

# ANNUAL MONETARY POLICY REPORT



National Bank of Serbia

# 2018



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2018

**NATIONAL BANK OF SERBIA**

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## Introductory note

The National Bank of Serbia is required to submit to the Parliament its annual and semi-annual monetary policy reports, explaining all the factors that affected the implementation of monetary policy in the period under review. The annual report must be submitted by 30 June of the following year and the semi-annual by 30 September of the year under review.<sup>1</sup>

Pursuant to the Statute of the National Bank of Serbia<sup>2</sup>, the above reports must present and analyse the monetary policy strategy, macroeconomic developments (international environment, balance of payments, the country's international investment position, movements in monetary aggregates, prices, wages and employment, and other macroeconomic movements), monetary policy defined and monetary policy implemented (defined vs. achieved monetary policy objectives, monetary policy instruments and measures applied, and other monetary policy-related issues), as well as outline the monetary policy planned.

The *Annual Monetary Policy Report 2018* was adopted by the NBS Executive Board at its meeting of 6 June 2019.

Monetary policy reports 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

Željko Jović, Vice Governor

Ana Ivković, Vice Governor

Dragana Stanić, Vice Governor

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<sup>1</sup> Law on the National Bank of Serbia, (RS Official Gazette, Nos 72/2003, 55/2004, 85/2005 – other law, 44/2010, 76/2012, 106/2012, 14/2015 – CC decision and 44/2018.

<sup>2</sup> RS Official Gazette, Nos 12/2013, 18/2015 and 72/2015.

## **ABBREVIATIONS**

**bn** – billion  
**bp** – basis point  
**CEFTA** – Central European Free Trade Agreement  
**CPI** – Consumer Price Index  
**ECB** – European Central Bank  
**EMBI** – Emerging Markets Bond Index  
**FAO** – 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  
**mn** – million  
**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  
**s-a** – seasonally-adjusted  
**y-o-y** – year-on-year

Other generally accepted abbreviations are not cited

# Contents

<b>Overview</b>	<b>1</b>
<b>I Strategic monetary policy framework</b>	<b>5</b>
<b>II Monetary policy and achievement of the inflation target</b>	<b>7</b>
1 Monetary policy in 2018	7
2 Monetary policy instruments	9
Open market operations	9
Deposit and lending facilities	10
Required reserves	10
Foreign exchange market operations	11
FX swap auctions of the National Bank of Serbia	11
Other interest rates	11
3 Achievement of inflation target in 2018	12
<b>III Macroeconomic environment</b>	<b>15</b>
1 International environment	15
Economic activity and inflation	15
Monetary policy	17
Financial and commodity markets	18
2 International transactions	19
Balance of payments trends and FX reserves	19
International investment position	22
3 Financial market trends	23
Interest rates	23
Country risk premium	25
Trends in the FX market and exchange rate	26
Stock exchange trends	27
4 Money and loans	28
Monetary aggregates M1, M2 and M3	28
Bank loans	29
5 Dinarisation	31
6 Inflation expectations	33
7 Fiscal trends	34
8 Aggregate demand	36
Domestic demand	36
Net external demand	36
9 Economic activity	37
10 Wages and employment	39
Appendix 1 Monetary Policy Programme of the National Bank of Serbia in 2018	44
List of charts and tables	45





## Overview

Monetary policy easing continued at a cautious pace into 2018. The key policy rate was lowered in March and April, by 25 basis points each – to 3.0%. In this way, from May 2013, when the cycle of monetary policy easing began, until end-2018 the key policy rate was cut by a total of 875 basis points. The room for further monetary policy easing and additional support to lending and economic growth was created by low inflationary pressures on account of most factors from the domestic environment, while developments in the international environment warranted caution.

International developments were characterised by downward revisions of global economic growth forecasts for 2018 and the following two years. Those revisions were largely motivated by the rising protectionism and tightening of geopolitical tensions. Economic growth of the euro area, our most important trade partner, slowed to 1.8% in 2018, as opposed to 2.2–2.3% expected at the start of that year. The slackening was mainly the result of the slower growth of external demand and the impact of specific factors in some euro area members. It was Germany and Italy, our most important trade partners if individual countries are observed, that put a drag on growth. On the other hand, economic growth in regions of Central and East Europe remained relatively high, primarily owing to the pick-up in domestic demand. Caution in the conduct of monetary policy was mandated by uncertainty surrounding global oil prices which, with some oscillations, rose from the beginning of 2018 all the way until October, only to plunge thereafter when it became quite clear that global growth would be weaker than expected. Changeable dynamics of global oil prices also increased volatility of inflation in the international environment and caused it to change its profile, comparing the first and second half of the year. An important factor from the international

environment which compelled the NBS to conduct prudent monetary policy was the uncertainty as to the pace of normalisation of monetary policies of leading central banks, the Fed and ECB. The possibility for the rising protectionism to cause sudden shifts in the capital flows towards emerging markets, including Serbia, also called for a watchful stance. However, the Executive Board was aware that, owing to strengthened domestic macroeconomic fundamentals and improved prospects, Serbia is today more resilient to potentially adverse effects from the international environment. This is attested also by the improvement in the country's outlook to "positive" from "stable" by Standard & Poor's, which attributed the revision mainly to robust economic growth and NBS's results in preserving price and financial stability.

