a), Serbia's key individual foreign trade partners.

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



Source: Eurostat.

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



Sources: Eurostat, Markit Group, Banca d'Italia and European Commission.
* Eurostat's preliminary flash estimate for Q2 2018.

According to the Eurostat flash estimate, GDP growth in the euro area slackened to 0.3% s-a in Q2. Leading indicators of economic activity also suggested somewhat slower economic growth. The PMI Composite for the euro area on average equalled 54.7 points[26] in Q2, and the Economic Sentiment Indicator measured 112.5 points,[27] which is lower than in Q1. By contrast, favourable developments continued in the labour market and the unemployment rate in Q2 fell to its lowest since 2008 (8.3% in June).

Though economic growth in the euro area slowed down since the start of the year, the ECB expects it to remain stable and broad-based in the medium term. Favourable financing conditions and developments in the labour market, as well as a stable increase in company revenues and profit, will continue to support economic growth – according to the ECB, it should measure 2.1% in 2018,

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

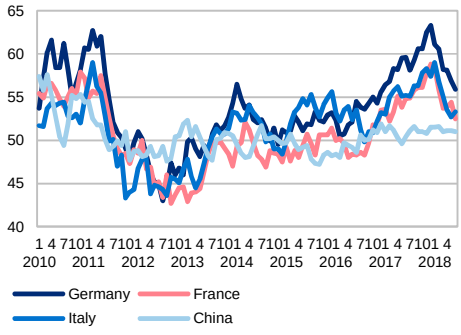
[27] The index has been designed to indicate long-term average with 100 points.

down by 0.3 pp relative to the March projection. Projections for 2019 and 2020 (1.9% and 1.7% respectively) are unchanged relative to March and growth is expected to slow down in the coming years in response to the gradual waning of the effects of past monetary policy easing, as well as the effects of the supply-side factors such as high capacity utilisation and labour force deficit in some member countries, etc. Due to lower results at the start of the year, anticipated growth in the euro area for 2018 was revised down in the July projections of the IMF and Consensus Forecast relative to April projections – by 0.2 pp to 2.2%. For 2019 the IMF expects growth of 1.9%, and the Consensus Forecast of 1.8%, both figures trimmed by 0.1 pp each relative to previous forecasts. The ECB estimates that risks to the projection pertain to the possibility of tensions in the international trade aggravating further and increased instability in international financial markets. However, at a meeting between the presidents of the European Commission and the USA, held at end-July, agreement was reached on cooperation that would aim to remove trade barriers, whereby risks on that account will also be mitigated for the time being.

Developments in the labour market, high consumer confidence and fiscal incentives continued to contribute to the upturn in **US** economy in Q1 2018 (0.5% s-a). These factors, including increased exports, continued to sustain growth during Q2 as well – according to the preliminary assessment of the Bureau of Economic Analysis, growth picked up to 1.0% s-a, or 4.1% annually, which is the highest growth figure in almost four years. At the same time, the output gap entered positive territory for the first time since 2007. The unemployment rate dipped further, from 4.1% in March to 4.0% in June, while the number of new nonfarm payrolls remained relatively high – exceeding 200,000 per month on average.

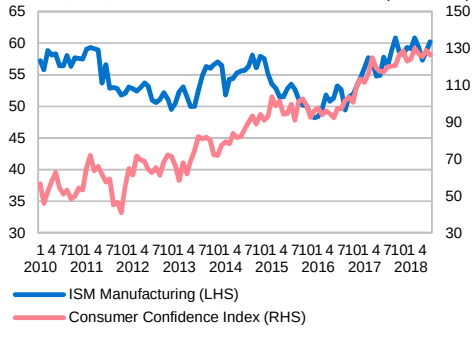
According to the Fed's June projection, US growth is expected to measure 2.8% in 2018, up by 0.1 pp from March projections, while projections for 2019 and 2020 were kept at 2.4% and 2.0% respectively. The IMF left the April projection for the USA unchanged, i.e. at 2.9% for 2018 and 2.7% for 2019. The Consensus Forecast revised its projections slightly up from April, by 0.1 pp to 2.9% for 2018, while growth in 2019 remained at 2.6%. Further economic growth is expected on account of the effects of fiscal stimuli and robust private consumption.

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



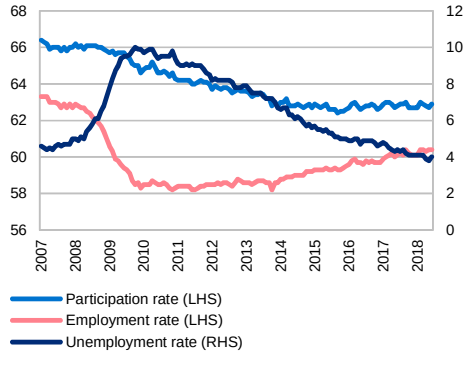
Source: Markit Group.

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



Sources: Institute for Supply Management, Conference Board.

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



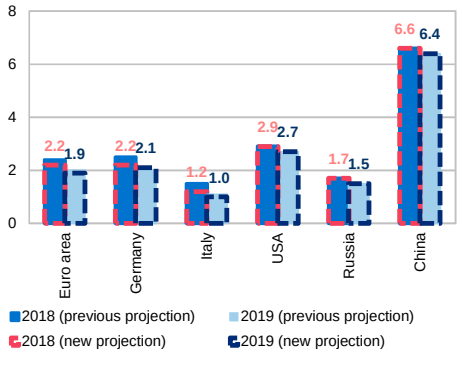
Source: Bureau of Labor Statistics.

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

	April 2018		July 2018	
	2018	2019	2018	2019
Poland	4.1	3.4	4.4	3.5
Czech Republic	3.5	3.0	3.4	3.0
Hungary	3.8	3.0	4.1	3.1
Albania	3.9	3.9	3.8	3.8
Bulgaria	3.7	3.4	3.7	3.4
Bosnia and Herzegovina	3.0	3.2	3.1	3.2
Macedonia	3.0	3.2	2.9	3.3
Romania	4.7	3.6	4.0	3.5
Slovenia	4.3	3.4	4.5	3.6
Croatia	2.8	2.7	2.6	2.7

Source: Consensus Forecast.

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



Sources: IMF WEO (April 2018) and IMF WEO Update (July 2018).

According to the European Commission, the expansive fiscal policy in the USA could reflect on growth in the current deficit, which might lead to more protectionism and spill over onto a fall in business confidence and investment.

Growth in the **Central European** region in Q1 was chiefly supported by increased investments and private consumption. However, due to dampened external demand, it decelerated compared to Q4 in most countries, including the Czech Republic (from 0.7% s-a to 0.5% s-a). On the other hand, economic growth in Poland, the biggest economy in the region, picked up from 1.0% to 1.6% s-a driven by a considerable rise in domestic demand. Investments and private consumption are expected to remain the main drivers of growth in the coming period as well, given the rise in wages and increased utilisation of EU development funds. Compared to the April projection, the July Consensus Forecast revised growth figures for the region from 3.9% to 4.1% for 2018 and from 3.3% to 3.4% for 2019.

According to the July Consensus Forecast, growth in the **Southeast European** region was revised down relative to April, from 4.0% to 3.6% for 2018, while the projection for 2019 remained unchanged at 3.4%. Growth in 2018 at rates lower than expected is mainly attributable to the economic slowdown in Romania, whereas the projection for Serbia was revised upwards. The latest report of the European Commission stated that growth in the Western Balkans picked up in Q1 from 2.7% to 3.5% y-o-y, mainly driven by Serbia's growth, while the majority of other countries in the region also recorded a faster rise in GDP. As the unemployment rate contracted and lending increased, investments and private consumption continued to provide the main impetus to growth.

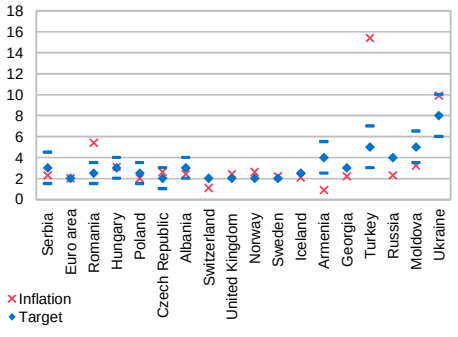
Though still moderate, **Russia's GDP growth** edged up from 0.9% y-o-y in Q4 2017 to 1.3% y-o-y in Q1 2018, primarily owing to the rise in manufacturing and mining. Economic recovery is expected to continue in Q2 on account of positive developments in the labour market and rising exports. Unemployment dropped to its multiyear minimum in May, thus providing an additional impetus to economic growth. The IMF did not change its projections from April, hence growth in 2018 is expected to measure 1.7% and to slow down moderately to 1.5% the following year. The Consensus Forecast revised its projections down relative to April – instead of 2.0%, it projected a rise of 1.8% for the Russian economy in 2018, the same as in 2019 (1.9% according to the previous forecast).

The Chinese economy decelerated in Q2, by 0.1 pp to 6.7% y-o-y, thus recording the slowest growth in two years. The slowdown is largely attributable to tighter borrowing conditions for local self-governments, as they resulted in slightly lower investments in infrastructure projects, while investments in the manufacturing industry posted a rise. In H2 the Chinese economy is expected to show the effects of customs tariffs which the USA imposed on imports from China. As in previous projections, the IMF expects Chinese economic growth to decelerate slightly – to 6.6% in 2018 and 6.4% in 2019, due to stricter regulations in the financial sector and subdued external demand.

Inflation movements

Average y-o-y inflation in the **euro area**, Serbia's key foreign trade partner, edged up from 1.2% in Q1 to 1.7% in Q2, largely in response to the rise in the prices of energy and unprocessed food. June inflation was the highest since February 2017 (2.0% y-o-y). Measured by the Harmonised Index of Consumer Prices (HICP), average y-o-y inflation in Germany increased from 1.4% in Q1 to 1.9% in Q2, and in Italy from 0.9% to 1.0%. Though core inflation remained relatively low in Q2 (0.9% y-o-y on average), the ECB expects it to rise gradually over the medium run, sustained by monetary policy measures and extended economic growth.

Chart IV.7.7 **Inflation and target by country in June 2018**
(in %)



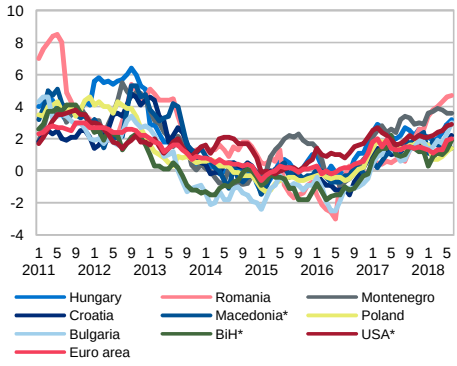
Sources: Eurostat and websites of central banks.