In 2018, inflation moved at a lower level than in 2017. Save for two months (March and April), when the base effect pushed it temporarily below the lower bound of the target tolerance band, for the rest of the year inflation moved within the target band ( $3 \pm 1.5\%$ ). It measured 2% in December and this was also its annual average. Two thirds of contributions to inflation came from prices of food, cigarettes and petroleum products, which shows that inflationary pressures on the demand side remained low in 2018, despite strong economic growth and favourable trends in the labour market. Subdued inflationary pressures were also confirmed by inflation expectations of the financial and corporate sectors which were anchored within the NBS target tolerance band.

NBS's monetary policy easing, which considerably reduced the cost of dinar borrowing, coupled with the falling risk premium and stronger interbank competition, as well as persistently low interest rates in the euro area,

led to a further growth in disposable income and private sector investments. Hand in hand with the positive trends in the labour market, these developments continued to support lending, which ended the year with a y-o-y growth rate of 9.9%, as both household and corporate loans posted a relatively high increase.

According to the Statistical Office data, real GDP growth in 2018 measured 4.3% (calculated as the sum of quarterly figures), which is the highest growth in the last ten years. The greatest impetus came from the above-average output in agriculture and construction, as well as from the expansion in the majority of service sectors. Another positive contribution came from the rising industrial production, despite the slowdown in external demand in the second half of the year. On the expenditure side, GDP growth was led by domestic demand. Investment increased on the back of the preserved macroeconomic stability, continued improvement of the business environment (as evidenced by Serbia's progress on the World Economic Forum global competitiveness list to the 65<sup>th</sup> position out of 140 countries), implementation of infrastructure projects and low costs of financing. Concurrently, favourable labour market trends continued to impact positively on the recovery of household consumption. Exports extended their high and dispersed growth. However, due to a faster rise in imports, primarily of equipment and intermediate goods for industrial purposes, which is linked with the investment cycle, the contribution of net exports to GDP was negative.

Despite the production- and investment-driven import growth and the rise in global oil price, the current account deficit-to-GDP-ratio in 2018 remained unchanged from 2017 – at 5.2%. Relative to 2017, more favourable movements were seen in trade in services and secondary income account, which posted higher surpluses, as well as in the primary income account, whose deficit narrowed, and this is what largely compensated for the higher trade in goods deficit. Compared to 2017, the financial account also saw more favourable trends, mainly in terms of FDI whose net inflow measured EUR 3.2 bn, as a result of the improved business environment. This ensured more than full coverage of the current account deficit (143.4%) for the fourth consecutive year. Since FDI also boosts export capacities of the Serbian economy, it will help narrow the current account deficit in the medium term. These movements at the annual level pushed the FX reserves up by EUR 1.1 bn (according to the balance of payments methodology), underscoring the economy's increased

resilience to external shocks. Thanks to the high inflow of FDI as the most desirable source of funding, net FDI exceeded 80% of Serbia's net international investment position, which also increases the country's resilience to external shocks.

Serbia's FX reserves remained at an adequate level, safeguarding the country from external risks. At end-2018 they stood at EUR 11.3 bn, covering more than five months of goods and services imports and 281.4% of external debt falling due in the following year.

Fiscal overperformance extended into 2018 and public finance recorded a surplus for the second year in a row. Instead of the planned deficit of 0.7% of GDP, the consolidated budget recorded a surplus of 0.6% of GDP (or RSD 32.2 bn). The continuation of positive fiscal trends was to a large extent due to the vibrant economic activity and positive trends in the labour market, which resulted in better than expected public revenue performance. A significant growth in government capital expenditures, as well as the rise in public sector wages and pensions boosted investment and consumption, while not causing any major inflationary pressures. The favourable fiscal result and the maturing of the eurobond issued in 2013 in the amount of USD 1 bn drove the public debt of central government further down, extending the downward trajectory of public debt-to-GDP ratio – to 53.8% at year-end. The government's decision to rely more on domestic borrowing in dinars also helped mitigate the currency risk. These results show that past fiscal consolidation measures fully achieved the desired effects, ensuring public finance sustainability.