The ECB estimates that significant progress has been made in terms of inflation approaching the target level and in the coming period it expects it to remain close to the target owing to robust economic growth and anchored long-term inflation expectations. In June, inflation projections for 2018 and 2019 were revised up by 0.3 pp each relative to March, while the projection for 2020 was unchanged; hence inflation is projected at 1.7% for the entire projection horizon. The July survey of professional forecasters[28] expects stable inflation growth going forward, also at 1.7% in 2018, 2019 and 2020. Compared to the April survey, expectations were revised up for 2018 (by 0.2 pp) and 2019 (by 0.1 pp) due to the rising oil prices, whereas expectations for 2020 remained the same. Long-term inflation expectations, which refer to 2023, were kept at 1.9%. Obtained through a survey, these long-term expectations are still slightly higher than long-term market expectations which have remained largely unchanged at end-July when compared to April (1.74%).[29]

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

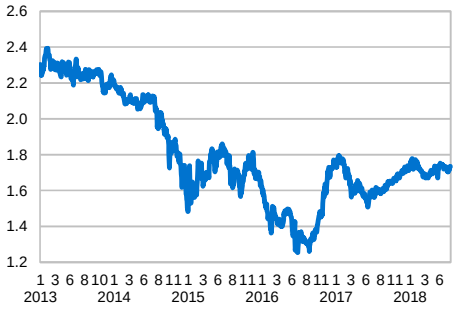
[29]* The five-year, five-year breakeven forward.

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



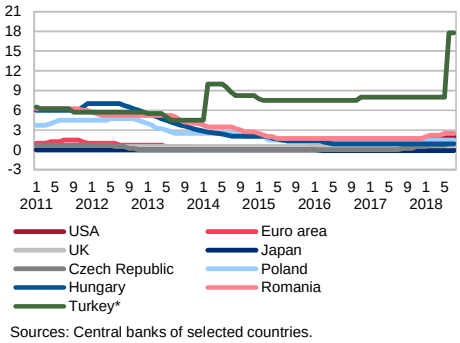
Sources: Eurostat, Bureau of Labor Statistics and statistical offices of selected countries.
* CPI.

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



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

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



Sources: Central banks of selected countries.
* As of June 2018, after a year and a half, the one-week repo rate is again the key policy rate.

After slowing down in most countries in Q1, average y-o-y inflation posted a rise in all **Central and Southeast European** countries in Q2, with the exception of Macedonia, where it remained unchanged (1.5%). Backed by the rising fuel prices, average y-o-y inflation in Poland inched up from 1.5% in Q1 to 1.8% in Q2, which is still lower than at end-2017. In Hungary, average inflation during the quarter equalled 2.7%, in Bulgaria 2.6%, Croatia 1.9% and Bosnia and Herzegovina 1.4%. Montenegro saw its average y-o-y inflation pick up additionally in Q2, from 2.7% to 3.2%. On average, inflation in Russia measured 2.4% y-o-y in Q2, negligibly higher than in Q1, while the central bank expects it to come close to the 4% target at end-2018. Inflation in Romania has been trending above the target since the beginning of the year and in Q2 it reached its highest level in five years (on average it measured 5.3% y-o-y). The depreciation of the lira, which spilled over onto domestic prices through the rise in import prices, contributed to the continued inflation growth in Turkey, from 10.3% to 12.8% y-o-y on average in Q2, overshooting the central bank's target (5.0±2%).

US inflation is still higher than in most of the advanced economies and is maintaining its upward trend, driven primarily by higher energy prices. It reached 2.9% y-o-y in June, its highest level since February 2012. Due to a rise in income, inflation measured by the personal consumption expenditure price index also rose to 2.2% y-o-y in May where it remained in June as well, according to the preliminary assessment. Excluding food and energy prices, this inflation measure on average increased mildly relative to Q1 and equalled 1.9% y-o-y in Q2. In June all FOMC members projected inflation for end-2018 measured by the personal consumption expenditure price index at a level slightly above the target (2%), with expectations that it would remain there until end-2020.

Monetary policy

The Fed and ECB's monetary policies diverged further during Q2 as the ECB still pursued an accommodative monetary policy and the Fed raised its interest rate.

Having assessed that economic conditions are still favourable, despite a certain slowdown in GDP since the beginning of the year, the **ECB** announced at its meeting in June, and confirmed it in July, that the programme of monthly net asset purchases of EUR 30 bn will run until the end of September. After that, provided that inflation continues to move according to expectations, the monthly pace of net asset purchases will be reduced to

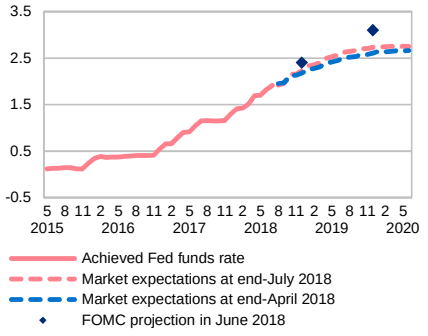
EUR 15 bn and wrapped up at the end of the year. It also underlined that it will continue to reinvest the principal payments from maturing securities purchased under the QE programme for an extended period beyond end-2018, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

The ECB kept its interest rates record low in Q2 – key rate at 0%, and deposit and marginal lending facility rates at -0.4% and 0.25% respectively. The June meeting was the first time the ECB mentioned a timeframe when announcing future movements in the key rate, stating that it expects the rates to remain unchanged at least through the summer of 2019, and in any case for as long as necessary to ensure sustainable movement of inflation towards the ECB target. At the meeting held in end-July, the ECB confirmed the June decisions and positive expectations regarding the economic performance in the euro area, with balanced growth-related risks.

As expected, FOMC members passed a unanimous decision in June to raise the target range for **the Fed's** rate for the second time this year, this time to 1.75–2.0%. The gradual increase in the federal funds rate is said to be aligned with sustainable growth in economic activity, favourable labour market trends and inflation which is close to the 2% target in the medium run. The biggest uncertainty regarding future movements arises from the aggravation of tensions in international trade that might reflect on the decline in business confidence and impact investment decisions. The June statement no longer mentions that, for a while, the federal funds rate is most likely to remain below the level expected in the longer run. Also, as of May, the statements emphasise the "symmetric inflation objective", which indicates that after years of inflation moving below the target level, the Fed is ready to tolerate its moving slightly above the target tolerance band in order to stimulate market inflation expectations. While March projections expected only one more rate hike after the one in June, the latest projections by the Fed suggest that the federal funds rate will be lifted twice before the end of the year. Three rate hikes are expected in 2019, to 3.1%, whereas March projections expected an increase to 2.9%. Market expectations for this and the following year are somewhat below the Fed's projections.

The Fed stated it would continue normalising its balance sheet, noting that reinvestment of principal payments was reduced by USD 30 bn in June, and as of July it will be trimmed by USD 40 bn a month.

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



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

Monetary policies of countries in **Central and Southeast Europe** differed in character during Q2, reflecting the varying strength of inflationary pressures and their economies' current stage in the cycle.

At its meeting in June, the Czech central bank lifted its key policy rate by 25 bp to 1% and its lending facility rate by 50 bp to 2%, while the deposit facility rate was kept at 0.05%. This is the second key policy rate hike since the start of the year, the first one being in February, and the fourth increase since 2017 when the cycle of monetary policy tightening was initiated. The decision was supported by economic activity overshooting its potential level and the depreciation of the koruna which was higher than projected.

After keeping its key policy rate on hold in April, the Romanian central bank raised the rate in May, by 25 bp to 2.5%, which is its third hike in 2018 and in line with expectations of analysts. According to the central bank's projections, inflation will remain above the target for the remainder of the year. Due to a deceleration in Romania's economic indicators, the key policy rate was not changed at the July meeting.

Due to the decline of the lira to a record-low level and the consequent further strengthening of inflationary pressures, the central bank of Turkey raised its late liquidity window rate (which was de facto considered its benchmark interest rate) in April and May by a total of 375 bp, to 16.5%. After it was brought on a par with the late liquidity window rate, the one-week repo rate, previously at 8%, again became the key policy rate as of 1 June. It was raised by another 125 bp to 17.75% in June, exceeding analysts' expectations. As of June, the symmetric interest rate corridor was established at ±1.5 pp relative to the key policy rate. Contrary to expectations, the key policy rate was not changed at the July meeting.

After trimming it to 7.25% at end-Q1, the Russian central bank did not change its key policy rate during Q2, in view of the considerable depreciation of the ruble and impact of proposed fiscal measures (VAT increase) on the inflation rate and inflation expectations.

Using a set of unconventional measures introduced in January, the Hungarian central bank continued with monetary easing in Q2, at the same time keeping the key policy rate unchanged (0.9%). Inflation target achievement is forecast for mid-2019. As expected by analysts, the central bank of Poland maintained its key policy rate at 1.5%, where it has stood since March 2015.

Financial and commodity markets

Volatility in the international financial market declined and at end-Q2 it was slightly above the very low levels from end-January. According to the implicit measure of **financial market volatility** (VIX), it equalled around 16% at end-June (compared to 20% at end-March). At the same time, the EM-VXY index – which tracks volatility in emerging market countries – rose mildly during Q2, by 1.8 pp to 9.8%.

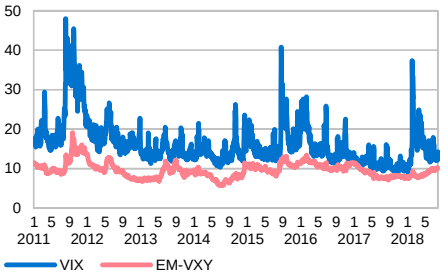
In Q2, yields on ten-year US Treasuries rose to a lesser degree than the Fed's interest rate, by 0.1 pp, coming at 2.9% at end-Q2. At the same time, the quarter saw significant fluctuations, ranging from 2.7% to more than 3.1%, the highest level in seven years. Due to difficulties surrounding the formation of the new government in Italy, investors' readiness to purchase Italian government bonds was reduced, which in turn led to a rise in their yields. Investors redirected some of their investments into German government bonds (considered safe assets), whereby the spread between the Italian and German bonds reached its highest level since 2013. Under the impact of all of these factors, the spread between US and German government bonds increased as well, from 2.2 pp at end-March to 2.6 pp at end-June.

During Q2, **the dollar strengthened relative to other leading global currencies**, which can be attributed to different stages in the economic cycle and the rise in the interest rate differential between the USA and other advanced economies. Observed at the end of the period, the dollar gained 5.4% against **the euro** in Q2, thus reversing its downward trend against the euro which was present during 2017 and in early 2018. In July, the dollar was almost unchanged against the euro, with the USD/EUR exchange rate at around 1.17. With the dollar gaining strength, the price of gold dropped 5.5% in Q2.

Financial and macroeconomic instability resulted in a significant weakening of currencies of some emerging economies (including Argentina, Turkey, Mexico and India). Hence, these countries responded by raising their key policy rates to suppress inflationary pressures and avert the further weakening of currencies, as well as prevent capital outflows in some of them.