The NBS remained committed to NPL resolution and prevention. Prior measures and activities helped reduce the level of NPLs at year-end by around 70% compared to the period immediately before the adoption of the NPL Resolution Strategy. Aided by the effects of macroeconomic stability and the rise in lending, these measures pushed the NPL ratio down to 5.7%, i.e. the lowest level since this indicator of bank portfolio quality was introduced.

In 2018 the NBS continued implementing activities and measures aimed at promoting the use of the dinar in the Serbian financial system. These measures, along with the results achieved in the field of macroeconomic stability, mainly through ensured and preserved price stability and relative stability of the exchange rate, contributed to a further rise in the degree of deposit

dinarisation (to 32.2%), while loan dinarisation remained unchanged (33%). Bearing in mind that macroeconomic stability had been ensured and financial stability reinforced since the signing of the 2012 Memorandum, in December 2018 the NBS and the Serbian Government signed the new Memorandum on the Dinarisation Strategy, confirming their commitment to additionally support dinarisation and contribute to financial stability. The new Memorandum takes stock of

the results of past measures and activities and, based on them, defines additional measures and activities so as to encourage further dinarisation and mitigate foreign currency risk in the system.

Keeping inflation low and stable in the medium run and preserving financial stability remain the main tasks of the NBS, their fulfilment being the best way for a central bank to contribute to the country's economic prosperity.



# I Strategic monetary policy framework

The NBS has been implementing a **fully-fledged inflation targeting** regime since 2009, with elements of the regime gradually introduced into practice since 2006. In December 2008, the NBS Monetary Policy Committee<sup>1</sup> adopted the Memorandum on Inflation Targeting as a Monetary Strategy, defining formal implementation of the inflation targeting regime from 1 January 2009. The Memorandum was drafted in accordance with the Agreement on Inflation Targeting between the NBS and the Government of the Republic of Serbia, adopted at the Government session of 19 December 2008. In the best collective judgment of the NBS and the Government, this was the most appropriate monetary policy regime under the circumstances prevailing at the time.

The inflation targeting regime is pursued by a significant number of central banks worldwide as a pragmatic response to the deficiencies of other monetary policy regimes. The choice of the regime was strengthened by the awareness that high inflation rates dampen economic growth and employment and that the monetary policy focus should therefore be shifted from short-term demand management to medium-term price stability which lies at the core of inflation targeting. The inflation targeting regime is a framework rather than a set of rigid monetary policy rules. It is based on a numerical target for inflation in the medium term and a discretionary right to respond to economic shocks in the short term.

**The NBS inflation target is defined in terms of the headline inflation rate (with a tolerance band) measured as the annual percentage change in the Consumer Price Index (CPI).** The target is determined

as a point value with a tolerance band. **For 2018 the target was set at 3%±1.5 pp.**

In order to define the framework for medium-term monetary policy decision-making and to anchor and stabilise inflation expectations, the decision on the level of the inflation target is always made for the period ahead. In the case of Serbia, this decision is made for three years ahead and this will remain so until the process of nominal, real and structural convergence to the EU is completed. As the process is ongoing, the inflation target is slightly above the level of the quantitative definition of price stability and the level of the inflation target in advanced economies (2.0% or 2.5%). In late 2018, **the inflation target for the period January 2019–December 2021 was set at 3%, with a tolerance band of ±1.5 pp.**<sup>2</sup>

For the sake of reminder, as of 2017 the **inflation target has been lowered by 1 pp to 3.0±1.5%**<sup>3</sup>, confirming the economic policy makers' determination to keep medium-term inflation low, stable and predictable. In cooperation with the Government, the NBS made such decision owing to the achieved and maintained low and stable inflation, for three consecutive years at the time, significantly improved macroeconomic fundamentals and prospects for our economy, which reflected successful coordination of monetary and fiscal policies and excellent results of fiscal consolidation. Inflation expectations of the financial and corporate sectors for both one and two years ahead were stable for quite some time already, testifying to increased credibility of the NBS monetary policy.

<sup>1</sup> In line with the Law Amending the Law on the National Bank of Serbia (RS Official Gazette, No 44/2010), the Executive Board assumed all powers of the Monetary Policy Committee.

<sup>2</sup> The National Bank of Serbia's Memorandum on Inflation Targets until 2021 was adopted at the meeting of the NBS Executive Board of 6 December 2018.

<sup>3</sup> The National Bank of Serbia's Memorandum on Inflation Targets until 2018.