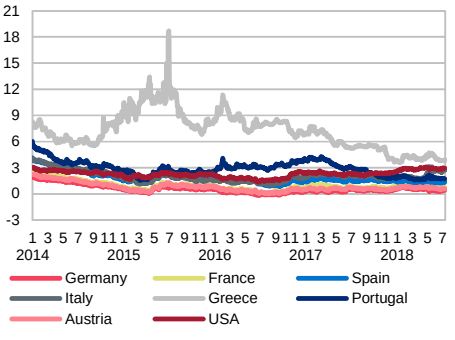
On the back of growing demand and diminishing inventories, **global oil prices** were on average 11.2% higher in Q2 than in Q1 and moved in the range from USD 67 to USD 79 per barrel. In addition to dampened production in Venezuela, the rise in the price of oil was also facilitated by exacerbated geopolitical tensions in the

Chart IV.7.12 **Implied volatility of the global financial market***
(in %)



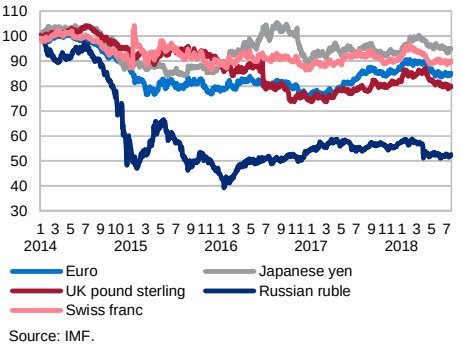
Source: Bloomberg.
* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM-VXY (JPMorgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

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



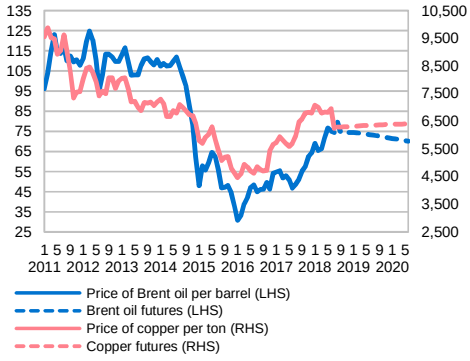
Source: Bloomberg.

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



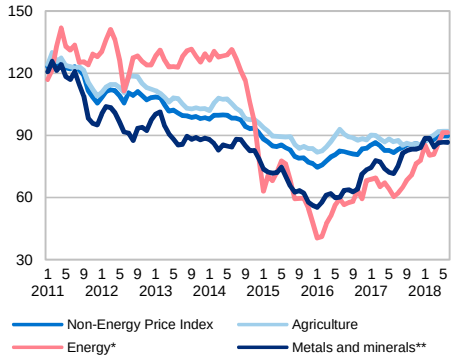
Source: IMF.
* Growth indicates appreciation.

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



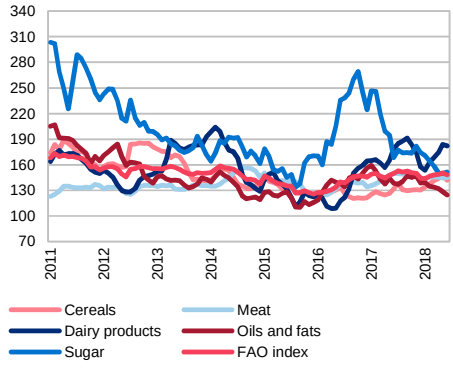
Source: Bloomberg.

Chart IV.7.16 **Primary Commodity Prices Index**
(2010 = 100)



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

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



Source: UN FAO.

wake of the USA's decision to back out of the nuclear deal with Iran and the announcement that it would reinstate sanctions, which implies a reduction in oil supply from Iran. At end-June, agreement was reached between OPEC countries and Russia to increase the supply by 1 mn barrels a day. This, coupled with the July announcement by Libya about boosting production, acted towards a decrease in the price of oil. According to the European Commission, oil price is expected to hover around the present levels until end-2018 and to decline in 2019, primarily in H2, in response to greater supply from the USA. Similar conclusions are also indicated by movements in futures, according to which the expected price of oil at end-2018 is around USD 74 per barrel, and at end-2019 around USD 71 per barrel.

Based on the World Bank primary commodities' price index, the **prices of metals and minerals** rose by 3.2% since the start of the year, and by 20.1% y-o-y in May.[30] Although on average, the price of copper did not change much in Q2 relative to the prior quarter, it touched its four-year maximum in early June in the wake of announcements of a new strike in the world's biggest copper mine in Chile. After going up, partly due to the announced stepped up production in Africa, the price of copper declined and at the end of July it was around 7% lower than at end-Q2.

World food prices, measured by the FAO index, rose in Q2 by 1.3% y-o-y on average. Still, they recorded a y-o-y fall in June which, according to the UN Food and Agriculture Organization, can be associated with investors' heightened wariness amid growing tensions in international trade. On average, the price of cereals was higher by 13.1% y-o-y in Q2 and the prices of dairy by 8.0% y-o-y. On the other hand, the price of vegetable oil continued to decline and in Q2 it was 8.3% lower y-o-y on average, coming down in June to its lowest level since January 2016. The price of palm oil declined owing to low global demand and the spill-over effects of the fall in the prices of soybean products amid trade tensions, while increased production in the EU and Ukraine reflected on the decline in the price of sunflower oil. Although the price of sugar fell by 19.7% y-o-y on average in Q2, in June it recorded monthly growth for the first time since November 2017, in response to increased concerns over the impact of weather conditions on production in Brazil, the world's leading sugar producer and exporter. Of the remaining food products in the FAO index, the price of meat was on average 1.5% lower y-o-y in Q2 2018.

[30] The World Bank will not publish this report until September due to changes in time series.

V Inflation projection

Under the August central projection, y-o-y inflation is expected to continue to move within the target tolerance band in the next two years – below the target midpoint until end-2019, getting temporarily close to the midpoint in the first months of 2019 due to the low-base effect early this year. The main factors driving such movement in the medium run include elevated aggregate demand and gradual weakening of disinflationary pressures on account of past appreciation of the dinar. A short-term disinflationary effect will be produced by low food production costs, with administered prices working in the opposite direction. In the course of 2019, y-o-y inflation will also be influenced by the high base for fruits, vegetables and petroleum products. Uncertainties surrounding the inflation projection concern primarily the developments in the international commodity and financial markets and, to an extent, administered price growth.

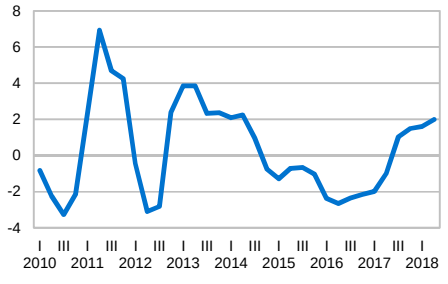
We revised the GDP growth forecast for 2018 to around 4%, up by 0.5 pp compared to the May projection. The upward revision was guided by faster than expected growth in construction and agriculture on the production side, and investment on the expenditure side, which we underlined as positive risks in our May projection as well. The growth forecast for 2019 is unchanged (3.5%), partly due to the high base this year. We expect that continued reforms will ensure that GDP growth of around 4% remains sustainable in the medium run as well. GDP growth going forward will be led by investment and household consumption. A boost is also expected from exports, which are likely to rise at two-digit rates. The risks to the GDP growth projection are assessed to be symmetrical and associated primarily with the developments in the international environment, i.e. the pace of economic growth in the euro area and our other important trade partners, as well as developments in the international commodity and financial markets and, to an extent, agricultural performance at home and the pace of recovery in the energy sector.

The medium-term inflation projection aims to show expected inflation movements (CPI) in the coming period, the main factors behind such movements and the underlying risks. The projection is set out in the form of a range and the central projection. 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

Consistent with our expectations, in Q2 inflation began to gradually move towards the target. It touched 2.3% y-o-y in June. Unprocessed food and energy prices exceeded our expectations from the May *Inflation Report*. Still, inflationary pressures generated by most factors remain low. This is also confirmed by core inflation – at 0.8% y-o-y for four months in a row, this being its lowest level since measured by CPI. That inflationary pressures are low is also reflected in the inflation expectations of the financial and corporate sectors, anchored around the target midpoint of 3% both one- and two-year ahead, for quite some time already.

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

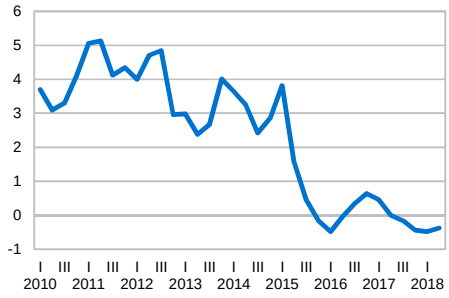


Source: NBS.

* 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.

Appreciation pressures in the domestic FX market prevailed in Q2 and July, reflecting more favourable balance of payments trends – continued vibrant exports

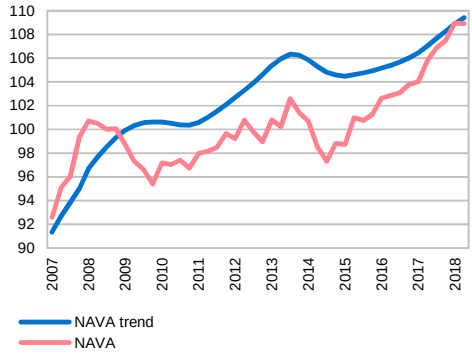
Chart V.0.2 **Real interest rate**
(in %)



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.

and a high FDI inflow. In terms of factors in the domestic FX market, the dinar appreciated primarily owing to high purchases of foreign cash, rising bank lending activity (FX-indexed bank assets)[31], and increased payment card payments by non-residents in Serbia. These inflows exceeded several times the FX demand of enterprises, as well as the demand of non-residents who – despite purchases in the primary market of government securities – were net FX buyers from banks as securities were falling due and were sold in the secondary market in Q2. End-of-period, in Q2 the dinar gained 0.3% against the euro. It however lost 5.4% against the dollar, reflecting the euro's weakening against the dollar.

The Monetary Conditions Index, showing a combined impact of the real interest rate gap and the real exchange rate gap, moved above the neutral level since mid-2017, mainly on account of the nominal appreciation of the dinar. Compared to Q1, the degree of monetary policy accommodation, measured by the deviation of the real interest rate from its neutral level, increased slightly. Despite continued monetary policy easing, the real interest rate in the interbank money market went up in Q2, on account of lower inflation expectations of the financial sector. At the same time, due to global factors, Q2 saw an increase in the country risk premium and thus the real interest rate trend.

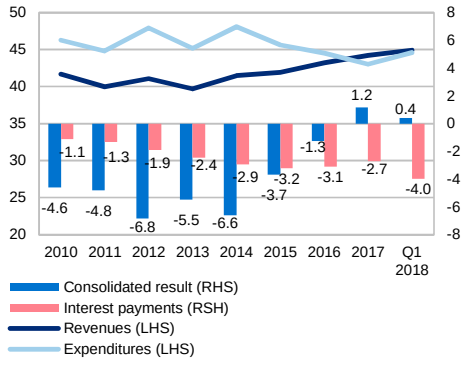
A vigorous pace of GDP growth was kept in Q2 (4.4% y-o-y according to the preliminary estimate of the Serbian Statistical Office), led mainly by domestic demand. Further investment growth was prompted by a favourable macroeconomic environment and growth outlook, continued infrastructure projects and favourable terms of borrowing which, along with further labour market recovery, sparked a rise in household consumption. A positive contribution to GDP growth also came from the continued rise in goods and services exports, while the contribution of net exports remained negative, though to a lesser extent than in Q1. Continued s-a GDP growth, recorded in eleven consecutive quarters, measuring 0.5% in Q2, according to our estimate, helped the economy approach its potential.

Positive fiscal trends continued – in April and May the consolidated budget continued to record a surplus, which stood at RSD 9.3 bn since early-year. Excluding interest expenses, since early-year the consolidated primary surplus was RSD 66.2 bn. In the first five months of 2018,

[31] Aiming to match their long open FX positions and thus reduce the exposure to FX risk, banks sell foreign currency, prompting dinar's appreciation.

consolidated revenue was by 3.2% y-o-y higher in real terms, on account of higher social contribute payments, owing to the recovery of the formal labour market, profit tax revenue, thanks to increased corporate profitability in 2017, and rising excise revenue. At the same time, consolidated expenditure was higher by 5.1% y-o-y in real terms. The rise was prompted mainly by much higher capital expenditure and higher employee expenses, while interest and activated guarantee expenses were reduced. At end-June, central government public debt was EUR 24.0 bn, accounting for 59.7% of projected GDP (vs. 61.5% at end-2017). As a result of increased issuance of dinar securities, the share of dinar public debt went up (from 23.0% at end-2017 to 24.9% in June). As the security worth USD 1 bn, issued in the international market in 2013, falls due in December, we expect that public debt will decline further by the year-end and that its share in GDP will go down by around 2 pp on these grounds only. In terms of currency risk, it is noteworthy that our exposure to the dollar will thus be reduced further. More favourable than expected fiscal trends since the start of the year suggest that the consolidated budget will post a better result than envisaged by the Fiscal Strategy, this year as well.

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



Source: Ministry of Finance.

Inflation projection assumptions

External assumptions

Global economic indicators still signal favourable conditions for economic growth, though the risks that it may be lower than expected are higher. Following vigorous growth in 2017, global trade slowed in the first months of this year, particularly trade in goods, whose physical volume declined in April for the first time since mid-2016.[32] The main underlying factors were rising trade barriers, somewhat slower growth of China, higher energy prices and elevated uncertainty as to economic policies going forward. However, the majority of relevant institutions kept their global growth projections unchanged, but underscored elevated risks in the last three months. In July, the IMF maintained its April projection for this and next year (3.9%), noting that growth is becoming uneven by country and that risks are more pronounced. Growth is more robust in the short-run in the USA, while growth projections for the majority of other advanced economies were revised down, due to deceleration of economic activity in early 2018.

[32] *Global Monthly*, World Bank, July 2018.

Table V.0.1 **Major projection assumptions**

	2018		2019		2020	
External assumption:	May	Aug.	May	Aug.	May	Aug.
Euro area GDP growth	2.4%	2.1%	1.9%	1.9%	1.7%	1.7%
Euro area inflation (annual average)	1.4%	1.7%	1.4%	1.7%	1.7%	1.7%
3M EURIBOR	-0.3%	-0.3%	-0.1%	-0.2%	0.4%	0.2%
International prices of primary agricult. commodities (Q4 to Q4)*	15.9%	11.3%	2.0%	6.0%	-1.1%	4.0%
Brent oil price per barrel (year-end, USD)	71	74	66	71	62	68
Internal assumptions						
Administered prices (Dec. to Dec.)	4.1%	4.0%	4.0%	4.0%	4.0%	4.0%
Trends						
Appreciation trend of the real exchange rate (average)	0.5%	0.4%	0.6%	0.5%	0.6%	0.6%
Real interest rate trend (average)	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%

Sources: NBS, ECB, BSE, CBOT.
* Composite index of soybean, wheat and corn prices.

According to our current projection, **growth outlook of the euro area, our most important trade partner**, is somewhat more unfavourable for 2018 than we assumed in our previous projection. We relied on the latest available ECB projection (June 2018), according to which the euro area growth rate for 2018 was revised down by 0.3 pp to 2.1%, while remaining unchanged in 2019 and 2020 compared to the previous projection (1.9% and 1.7%). As emphasised by the ECB, output growth will be above its potential in the coming period, remaining stable and broad-based in the medium-run. Growth will be further supported by favourable terms of financing and labour market trends, as well as stable growth in corporate revenue and profits. As in the previous projections, the ECB expects growth deceleration in 2019 and 2020 on account of the gradual waning of the effects of past monetary policy easing and supply-side factors such as high capacity usage and the lack of working force in some member states, etc. The risks to the projection are associated with potential further heightening of tensions in international trade and increased instability in the international financial market. It is encouraging that in late July the European Commission President and the US President made an agreement on cooperation to remove trade barriers between the EU and the USA. Due to weaker performance in early-year, the euro area growth projection for 2018 was revised down by both the IMF and Consensus Forecast, to 2.2% in July from 2.4% in April. Growth projections for 2019 were also revised down – to 1.9% (IMF) and 1.8% (Consensus Forecast), down by 0.1 pp from April.

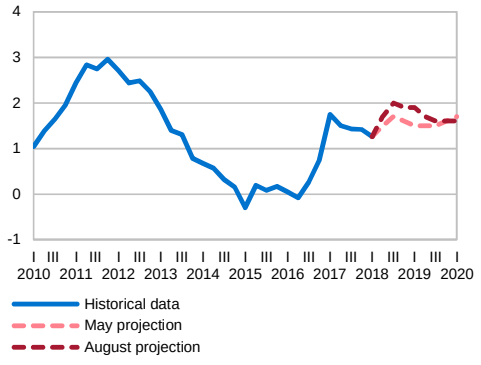
In terms of Serbia's **most important euro area trade partners**, the Consensus Forecast lowered the growth forecast for Germany to 2.0% for this and 1.7% for next year (from 2.4% and 1.9% three months ago). It is assessed that trade protectionism in the USA is a risk to the export-oriented German economy. In June, Bundesbank also revised down the GDP growth projection for 2018, to 2.0% (from 2.5%), due to developments in the international environment. It, however, increased the GDP growth projection for 2019 (from 1.7% to 1.9%), primarily due to the expected effects of expansionary fiscal policy measures. The Consensus Forecast also revised down Italy's growth projection for this and next year, to 1.2% and 1.1% (from 1.4% and 1.2% three months ago).

Expectations remain favourable in regard to the **growth of most countries in our region**, which are also our important trade partners. Due to growth deceleration in

Romania, the Consensus Forecast projection for 2018 was revised down for countries of South-Eastern Europe, from 4.0% in April to 3.6% in July, while remaining unchanged for 2019, at 3.4%. Growth in the majority of other countries is expected to accelerate, with investment and private consumption remaining its main drivers.

Global inflation was somewhat higher than in the prior period over rising global oil prices. However, the global oil price hike led to upward revisions of inflation projections in most countries, but only for this and next year, and not in the long run. In June, the ECB increased its **euro area inflation** projection for 2018 and 2019, by 0.3 pp each relative to the March projection. As it did not change the projection for 2020, inflation of 1.7% is now expected throughout the projection horizon. The ECB Survey of Professional Forecasters shows similar expectations – in July they were revised upward for 2018 and 2019 due to the oil price hike, while staying unchanged for 2020. Euro area inflation is expected to be stable at 1.7% in the next there years. In accordance with the ECB projection, our new projection assumes somewhat higher growth in euro area inflation than stated in the previous projection, but it will continue to be moderate and slightly below the level targeted by the ECB.

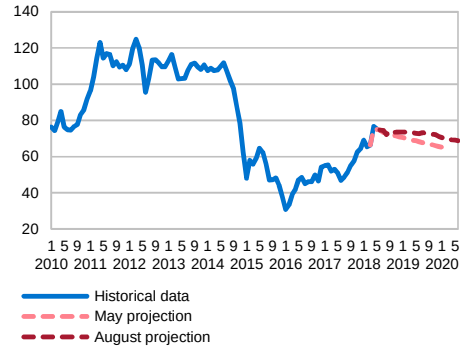
Chart V.0.5 **Assumption for euro area inflation**
(y-o-y growth, in %)



Sources: ECB.

Although inflation in countries of the region is somewhat higher than in the previous period, notably due to rising global oil prices, no significant inflationary pressures are expected. The Consensus Forecast increased its inflation forecast for countries of South-Eastern Europe for 2018 only, to 3.4%, from 3.2% in April, while keeping it unchanged for 2019 (2.9%).

Chart V.0.6 **Assumption for Brent oil prices**
(USD/barrel)



Sources: Bloomberg.

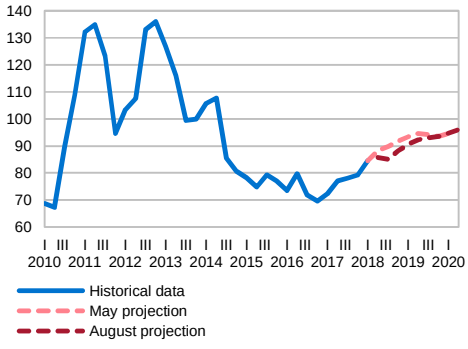
Conditions in the international financial market remain favourable. In the period from the previous projection, the divergence of monetary policies of leading central banks increased further and, in accordance with their announcements, such trend will be maintained until the end of the year – the ECB will continue to expand its balance sheet, while the Fed will contract it further, gradually raising its funds rate. The **ECB** announced in June and confirmed in July that it would implement the programme of monthly net asset purchases of EUR 30 bn until end-September, reducing it to EUR 15 bn thereafter and ending it by the year-end, subject to incoming data confirming the inflation outlook. After the programme is ended, the ECB will continue to reinvest the principal payments from maturing securities, i.e. it will not reduce its balance sheet "for an extended period of time". The "extended

period of time" is assessed by analysts to last from two to three years. The ECB also announced it would keep its key interest rates unchanged at least through the summer of 2019. Consistent with this, short-term rates on interbank loans are expected to remain negative for some time yet – according to end-July futures, which remained broadly unchanged compared to end-April, three-month EURIBOR should remain negative in 2018 and 2019 and move to positive territory in early 2020.

On the other hand, consistent with expectations, the **Fed** increased its target range for the federal funds rate in June, for the second time since the start of the year, to 1.75–2.0%. It also continued to reduce its balance sheet, while in June the reinvestment of the principal due was lowered by USD 30 bn, i.e. USD 40 bn a month starting from July. The Fed is expected to continue with monetary policy normalisation in the period ahead, in line with rising economic activity and inflation, as well as favourable labour market trends. However, unlike the Fed's March projection, when after the June increase another rate hike was expected until the end of this year, another two increases are expected according to the latest projections. Three rate hikes are likely to take place in 2019, to 3.1%, while according to March projections an increase to 2.9% was expected. Market participants still expect a slower rate increase than indicated by the Fed's projections.