The width of the target tolerance band has been kept at  $\pm 1.5$  pp, to diminish the need for frequent monetary policy interventions and contribute to higher predictability of monetary conditions. Being a small and open economy, Serbia is exposed to developments in the international commodity and financial markets, which may cause **temporary** volatility of headline inflation. The target tolerance band leaves to the NBS a broader room to work on the achievement of its second objective – financial stability, and to support the Government's economic policy which encourages sustainable economic growth.

It should be borne in mind that the inflation target is a medium-term objective, i.e. that the inflation outturn may diverge from the target in the short run due to exogenous shocks. The NBS will allow temporary deviations from the target if bringing inflation back to the target in the short term warrants monetary changes that would cause additional disruptions to macroeconomic processes. This also applies to sudden shocks in primary commodity prices or deviations from the planned growth in commodity prices under direct or indirect government regulation.

The NBS strives to achieve the inflation target by **changing its key policy rate, applied in main open market operations**. This interest rate is the key monetary policy instrument and the decisions on its level are based on the analysis of economic circumstances, assessment of future developments and the medium-term inflation projection. Other monetary policy instruments play a supporting role – they contribute to the smooth transmission of the impact of the key policy rate on market rates, as well as to the development of the financial market, without jeopardising financial stability.

The NBS implements a **managed float exchange rate regime**, which implies the right to intervene in case of excessive short-term volatility of the exchange rate, threats to financial and price stability, and risks to the adequate level of FX reserves.

To strengthen the transparency of its monetary policy and the effectiveness of communication with the public, the NBS Executive Board makes monetary policy decisions in line with the agreed schedule of meetings and regularly informs the public about the implementation of inflation targets and measures undertaken to achieve them.

## II Monetary policy and achievement of the inflation target

### 1 Monetary policy in 2018

In the course of 2018, the NBS pursued its monetary policy in accordance with the **Monetary Policy Programme of the National Bank of Serbia in 2018**.<sup>4</sup> The NBS was tasked with achieving the inflation target by changing the key policy rate in a consistent and predictable manner, taking into account the inflation projection, economic developments in the domestic and international environment, and the impact of those changes on financial stability, while at the same time exercising caution in making monetary policy decisions and bearing in mind uncertainties emanating from the international environment.

The key policy rate, as the principal instrument of NBS monetary policy, **was reduced further in March and April 2018, by total 50 bp – to 3.0%. By cutting the rate to its lowest level in the inflation targeting regime, the NBS provided additional support to lending activity and economic growth. In the remainder of the year the key policy rate was kept on hold**, in light of past monetary policy easing and uncertainties abroad.

Deciding to cut the key policy rate by 25 bp both in March and April, the Executive Board assessed that the expected movement in inflation and its underlying factors, along with further strengthening of domestic indicators, offered the chance for further monetary policy easing. In parallel with the rate cuts, in April the Executive Board made the decision **to narrow the interest rate corridor, from  $\pm 1.5$  to  $\pm 1.25$  pp** relative to the key policy rate.

Since early year, inflationary pressures were weaker than expected. Inflation fell to 1.4% in March and to 1.1% y-o-y in April. That inflationary pressures were low was also indicated by core inflation, which decelerated to 0.8% y-o-y in March, where it stood in April as well, this being its minimum since inflation is measured by the CPI. Short- and medium-term inflation expectations were anchored around the target midpoint (3.0%).

**In addition to low inflationary pressures, further monetary policy easing was made possible by a significant reduction in macroeconomic risks.** As highlighted by the Executive Board, owing to structural improvements and narrowed internal and external imbalances, Serbia increased its resilience to potential negative effects of global factors. The results achieved in terms of fiscal consolidation and public finance sustainability are best illustrated by the shift from a fiscal deficit to a surplus starting from 2017, a public debt reduction to close to 50% of GDP, a lower country risk premium and an upgraded credit rating. According to the Executive Board, the improved risk perception of Serbia is of key importance for a more favourable treatment and financial conditions that Serbia can obtain in the financial market. The improved risk perception of Serbia also plays a part in lowering the costs of corporate and household borrowing. In addition, the fact that investors believe Serbia is now a much safer investment destination drove up the FDI inflow (EUR 3.2 bn net in 2018) and non-resident investment in dinar government securities, fuelling appreciation pressures in the FX market in the major part of 2018 as well.

<sup>4</sup> RS Official Gazette, No 111/2017.



The cuts to the key policy rate to its lowest level in the inflation targeting regime, together with higher interbank competition, a lower country risk premium and low money market rates in the euro area, contributed to further lending growth. Lending increased against the background of continued NPL resolution efforts, i.e. write-off and sale of NPLs to non-banking sector entities. For somewhat more than three years from the adoption of the NPL Resolution Strategy, the share of NPLs in total loans fell to the lowest level since 2008, when this indicator of bank asset quality began to be monitored (by 16.7 pp to 5.7% in December). Owing to a considerable reduction in the share of NPLs in total loans, high capital adequacy of banks and greater availability of funding for SMEs, Serbia progressed significantly on the World Economic Forum's competitiveness list for 2018, in the context of indicators concerning the financial system.

As assessed by the Executive Board, further improvement of the business environment, a high and project-diversified FDI inflow channelled dominantly to tradeable sectors, the implementation of infrastructure projects and past monetary policy easing should continue to positively impact investment, which will remain one of the pillars of economic growth. A rising positive contribution is likely to come from household consumption, owing to positive trends in the labour market featuring rising wages and employment and a fall in the unemployment rate. **Those were the main factors underlying the Executive Board's expectation that GDP growth would accelerate in 2018 to its highest level in the past ten years.** Based on the results of achieved macroeconomic stability and implemented structural reforms, the Executive Board expected the same growth dynamics in the medium run as well.

In the past year, the Executive Board revised upward its economic growth estimates for 2018 several times, as was also done by other relevant domestic and international institutions. It first expected the GDP growth rate of around 3.5% in 2018, but in May, as investment exceeded expectations, the Board underscored that economic growth would probably exceed the estimate. In August, it raised its growth estimate for 2018 to 4%. In November, as positive risks relating to domestic demand materialised (which the Board emphasised in August), it increased again its GDP growth projection for 2018 to 4.2%, this being the highest rate in the past ten years. Robust economic growth was achieved in an environment of relatively low inflation, which measured 2.0% in December, this being its average value in 2018 as well. The Executive Board had in mind that inflation

movements in the coming period would be largely determined by a gradual rise in domestic demand.

**In contrast to favourable domestic macroeconomic conditions, factors from the international environment called for caution in the pursuit of monetary policy.**

The high GDP growth rate was achieved owing primarily to domestic factors, given that growth in external demand slowed and that global growth prospects were weaker than expected, largely due to rising protectionism in international trade and the tightening of geopolitical tensions. All relevant institutions reduced their global growth projections, expecting the 2018 figure to match the 2017 level (3.7%). The growth in the euro area, our major trade partner, was also revised down, though its economy is likely to remain above the potential. In addition to the dented production of the euro area car industry, an unfavourable effect also came from slower growth in service sectors, consumption and investment. On the other hand, the growth in Central and Southeast European countries, which are also our important trade partners, was faster than expected, despite the contraction in net exports, driven by the slowdown in external demand. Investment went up in a number of countries, as a result of stepped-up disbursement of EU funds.

The Executive Board emphasised that rising protectionism in international trade and geopolitical tensions could have negative effects not only on global economic growth, but on financial and commodity markets as well, which is why caution should be exercised when making monetary policy decisions. Rising protectionism and the heightening of trade tensions could bear on reduced investment readiness and thus on global capital flows towards emerging economies.

In making monetary policy decisions, the Executive Board took into account uncertainties as to the pace of normalisation of the monetary policies of leading central banks, the dollar-euro relationship and capital flows towards emerging economies. In 2018, the Fed continued to normalise its monetary policy and increased the target range for the fed funds rate by 100 bp to 2.25%–2.50%. On the other hand, the ECB pursued monetary accommodation – it kept the rates at historical lows (the policy rate at zero and the deposit facilities rate below zero) and continued to implement net securities purchases, though to a lesser degree, only to end them at close of the year. To maintain favourable liquidity conditions, the ECB highlighted it would continue to reinvest the principal payments from maturing securities over a longer period, even after it starts to increase



interest rates. In mid-year, the ECB announced and until the year-end maintained its stance not to change its key interest rate at least through the summer of 2019, while markets expected this would not take place in the remainder of 2019 either.

Monetary policy caution was also mandated by pronounced volatility of global oil prices, which were rising in the major part of the year. Exceeding 80 dollars per barrel, in Q3 they were higher by 46% y-o-y. The rise in global oil prices was the main reason behind somewhat higher inflation in the international environment. However, as of October, global oil prices declined sharply, and at end-2018 were by over 20% lower than at end-2017. The volatility of global oil prices was determined primarily by volatile global growth prospects, supply variations over geopolitical tensions, and production agreements between OPEC members and Russia. Also uncertain was the movement of prices of other primary products in the global market, notably the prices of primary agricultural commodities, whose movements spill over to the prices of domestic agricultural products.

Still, the Executive Board assessed that the resilience of our economy to potential negative effects from the international environment increased owing to the strengthening of domestic macroeconomic indicators and a more favourable outlook. This is also confirmed by the fact that vigorous economic growth and NBS results in terms of preservation of price and financial stability were the main reasons why late last year Standard & Poor's upgraded the outlook on Serbia to positive from stable and affirmed its 'BB/B' long- and short-term foreign and local currency sovereign credit ratings.