Still, the greatest uncertainty in terms of future trends in the international environment relates to movements in **global primary commodity prices**. This primarily concerns the global oil price, on an upward path in the past year. Reaching USD 79 per barrel, the oil price increased by 11.2% on average in Q2 compared to Q1. Global oil prices were influenced by both demand- and supply-side factors, notably rising demand in the leading economies, turbulences in production over geopolitical tensions, and agreements on production between OPEC countries and Russia. In July and early August, the oil price fell to USD 72 per barrel, most notably due to the expected slowdown in global growth and uncertainties in global trade. Our new projection assumes, in accordance with oil futures from early August, that the global oil price will increase to USD 74 per barrel until the year-end, whereafter it will gradually decline, first to USD 71 per barrel until end-2019 and then to USD 68 per barrel until end-2020. Oil prices in 2019 and 2020 will decline probably on the back of shale oil extraction in the USA.

Chart V.0.7 **Assumption for international prices of primary agricultural commodities**
(Q4 2013 = 100)



Sources: BSE, CBOT and NBS calculation.

In terms of **other primary commodities**, a further rise in metal prices is expected in the global market, and after a recent fall, a further increase in primary agricultural commodity prices as well. However, due to great sensitivity of **global metal prices** to global trade tensions and the dollar exchange rate, they are likely to fall in the coming period. The fall is estimated to be temporary, i.e. led by further appreciation of the dollar (among primary commodities, metals are the most sensitive to its movements) and elevated trade tensions, which would reflect on the slowdown in global growth. Supply and demand conditions in the metals market are conducive to further price growth – demand is much higher than supply, while prices are still significantly below the peak recorded seven years ago.

Rising global trade tensions also impacted the prices of **global primary agricultural commodities**, on a downfall since June. However, once the focus shifted back to the main supply and demand factors, notably a bleaker production outlook in several key regions, the prices of primary agricultural commodities are on the rise again. According to the July Grain Market Report by the International Grains Council (IGC), due to unfavourable weather conditions in key regions, grain production at the global level is expected to be reduced to a three-year low. This is why another reduction in their inventories is envisaged, to the lowest level in the past four years. Wheat production is expected to decline significantly, while corn production is projected to rise, though largely depending on whether production in South America will recover in accordance with expectations. Based on futures on the Chicago mercantile exchange, our assumption of their growth for 2018 was lowered relative to the previous medium-term projection (to 11.3% from 15.9%), mainly due to falling global prices of primary agricultural commodities in June and early July. In regard to 2019, given that these prices are expected to return from the currently relatively low levels to a neutral level over bad weather conditions in key regions, somewhat higher growth was assumed (to 6.0% instead of 2%).

Internal assumptions

Primary agricultural commodity prices in the domestic market increased from March to May, but plummeted thereafter. At the quarter-end they were by 1% lower than at end-Q1, and by around 2% higher on average. These prices were mainly under the influence of

global commodity stock exchanges, which responded to global assessments of the new wheat yields and trade tensions between the USA and China. In Q2, compared to Q1, average corn and wheat prices were by around 4% and 3% higher, respectively, while the soybean price fell by 3%. Consistent with these movements, in Q2 food production costs were slightly above the neutral level. However, a decline in these prices in June and early July will probably lead to food production costs trending again below the neutral level in Q3. In the coming period, as so far, prices in the domestic market are largely expected to mirror the dynamics of global primary commodity prices and, after rising in the current year, will increase in 2019 and 2020 as well, though to a lesser extent, while food production costs will most probably remain below the neutral level until the end of this year.

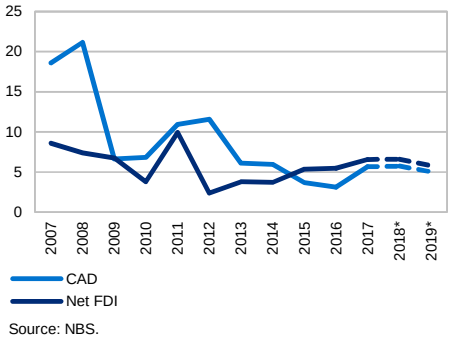
In line with the current projection, the **output gap**, negative since 2008, will probably be closed until end-2018. The negative output gap was opened in 2008, in response to the spill-over of the global financial crisis to Serbia. Still, it has displayed a closing tendency for more than two years already owing to labour market improvements, past monetary policy easing by the NBS and rising external demand. Until the end of the projection horizon, i.e. in Q2 2020, the output gap is likely to reach around 1.0%. We expect that demand will rise on account of the continued **positive labour market trends**, notably further growth in wages and employment.

The new projection also assumes that **administered price growth** in 2018 and next two years will equal around 4%. The strongest contribution this year is likely to come from the July adjustment of cigarette prices on account of higher excises, which, together with the February increase, will imply an 8.0% rise in cigarette prices in 2018. Exclusively for projection needs, we assumed that electricity prices will increase by around 4.0% this year, and that household gas prices will go up as well in Q4, driven by rising global oil prices in the prior period.

The projection assumes that **inflation expectations** will remain anchored around the target midpoint until the end of the projection horizon.

The Fiscal Strategy for 2018–2020 envisages that the **general government deficit** will stand at 0.7% of GDP this year and at 0.5% of GDP in the medium run. Such targeted medium-term level of the deficit would ensure a downward trajectory of public debt going forward, which would most probably positively affect the country risk premium and credit rating. Moreover, given positive

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



Source: NBS.
* NBS projection.

trends since the start of this year, it is almost certain that the consolidated budget will post a better result this year than planned by the Fiscal Strategy. Our current projection, for the sake of caution, assumes a balanced budget this year.

Exports are expected to maintain a high growth rate in 2018. They will be led by past investment and rising external demand. Imports of equipment and intermediate goods are also expected to rise owing to the continuation of the investment cycle. Taking this into account, the **share of the current account deficit** in GDP this year is estimated to stay at the level similar to last year's. Given that a stronger impact of the current investment cycle on export growth is expected in the years to come, the share of the current account deficit should gradually decline, to around 4–5% of GDP in the medium run. As so far, FDI will be more than sufficient to cover the current account deficit, contributing to relatively stable movements in the FX market in the period to come.

Given the expected maintenance of positive macroeconomic trends in the coming period, domestic factors are likely to have a positive impact on the **country risk premium** until the end of the projection horizon. This is reflected in movements in the risk premium in the year so far – it increased during Q2 less than in other countries of the region, owing to favourable macroeconomic indicators and outlook. On the other hand, global factors are more volatile, as it was the case during this year, which is why it is hard to assess their impact on Serbia's risk premium.

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

	2018	2019	2020
Public revenues	42.4	41.8	41.1
Tax revenues	37.3	37.0	36.6
Non-tax revenues	4.7	4.5	4.2
Public expenditures	43.1	42.3	41.6
Expenditures for employees	9.8	9.7	9.6
Pensions	11.1	11.0	11.0
Interests	2.5	2.3	2.1
Capital expenditures	3.6	3.7	3.7
Total balance	-0.7	-0.5	-0.5
Primary balance	1.9	1.8	1.6

Source: Ministry of Finance.

Projection

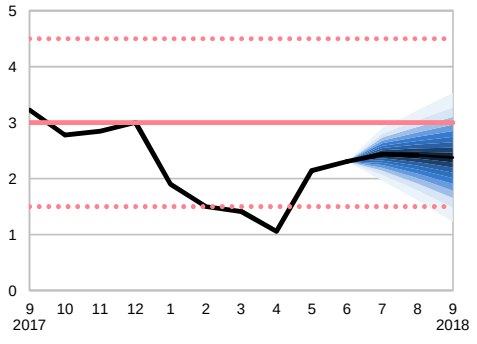
Inflation projection

Under our current projection, y-o-y inflation is expected to continue to move within the target tolerance band in the next two years – until end-2019 most probably below the target midpoint, getting temporarily closer to the midpoint in the first months of 2019 due to the low-base effect early this year.

Short-term inflation projection

In Q3 y-o-y inflation is expected to remain low and stable, getting closer to the June level in September. At the same time, we expect that core inflation (CPI change excluding the prices of food, energy, alcohol and cigarettes) will remain low, moving around 1.0% in Q3 as well.

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



Source: NBS.

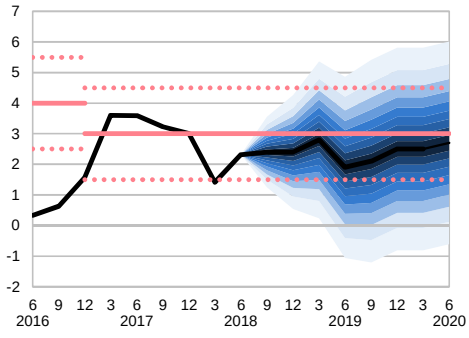
In **quarterly terms**, consumer prices are likely to decline moderately in Q3, reflecting the seasonally lower prices of fresh vegetables and travel packages. Working in the opposite direction will be the expected rise in meat prices and some administered price categories (cigarettes and utilities).

The risks to the current projection are associated primarily with the prices of unprocessed food, most notably fruit and vegetables, and developments in global commodity and financial markets.

Medium-term inflation projection

Starting from projection assumptions, we expect y-o-y inflation to continue to move within the target tolerance band in the next two years – until end-2019 most probably below the target midpoint, getting temporarily closer to the midpoint in the first months of 2019 due to the low-base effect early this year.

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%.

The main factors underlying such movement in inflation in the medium run are rising aggregate demand and gradual weakening of disinflationary pressures on account of past appreciation of the dinar. A short-term disinflationary effect will be produced by low food production costs, while administered prices will work in the opposite direction. In the course of next year, inflation will also be under the impact of the high base for fruit, vegetable and petroleum product prices.

Domestic **demand** is expected to continue to bounce back during the projection horizon, while disinflationary pressures on account of the negative output gap will weaken and wane altogether by the end of this year. As of 2019, we expect the output gap to be in positive territory. Such movement in the output gap will be supported by positive labour market trends and rising public sector wages and pensions, through the positive influence on household disposable income. Disposable income is expected to rise also on account of a lower level of interest rates and the resulting lower loan expenses, achieved with past monetary policy easing by the NBS. In addition, ECB monetary accommodation will positively affect economic growth in Serbia by encouraging external demand and through low interest rates on euro-indexed loans.

Past **appreciation of the dinar** produced a disinflationary effect through lower dinar-denominated import prices. In this regard, we expect disinflationary pressures for some

time yet, though they will diminish in time. However, given that we expect relative stability of the **dinar exchange rate**, while price growth in the euro area, our most important trade partner, will be moderate, the growth in dinar import prices is likely to remain relatively low until the end of the projection horizon.

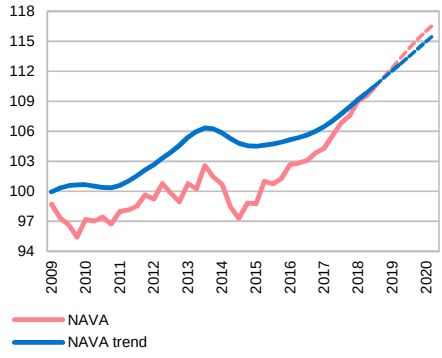
We estimate that **costs of raw materials in food production** are below the neutral level, where they will stay until the end of this year. From the previous medium-term projection, the prices of primary agricultural commodities are significantly lower both in Serbia and globally, dragging down on food production costs. Though the projection assumes, in accordance with futures, that the prices of these products will rise in the coming period, food production costs are likely to stay below the neutral level until the end of this year. Thereafter, we expect them to rise above the neutral level, in line with the assumed rise in prices of global primary agricultural commodities, which largely influence these prices in the domestic market.