Given that the key risks to monetary policy emanate from the international environment, the Executive Board will continue to carefully monitor and analyse trends in the international financial and commodity markets, and assess their impact on economic developments in Serbia. Monetary policy will remain predictable and consistent in the achievement of low and stable inflation in the medium run, which will, along with the preservation of financial stability, contribute to sustainable economic growth and the strengthening of resilience to external uncertainties.

## 2 Monetary policy instruments

The basic monetary policy instrument of the NBS is the **key policy rate, i.e. the interest rate on the main open market operations**. The role of the key policy rate is

supported by the **corridor of interest rates on deposit and lending facilities and by other open market operations**. In addition to the key policy rate, the NBS uses other instruments of monetary regulation, notably **reserve requirements and operations in the FX market**.

### Open market operations

The main open market operations of the NBS in 2018 were **one-week reverse repo transactions**, i.e. repo sale of securities (liquidity absorbing).

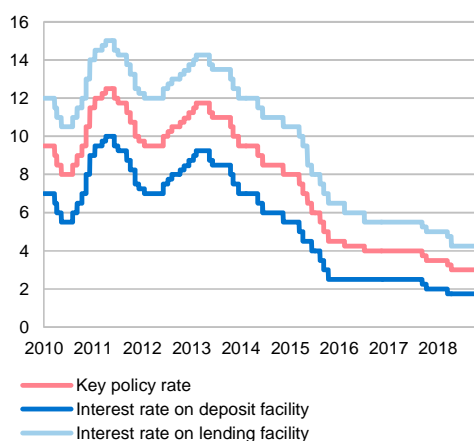
The NBS implemented repo transactions with own securities. For the purposes of repo sale, in 2018 the NBS issued one series of T-bills in the nominal amount of RSD 500.0 bn. The issuing of one series of high nominal value is consistent with the practice in earlier years which enables more adequate management of securities within the same series and facilitates liquidity management for banks.

In 2018, fifty-two repo sale auctions were organised. Auctions were organised once a week, upon **the model of the variable multiple interest rate**. Total securities sales amounted to RSD 2,488.4 bn. The sales volume was somewhat lower than in 2017 (RSD 2,701.7 bn).

The stock of NBS securities in banks' portfolios averaged RSD 47.8 bn in 2018, down by RSD 3.9 bn from 2017. Relative to end-2017, the stock of these securities decreased by RSD 28.6 bn, to RSD 16.5 bn at end-2018.

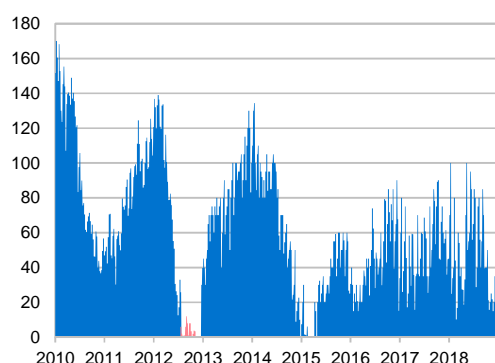
Chart II.2.1 **Key policy rate and interest rate corridor**

(daily data, p.a. in %)



Source: NBS.

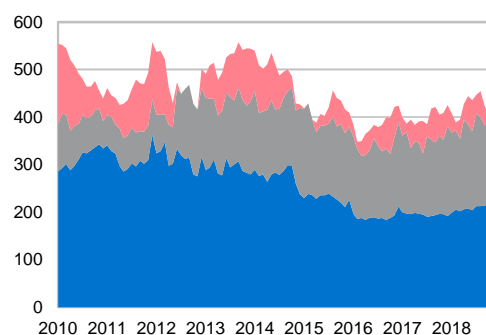
Chart II.2.2 **Stock of sold/bought NBS securities**  
(in RSD bn)



■ Stock of sold securities  
■ Stock of bought securities

Source: NBS.

Chart II.2.3 **Volume of sterilisation by monetary policy instruments**  
(in RSD bn)



■ OMOs – purchase price  
■ RSD required reserves  
■ FX required reserves

Source: NBS.

## Deposit and lending facilities

In 2018, banks continued to place overnight deposits with the NBS. The average daily stock of bank deposits with the NBS in 2018 came at RSD 14.6 bn, which is RSD 0.1 bn less than in 2017. The highest average monthly stock was recorded in March (RSD 18.5 bn) and the lowest in October (RSD 8.5 bn).

In 2018, banks used lending facilities as intraday loans (seven banks). Intraday loans were worth a total of RSD 23.4 bn, with the peak recorded in January (RSD 8.5 bn) and December (RSD 7.7 bn). Overnight loans were not used.

## Required reserves

In October 2018, the NBS passed a new Decision on Banks' Required Reserves.

The new Decision, which has kept the basic characteristics of the required reserves model in effect until then, ensures alignment with the regulations introducing the Instant Payment System. In this regard, the Decision stipulates that banks allocate the dinar required reserves in dinars to the current account or RTGS-IPS<sup>5</sup> account, and that the daily balance of allocated dinar required reserves is the sum of the daily balance of dinar funds on both accounts.

In addition, the provisions of the Decision concerning the liabilities exempt from reserve requirements, such as funds received from international financial organisations, governments and financial institutions founded by foreign states, define more precisely the conditions for their exclusion from the base for the calculation of required reserves. In this regard, it prescribes the requirement that the interest margins on loans from these sources must be lower than the average interest margins on loans approved by the bank from other sources of funding.

There were no changes to the provisions of the Decision concerning the comprehensiveness of the base for the calculation of required reserves, the method of calculation, the differentiated required reserves ratios aimed at stimulating the dinar sources of funding, the maintenance period and the averaging mechanism, as well as the calculation and payment of interest on the allocated dinar required reserves.

At end-2018, calculated required reserves allocated in dinars stood at RSD 171.2 bn, up by RSD 15.5 bn from end-2017. Of this amount, RSD 10.8 bn relates to the increase in FX required reserves allocated in dinars, and RSD 4.7 bn to the increase in purely dinar required reserves.

In the same period, the amount of calculated required reserves allocated in foreign currency increased by EUR

<sup>5</sup> Real Time Gross Settlement – Instant Payment System.

174.9 mn, standing at EUR 1.9 bn. During 2018, the FX base increased by EUR 1.5 bn, mostly on account of rising foreign liabilities (EUR 0.8 bn) and FX savings (EUR 0.6 bn). Looking at the maturity structure of the FX base, the amount of banks' liabilities with the maturity of less than two years doubled compared to liabilities of longer maturities (EUR 1.0 bn, compared to EUR 0.5 bn).

## Foreign exchange market operations

Under the 2018 Monetary Policy Programme, the NBS continued implementing the managed float exchange rate regime, with the possibility to intervene in the foreign exchange market in order to ease excessive short-term volatility of the exchange rate and maintain price and financial stability and an adequate level of FX reserves.

In 2018, the dinar gained 0.2% against the euro in nominal terms. The strengthening of the dinar in 2018 is the continuation of the appreciation tendency present since April 2017 as a result of improved macroeconomic indicators of the country. Strong macroeconomic performance and positive prospects of the domestic economy boosted foreign currency inflows from different sources, primarily FDIs whose net inflow was more than sufficient to cover the current account deficit. Foreign currency inflow was also intensified on account of increased interest of foreign portfolio investors in long-term dinar, mainly 10-year benchmark securities (in H1), as well as remittances and elevated net purchase of foreign cash, particularly during holidays and tourist season. Appreciation pressures were also underpinned by higher bank lending (increase in net FX-indexed bank assets)<sup>6</sup>.

In 2018, the NBS intervened in the IFEM as a net buyer of EUR 1,580.0 mn (buying EUR 1,835.0 mn and selling EUR 255.0 mn). The NBS intervened as a price taker, strictly under market conditions.

In January we witnessed depreciation pressures, caused primarily by temporary seasonal factors (heightened FX demand of domestic enterprises – energy importers), while appreciation pressures prevailed from February until the end of the year. FX supply significantly exceeded FX demand in the period from February until the end of August. FX supply and demand were almost

balanced from September onwards, which dampened appreciation pressures occasionally giving rise to mild depreciation pressures.

In quarterly terms, in Q1 the dinar gained 0.1% against the euro in nominal terms and the NBS intervened by selling EUR 180.0 mn in January and buying EUR 580.0 mn in February and March. In Q2 the dinar kept appreciating (by 0.3%), and the NBS exclusively purchased foreign currency in the IFEM (EUR 790.0 mn).

In Q3 the dinar depreciated against the euro by 0.3% in nominal terms, with the NBS net buying EUR 405.0 mn (having purchased EUR 420.0 mn and sold EUR 15.0 mn). In Q4 the dinar strengthened against the euro by 0.2% in nominal terms, with the NBS selling EUR 15.0 mn net (having purchased EUR 45.0 mn and sold EUR 60.0 mn).