Administered price growth in the year so far has stabilised at a relatively low, last year's level (2.9%). However, assuming that natural gas and electricity prices will be adjusted until the end of the year, we assumed, as in the previous projection, that administered prices will rise by around 4% this year, with their contribution to y-o-y inflation increasing by 0.2 pp until the end of the year. Administered prices are expected to grow at the same rate in the next two years.

The main disinflationary effect next year will be generated by the high base for prices of fruit, vegetables and petroleum products. In the past months, **fruit and vegetable prices** increased more than expected, thus arriving again above the neutral level. Therefore, the period to come is likely to see a drop in their contribution to inflation, with the possibility of it entering negative territory next year. Owing to the **global oil price** hike, petroleum product prices went up by around 8% in H1. Provided the oil price stabilises in accordance with projection assumptions, the contribution of petroleum product prices to inflation is likely to move around the current level until the end of this year (0.5 pp), and then to fall close to zero by mid-2019 once this year's price hike drops out of y-o-y calculation.

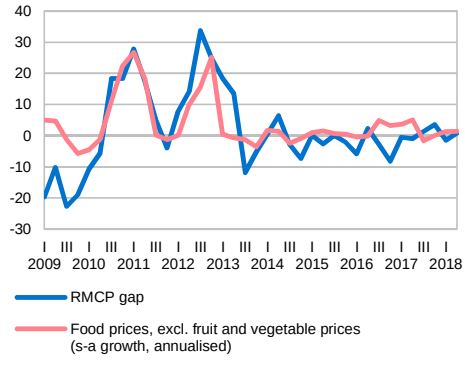
In terms of other inflation components, y-o-y growth in **food prices** (excluding fruit and vegetables) will be slower than expected. Until mid-2019 it will continue to

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



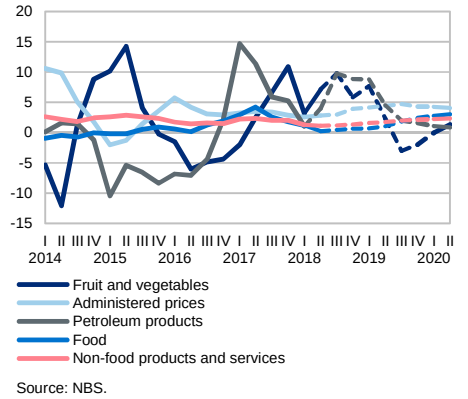
Sources: SORS and NBS calculation.

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



Source: NBS.

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



Source: NBS.

move at the current level (around 0.5% y-o-y) owing to low costs of raw materials in food production. Working in the opposite direction will be elevated domestic demand and the weakening of disinflationary pressures on account of past appreciation of the dinar, and the low base for fresh meat prices. Despite some growth recorded in the past several months, **non-food inflation** is still relatively low (1.3% y-o-y in June). We expect it to grow moderately in the coming period, prompted by rising aggregate demand and gradual waning of the effects of past appreciation of the dinar, though it should continue to move below 3% until the end of the projection horizon.

Uncertainty surrounding the inflation projection relates primarily to movements in the international commodity and financial markets and, to an extent, administered price growth.

In terms of the **international commodity market**, the prices of primary commodities in the coming period could be both lower and higher than assumed, due both to demand- and supply-side factors. In regard to demand-side factors, the risks to global economic growth are titled to the downside. The prevailing trade tensions could negatively affect global growth, and by extension, demand for primary commodities, notably **oil**. On the other hand, trade tensions may abate, in which case additional negative effects on global growth and demand for primary commodities will be absent. This is supported by the meeting between the European Commission President and the US President in late July, when they agreed to remove trade barriers between the EU and the USA. The supply-side factors, in the case of oil primarily concern possible problems in production because of geopolitical tensions and a potential agreement between OPEC and other major oil producers about greater and/or longer limitation of supply. On the other hand, looser implementation of the agreement and higher than expected growth in oil production in the USA could result in a falling global oil price. Uncertainty in the oil market is amplified further by numerous other supply-side factors (sanctions against Iran, instability in Venezuela, production challenges facing Libya etc.). Volatility in the global oil market, present in the prior period, will probably continue in the period ahead. Risks to the projection on these grounds are assessed to be symmetric.

Uncertainty on the supply side in regard to **primary agricultural commodity** prices concerns primarily the effects of weather conditions on production. They have already negatively impacted wheat on the northern hemisphere – notably heats in northern Europe and a combination of extreme rains and droughts in the Black Sea region. The forecasts for the leading European wheat producers (France, Germany, UK and Poland) are currently being revised down. In early August, the European Commission stated it would ease agricultural regulations and speed up payments to farmers, in order to mitigate negative financial effects of the drought. The concerns that global supply could plummet and trigger a crisis in the food market, as the one in 2007/2008, pushed up wheat price from mid-July. The price growth is also driven by a weaker production outlook in Australia, whose crops were also hit by a drought. On the other hand, some analysts believe that high inventories from last year's successful season and the substitution of consumption by other types of grains will largely offset this decline and limit the growth in wheat prices. In addition, in the past several years the prices of primary agricultural commodities in the global market increased a little, or even declined, while futures anticipated growth. The risks concerning movements in global primary agricultural commodity prices are assessed to be slightly asymmetric on the upside. Still, due to exceptionally unfavourable weather, the rise in global primary commodity prices may be somewhat higher than expected.

Risks to the projection are also associated with the developments in the **international financial market**, notably the monetary stance of the Fed and the ECB, and consequently conditions in the international financial market and the euro-dollar relationship. Due to uncertainties as to the economic outlook, the pace of normalisation of monetary policies of leading central banks could be slower than expected. Additional fiscal stimuli may be introduced as well, primarily in the euro area, in order to support growth. On the other hand, if the Fed and/or ECB were to accelerate the normalisation of their monetary policies more than the market expects, this might heighten the volatility in financial markets and negatively affect portfolio investment in emerging economies, including Serbia. Given the above, we believe that risks to the projection on these grounds are symmetric.

The projection operates on the assumption that **administered prices** will rise at a rate of around 4.0% this and next year. However, given that administered prices in the previous two years increased less than projected and that until the year-end the prices of electricity and gas may not be raised (while we assumed an increase in our projection), the risks to the projection in this respect are assessed to be slightly asymmetric on the downside.

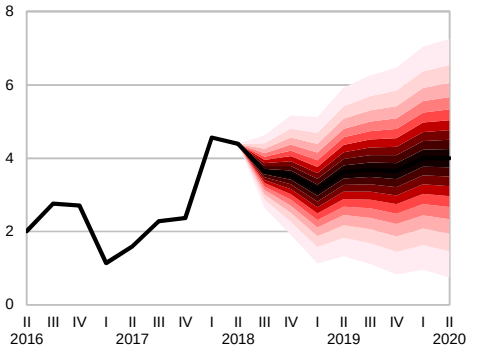
Taking all the above into consideration, the **risks to the inflation projection are assessed to be symmetric**.

Monetary policy decisions in the coming period will depend on the assessment of the impact of domestic and international factors on inflation movements in Serbia. As the key risks to the projection emanate from the international environment, the NBS will continue to closely monitor and analyse trends in the international financial market and the market of primary commodities, particularly crude oil and primary agricultural commodities, and to assess their impact on economic developments in Serbia. As so far, the NBS will use all available instruments to ensure that inflation remains low and stable in the medium run, which will, along with preservation of financial stability, contribute to sustainable economic growth and strengthening of resilience to external uncertainties.

GDP projection

The past efforts aimed at ensuring macroeconomic stability and a favourable business environment continued to positively influence economic growth which, from early 2018, accelerated above our expectations, to 4.5%. We revised our GDP growth projection for 2018 to around 4%, up by 0.5 pp from the May projection. The upward adjustment was prompted by faster than expected growth in construction and agriculture on the production side, and investment on the expenditure side (singled out as positive risks in the May projection as well). The GDP growth forecast for 2019 remained unchanged (3.5%), partly also due to the high base on account of faster growth in 2018. We expect that the continuation of reforms, envisaged by the new arrangement with the IMF as well, will ensure the basis for the GDP growth pace of around 4% to remain sustainable in the medium run as well.

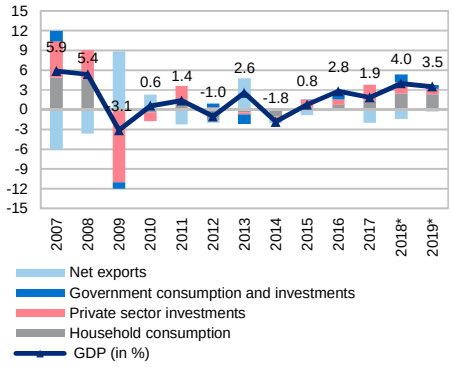
Chart V.0.14 **GDP growth projection**
(y-o-y rates, in %)



Source: NBS.

Domestic demand, i.e. investment and household consumption, should remain the main drivers of GDP growth in 2018. A favourable macroeconomic environment and growth outlook, continued intensive investment in infrastructure and favourable financing conditions should continue to positively affect fixed investment, which will, owing to vibrant growth, increase its share in GDP to 22% this year, and ensure preconditions for sustainable growth in the medium run. Besides, favourable terms of borrowing, along with a further rise in disposable income based on expected wage and employment growth, and gradual recovery of consumer confidence, will continue to positively affect a rise in household consumption.

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



Sources: SORS and NBS calculation.
* NBS estimate.

The positive effects of past investment[33] and further economic growth in the euro area and neighbouring countries should continue to positively influence the exports of goods and services in 2018 as well. Exports are expected to be led by manufacturing, which since early 2018 continued to attract the relatively highest portion of FDI inflows, and a further rise in exports of services and agricultural products. As a result of the new investment cycle and economic upturn, by all odds, the imports of equipment and intermediate goods will continue to rise as well, largely impacting overall imports of goods and services. In addition, owing to further recovery of household consumption, growth is also expected for imports of consumer goods, which is why the contribution of net exports to GDP movements in 2018 is likely to be negative.

Investment in manufacturing should ensure an increase in its export potentials, which would, along with the continued positive effects of external demand on account of further growth in the euro area and neighbouring countries, enable it to remain one of the drivers of economic growth in 2018, on the supply side. In addition to manufacturing, a positive contribution to GDP growth is expected from service sectors, which will be under a positive impact of a further rise in domestic demand, as well as from the construction sector, owing to the implementation of initiated and agreed infrastructure projects and the recovery of the real estate market. In the current year, GDP growth will be further encouraged by the recovery of agriculture, following last year's bad season.

Led by similar factors as in 2018, GDP growth should keep a similar pace in the medium run as well. On the expenditure side, investment and household consumption should remain the key drivers of growth, while the effects of investment in new export projects and continued growth in external demand should speed up exports and ensure a positive contribution of net exports to GDP. Investment and external demand will continue to support expansion in manufacturing, which should, together with service sectors (supported by further recovery of domestic demand) give the greatest contribution to GDP growth in 2019 on the supply side. In addition, a positive contribution to GDP growth is expected from continued positive tendencies in construction.

Risks to the GDP projection are assessed to be symmetric and concern primarily developments in the international environment, i.e. the pace of growth in the euro area and our other important trade partners, including

[33] See Text box 2, p. 32.

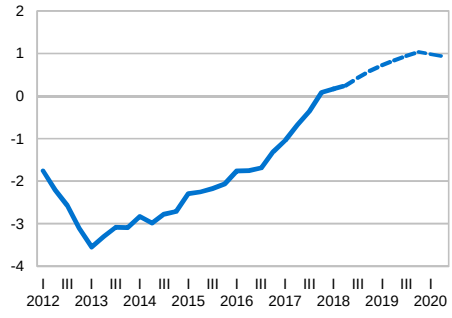
developments in the international commodity and financial markets. Risks arising from the domestic environment are also symmetric and are associated with the possibly faster or slower growth in agriculture compared to the projection assumption, and the pace of recovery in the energy sector.

Despite the slowdown since early 2018, the ECB expects euro area growth to remain stable and broad-based. Bearing this in mind, we expect external demand to remain a significant driver of our exports and GDP growth. Potentially faster growth in the euro area and our other important trade partners on account of faster global growth would additionally spur demand for our exports and push up our GDP growth. In contrast, if the pace of growth in the euro area and globally slows in the coming period, notably due to the potential increase in protectionism in international trade and geopolitical tensions, this could spill over to smaller external demand and slower GDP growth in Serbia.

The risks to the projection are also associated with movements of global primary commodity prices, notably the prices of oil, primary agricultural commodities and base metals. Serbia being a net oil importer, potential further growth in oil prices may affect a smaller disposable household income and higher corporate costs, and thus slow down economic growth to an extent. On the other hand, being a net exporter of grains and base metals, Serbia would benefit from a further rise in their prices in the global market.

In addition to the external demand channel, Serbia is exposed to factors that determine movements in the international financial market. A gradual reduction in Fed's monetary policy accommodation may impact higher volatility of capital flows and inter-currency

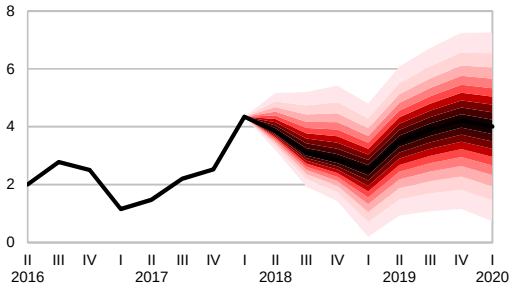
Chart V.0.16 **Assumption for euro area output gap**
(level)



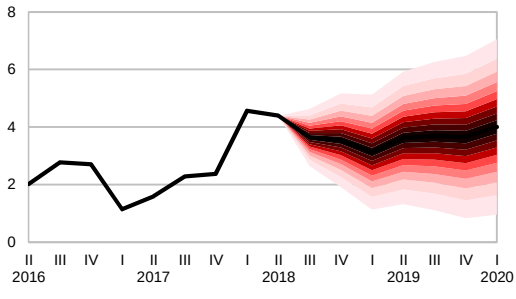
Sources: IMF and OECD calculation.

Chart V.0.17 **Current vs. previous GDP growth projection**

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



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



Source: NBS.

relationships. However, potential negative effects on these grounds are likely to be mitigated by the continued favourable monetary conditions in the euro area, given the ECB's announcement that, after ending the quantitative easing programme, it will continue to reinvest principal payments from maturing securities and will keep its key interest rates unchanged at least through the summer of 2019.

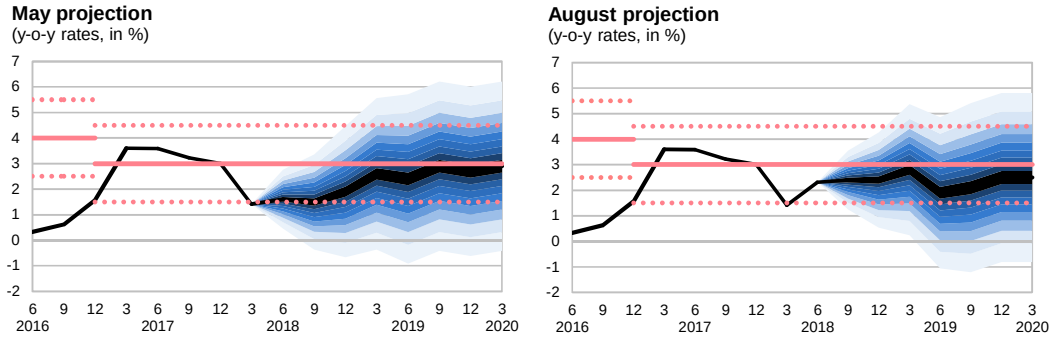
As the agricultural season is under a strong impact of weather conditions, which cannot be fully envisaged and which, until the end of the season, may affect the yields in the coming period, the deviations from the assumed agricultural growth of around 11% and the contribution to GDP growth (0.8 pp) are possible in both directions. Similarly, weather conditions may also affect the pace of further recovery of the energy sector and contribute, to an extent, to faster or slower GDP growth.

Comparison and outcome of inflation projections

Compared to the previous projection, the **new medium-term inflation projection is temporarily, until end-Q1 2019, at a somewhat higher level** due to higher consumer price growth in the period from the previous projection – notably energy and vegetable prices, which will remain factored in the y-o-y inflation rate over the next year. **Thereafter, until the end of the projection horizon, it will be at a lower level** due to the higher base for fruit and vegetable prices, lower food production costs and, to a lesser extent, continued appreciation of the dinar against the euro in Q2.

Contrary to a seasonable fall, vegetable prices increased in Q2. According to the current projection, we expect that their annual growth will be higher than assumed in the

Chart V.0.18 **Current vs. previous inflation projection**

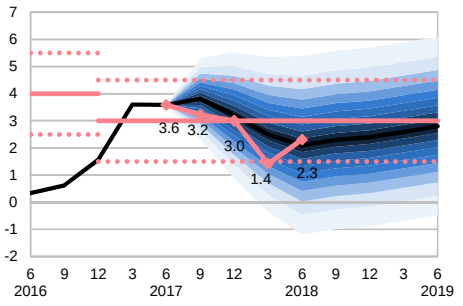


Source: NBS.

previous projection. Given the tendency of these prices going back to their neutral level, their sharper y-o-y fall is projected for H2 2019. The new projection assumes lower food production costs, due to falling primary agricultural commodity prices in the period from the previous projection, which is why food prices are at a lower level in the major part of the projection. Working towards a lower inflation projection is the appreciation of the dinar in Q2. It reflects primarily on the lower level of non-food inflation compared to the previous projection. Conversely, petroleum product prices are rising somewhat faster in the new projection due to higher growth in the period from the previous projection due to the rising global oil price and the assumption that their fall in the coming period will be slower than indicated by futures in the May projection.

In the past year, inflation moved within the projected band from the August 2017 *Inflation Report*, but mainly below the central projection, notably in Q1 2018. This reflects mainly lower dinar import prices and low food production costs. In June 2018, inflation came close to the central August 2017 projection, i.e. the actual consumer price growth was consistent with our expectations one year ago.

Chart V.0.19 **Achievement of August 2017 inflation projection**
(y-o-y rates, in %)



Source: NBS.

Projections of other institutions

The period from the previous Report is marked by improved projections of the key macroeconomic indicators for Serbia issued by relevant international institutions.

The IMF lowered significantly its inflation projection for this and next year, to 1.6% and 2.6% (vs. 2.7% and 3.0% three months ago). The IMF also improved the fiscal projection for 2018 – instead of a 0.3% deficit, it envisages a 0.6% surplus. Starting from 2019, the IMF projects that Serbia will achieve the target deficit of 0.5%, which will result in a reduction in the public debt share to 50% of GDP until 2021, while at the same time enabling higher capital expenditure in accordance with infrastructure needs.

According to the Bloomberg survey, Serbia's GDP growth in 2018 will be higher (3.5% instead of 3.0%) and the fiscal result balanced, in contrast to the earlier expected deficit. Expectations about the budget deficit were reduced for 2019 as well – to 0.3% vs. 0.5% in the previous survey. The Consensus Forecast also reduced its inflation projection for this and next year (2.1% and 2.9%, vs. 2.5% and 3.4%) and increased the GDP growth projection for 2018 (to 3.4% from 3.0%).

Table V.0.3 **Projections of key macroeconomic indicators for Serbia**

	2018		2019		2020	
	Previous	New	Previous	New	Previous	New
Inflation (annual average, in %)						
IMF	2.7	1.6	3.0	2.6	3.0	3.0
World Bank	3.0	-	3.0	-	3.0	-
European Commission	1.7	-	2.7	-	-	-
Consensus Forecast	2.5	2.1	3.4	2.9	-	-
Bloomberg	2.3	2.3	3.0	3.0	3.2	3.2
GDP (%)						
IMF	3.5	3.5	3.5	3.5	4.0	4.0
World Bank	3.0	-	3.5	-	4.0	-
European Commission	3.3	-	3.5	-	-	-
Consensus Forecast	3.0	3.4	3.2	3.2	-	-
Bloomberg	3.0	3.5	3.3	3.3	3.5	3.5
Fiscal result (% of GDP)						
IMF	-0,3	0.6	-0.2	-0.5	-0.4	-0.5
World Bank	-0,6	-	-0.5	-	-0.5	-
European Commission	0.6	-	0.5	-	-	-
Consensus Forecast	-	-	-	-	-	-
Bloomberg	-0.5	0.0	-0.5	-0.3	-0.5	-0.5

Sources: IMF (WEO April 2018 and Country Report, July 2018), World Bank (RER, March 2018), European Commission (Spring Forecast 2018), Consensus Forecast (April and July 2018) and Bloomberg Quarterly Survey (April and July 2018).

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Q1 2018	Q2 2018
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	6.7	6.2	5.3	5.3	5.6[2]
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.8	237.3	268.6	294.0	256.4	238.2	223.7	243.6	
FX reserves /GDP	23.3	36.9	32.7	24.2	34.6	33.6	36.1	34.5	32.7	29.7	31.0	29.5	27.1	27.1	28.7
Debt repayment/GDP	5.0	10.3	10.3	10.7	12.8	12.0	12.4	13.0	13.4	14.2	11.8	13.0	11.6	10.0	
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	25.2	25.9	22.2	18.2	
EXTERNAL SOLVENCY INDICATORS (in %)															
External debt/GDP	59.3	58.5	59.0	62.3	72.7	79.0	72.2	80.9	74.8	77.1	78.3	76.5	69.7	67.5	
Short-term debt/GDP	13.2	13.9	13.1	14.9	15.7	17.6	12.0	14.5	12.2	10.1	12.1	12.4	12.1	11.1	
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	166.8	152.4	132.6	128.5	
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	176.2	191.4	195.8
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	185.0	202.1	209.4
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	102.6	106.8	113.3	120.0	117.9[2]
MEMORANDUM: (in EUR million)															
GDP[1]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	33,491	34,617	36,795	8,839	9,828[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	26,494	25,630	25,445	
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,728	3,960	4,508	4,285	884	
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	9,962	10,235	11,104
Short-term debt[3]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	676	888	852	
Current account balance	-1,779	-2,355	-5,474	-7,126	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,090	-636	-366[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	2017 Dec	
S&P	BB- /stable	BB- /positive	BB- /stable	BB- /negative	BB- /stable		BB /stable	BB- /negative				BB- /positive		BB /stable	
Fitch	BB- /stable			BB- /negative		BB- /stable		BB- /negative		B+ /stable	B+ /positive	BB-/stable		BB /stable	
Moody's									B1 /stable			B1 /positive	Ba3 /stable		

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) – ratio of end-of-period foreign exchange reserves to average monthly imports of goods and services during period under review.
Foreign exchange reserves/short-term debt (in %) – ratio of foreign exchange reserves to stock of short-term debt at remaining maturity at end-of-period.
Foreign exchange reserves/GDP (in %) – ratio of end-of-period foreign exchange reserves to GDP.
Debt repayment/GDP (in %) – ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to GDP during period under review.
Debt repayment/exports (in %) – ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to exports of goods and services during period under review.
External debt/GDP (in %) – ratio of end-of-period outstanding debt to GDP.
Short-term debt/GDP c ratio of end-of-period short-term debt at remaining maturity to GDP.
External debt/exports (in %) – ratio of end-of-period outstanding debt to annual value of exports of goods and services.
Foreign exchange reserves/M1(in %) – ratio of foreign exchange reserves to money supply at end-of-period.
(Exports +imports)/GDP (in %) – ratio of value of exports and imports of goods and services to GDP during period under review.

[1] According to ESA 2010.

[2] NBS estimate.

[3] At original maturity.

Notes:

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

2. Starting from 2007 data on balance of payments (exports and imports of goods and services) are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to previous methodology.

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

4. In September 2010, the methodology of external debt statistics was changed – public sector external debt now includes liabilities under SDR allocation (EUR 461.6 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 934.8 million, of which EUR 402.0 million relating to domestic banks and EUR 532.8 million to domestic enterprises).

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

Table B
Key Macroeconomic Indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Q1 2018	Q2 2018
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	1.9	4.6	4.4
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	3.0	1.4	2.3
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	9,962	10,235	11,104
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	15,728	17,385	19,330	4,850	5,347[6]
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.8	10.5	11.2	10.7	8.4[6]
Imports (in EUR million)[3]	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,643	19,597	22,365	5,757	6,240[6]
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	3.0	5.1	14.1	13.1	10.4[6]
Current account balance[3]															
(in EUR million)	-1,779	-2,355	-5,474	-7,126	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,090	-636	-366[6]
as % of GDP	-8.4	-9.6	-18.6	-21.2	-6.6	-6.8	-10.9	-11.6	-6.1	-6.0	-3.7	-3.1	-5.7	-7.2	-3.7[6]
Unemployment according to the Survey (in %)[7]	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	13.5	14.8	
Wages (average for the period, in EUR)[8]	210.4	257.8	347.1	402.0	337.8	331.8	372.5	366.1	388.5	379.8	367.9	374.5	383.9	414.5	420.9
RS budget deficit / surplus (in % of GDP)[4]	0.5	-1.7	-1.6	-1.7	-3.2	-3.4	-4.0	-5.9	-5.2	-6.3	-2.8	-0.2	0.8	0.6	
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	0.4	
RS public debt, (central government, in % of GDP)	50.2	35.9	29.9	28.3	32.8	41.8	45.4	56.2	59.6	70.4	74.7	71.9	61.5	59.0	59.7
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	107.50	96.34	99.22
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	99.12	96.08	101.34
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	121.34	118.43	118.17
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	118.47	118.39	118.07
MEMORANDUM:															
GDP (in EUR million)[5]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	33,491	34,617	36,795	8,839	9,828[6]

[1] At constant prices of previous year.

[2] Retail prices until 2006.

[3] Starting from 2007 data on balance of payments (current account, exports and imports of goods and services) are shown in accordance with BPM 6. Data for 2005 and 2006 are shown according to BPM 5. Due to the break in the series for 2007, exports and imports growth rates are not shown. As of 1 January 2010, the Serbian Statistical Office applies the general trade system of registration of exports and imports which is a broader concept and includes all goods entering/exiting country's economic territory, apart from goods in transit. The Statistical Office has published comparable data for 2007, 2008 and 2009. Previous years are disseminated using the special trade system. Trade with Montenegro is registered within relevant transactions as of 2003.

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

[5] According to ESA 2010.

[6] NBS estimate.

[7] New methodology of Labour Force Survey since 2014.

[8] Until 2017, wages were shown according to the old methodology. Since 2017, wages are published according to the new methodology and data are based on Tax Administration evidence. Wages for the second quarter of 2018 are average of two available months. The average RSD/EUR exchange rate in the period under review is used for conversion of wages from dinars to euros.

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

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Executive Board meetings and changes in the key policy rate

2017

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

2018

Date	Key policy rate (p.a, in %)	Change (in basis points)
11 January	3.50	0
8 February	3.50	0
8 March	3.25	-25
12 April	3.00	-25
10 May	3.00	0
7 June	3.00	0
12 July	3.00	0
9 August	3.00	0
6 September		
8 October		
8 November		
6 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 7 June 2018

At today's meeting, the NBS Executive Board voted to keep the key policy rate on hold, at 3.0%.

In making such a decision, the Executive Board was primarily guided by the expected movement in inflation and its underlying factors going forward, and the effects of past monetary policy easing. After touching this year's low of 1.1 % y-o-y in April, inflation is expected to gradually move towards the target, while staying closer to its lower bound by end-2018. Its approach to target midpoint of 3% is anticipated in the second half of 2019, primarily on account of an expected rise in demand. One-year ahead inflation expectations of both financial and corporate sectors are below the target midpoint (2.5% and 2.7%, respectively). Two-year ahead inflation expectations of the financial sector and the NBS are at the target midpoint of 3.0%, while corporates put inflation close to this point (2.8%).

The NBS Executive Board recognised that 2018 has seen acceleration in lending and economic growth. It was assessed that growth has been driven mainly by investment, which will continue to support diversified growth of export-oriented sectors of the economy going forward.

In view of the uncertainties in the international commodity market, primarily the movement of oil prices which posted a significant increase since mid-last year, the Board mandated further caution in the conduct of monetary policy. However, according to futures and assessments of relevant international institutions, global oil prices are not likely to rise further, but will instead stabilise by the end of the year and decline in the course of 2019. Uncertainties also concern the volatile movement in global prices of agricultural commodities and the impact of weather on domestic production and fruit and vegetable prices. In addition, inflation in the euro area, our most important trade partner, increased to 1.9% in May. However, the rise in euro area inflation is assessed to be temporary, reflecting higher energy prices. Its more durable return to the target is expected in the years to come. Caution is still needed because of the diverging policies of the Federal Reserve System and the European Central Bank, and uncertainty in terms of the pace of their normalisation going forward. Uncertainties in international markets are also fuelled by geopolitical tensions. Nevertheless, the Executive Board points out that the resilience of our economy to potential negative effects from the international environment has increased, owing to improved macroeconomic trends and a more favourable outlook for the period ahead.

The next rate-setting meeting will be held on 12 July 2018.

Press release from Executive Board meeting held on 12 July 2018

At its meeting today the NBS Executive Board voted to keep the key policy rate unchanged at 3.0%.

The Executive Board's decision is based primarily on the outlook for inflation and its underlying factors, as well as on the effects of monetary policy easing thus far. After touching this year's low in April, inflation has been moving steadily towards the target, measuring 2.3% in June, consistent with expectations. Inflation is expected to move within the target band until the end of the projection period, i.e. over the next two years. This expectation is supported also by the movements in core inflation which has been running at the minimum level of around 0.8% y-o-y for the past four months. In addition, both one-year and two-year ahead inflation expectations of the financial and corporate sectors remain low and anchored around the 3% target.

The Executive Board stated that economic growth is accelerating, with a high share of investment that will continue to support diversified growth of export-oriented industries going forward. Investment growth is aided by favourable financing conditions and the increase in lending, as well as by the FDI inflow which is more than sufficient to cover the current account deficit and to contribute to its reduction in the medium term.

The Executive Board believes that caution in the conduct of monetary policy is still needed, primarily due to uncertainties in the international commodity and financial markets. Global oil prices remain volatile though they are expected to stabilise until end-2018, judging by futures, and trend to a somewhat lower level until end-2019. The current oil price hike is expected to push up inflation in the international environment. The monetary policies of leading central banks, the Federal Reserve System and the European Central Bank, are expected to be normalised further, which could negatively affect capital flows towards emerging markets. In addition to geopolitical tensions, uncertainties pertain to

the strengthening of trade tensions and potential effects on global economic growth and volatility in commodity and financial markets. Still, the Executive Board underscores that the resilience of our economy to potential negative effects from the international environment has increased owing to favourable macroeconomic indicators and prospects for the coming period.

The next rate-setting meeting of the Executive Board will be held on 9 August 2018.

Press release from Executive Board meeting held on 9 August 2018

At today's meeting, the NBS Executive Board voted to keep the key policy rate on hold, at 3.0%.

In making such a decision, the Executive Board was primarily guided by the expected movement in inflation and its underlying factors going forward, and the effects of past monetary policy easing. After reaching this year's low in April, inflation returned within the target tolerance band and measured 2.3% y-o-y in June, consistent with expectations. According to the August central projection as well, y-o-y inflation is expected to continue to move within the target tolerance band in the next two years. By the end of 2019, inflation will most probably be below the target midpoint, while gradually approaching the midpoint in the first months of 2019 owing to the low-base effect early this year. The inflation expectations of financial and corporate sectors remain low and anchored around the 3% target both one- and two-year ahead.

As assessed by the Executive Board, the effects of past monetary policy easing contribute to accelerating economic growth, which measured 4.5% y-o-y in the first half of 2018, according to the preliminary estimate of the Serbian Statistical Office. Investment is a strong contributor to economic growth and will ensure continued broad-based growth in export-oriented sectors. Investment growth is underpinned by favourable financing conditions and rising lending activity, as well as by FDI inflows which more than fully cover the current account deficit and help in its reduction in the medium run.

The Executive Board believes that caution in the pursuit of monetary policy is still needed, primarily in view of uncertainty in the international commodity and financial markets. Movements in global oil prices are still volatile, although based on the futures they are expected to stabilise by the end of 2018 and decline somewhat by late 2019. In view of the current hike in oil prices, inflation in the international environment is expected to rise slightly. Also, leading central banks, the Fed and the ECB, are expected to continue with monetary policy normalisation, which could have an adverse effect on capital flows to emerging economies. In addition, there is also uncertainty with regard to geopolitical and trade tensions and the possible effects on global growth and volatility in commodity and financial markets. Nevertheless, the Executive Board points out that the resilience of our economy to potential negative effects from the international environment has increased, owing to improved macroeconomic indicators and a more favourable outlook for the period ahead.

At today's meeting, the NBS Executive Board adopted the August Inflation Report, which will be presented to the public on 15 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 6 September 2018.

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