## FX swap auctions of the National Bank of Serbia

In 2018, the NBS continued to hold its regular three-month and two-week swap auctions of FX purchase and sale for dinars in order to boost the development of interbank swap trading and facilitate more efficient bank liquidity management. In 2018, 100 two-week swap auctions were held, with the NBS swap purchasing and selling EUR 134.0 mn, as well as 100 three-month swap auctions, at which it swap sold and bought EUR 190.0 mn. The largest auction volume in 2018 was recorded in October, when the NBS swap sold and bought EUR 69.0 mn. At end-2018, FX receivables and liabilities of the NBS in respect of three-month swap auctions equalled EUR 55.0 mn each and those in respect of two-week swap auctions – EUR 39.0 mn each.

## Other interest rates

The interest rate at which the NBS calculates and pays interest on the average daily balance of allocated dinar required reserves was cut from 1.75% to 1.50% in March and then further down to 1.25% in April.

Furthermore, in April the NBS interest rate corridor was also lowered relative to the key policy rate from  $\pm 1.50$  pp to  $\pm 1.25$  pp.

<sup>6</sup> Aiming to balance their foreign currency positions, thus reducing exposure to foreign exchange risk, banks sell foreign currency, which results in the strengthening of the dinar.

### 3 Achievement of inflation target in 2018

In 2018 inflation was lower than in 2017. It moved within the target tolerance band ( $3 \pm 1.5\%$ ) throughout the year, with the exception of two months (March and April) when it slipped temporarily below the lower bound of the tolerance band. In December it touched 2%, which was also its average annual level. The largest contribution to inflation in 2018 came from the prices of food (0.8 pp), primarily vegetables, followed by cigarettes (0.4 pp) and petroleum products (0.3 pp), while the aggregate contribution of other products and services was 0.5 pp. This shows that the demand-side inflationary pressures stayed low in 2018 as well despite the robust economic growth and favourable labour market trends.

In monthly terms, y-o-y inflation decelerated at the beginning of the year to 1.1% in April, primarily as a consequence of the high base in the prices of vegetables and petroleum products. It was due to the diverging dynamics of these two groups of prices that consumer prices rose moderately from May to 2.6% y-o-y in August. In the period thereafter, y-o-y inflation decelerated, to 2% in December, as a result of dwindling contribution from the prices of industrial non-food products, as well as of petroleum products due to a sharp fall in global oil prices by the end of the year.

In terms of inflation components, overall **food prices** grew by 2.7% in 2018, largely on the back of the rising prices of **unprocessed food** (6.4%), more specifically vegetables (23.1%). **Processed food prices** in December were 0.8% higher y-o-y. Their contribution to headline inflation in 2018 remained low (0.2 pp), primarily owing to the persistently low prices of primary agricultural commodities in the global market. The strongest boost came from the prices of non-alcoholic beverages, bread and other bakery products, and processed meat products.

**Industrial product prices excluding food and energy** picked up by 0.9% y-o-y in December, contributing 0.3 pp to inflation. The price growth in this group was dominantly determined by the February and July cigarette price hikes totalling 8.2% (contribution to inflation: 0.4 pp). The appreciation of the dinar in the greater part of the year lowered the prices of imported products expressed in dinars. The largest negative contribution within this price group stemmed from clothes and footwear.

At annual level, the **prices of services** went up by 2.4% (contribution to inflation 0.6 pp), driven largely by the

Table II.3.1 Contribution to y-o-y consumer price growth (in pp)

	2017	2018	Difference
<b>Consumer prices (CPI)</b>	3.00	2.00	-1.0
Unprocessed food	0.91	0.68	-0.2
<i>Fruit and vegetables</i>	0.85	0.65	-0.2
<i>Fresh meat</i>	0.00	0.06	0.1
Processed food	0.40	0.16	-0.2
Industrial products excluding food and energy	0.59	0.25	-0.3
Energy	0.60	0.35	-0.3
<i>Petroleum products</i>	0.28	0.30	0.0
Services	0.51	0.59	0.1

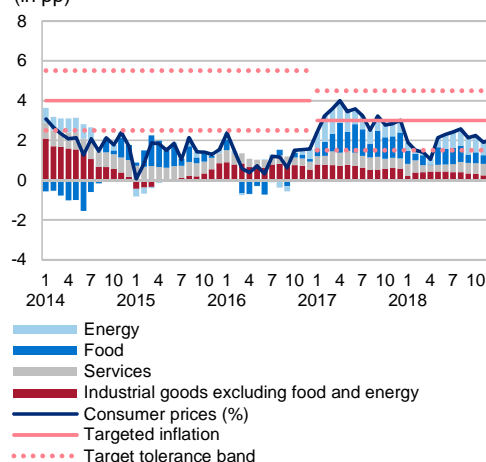
Sources: SORS and NBS calculation.

rising prices of travel packages (by around 12%) and transport services (5.1%), on account of higher prices of technical inspection of vehicles and intercity transportation.

**Energy prices** gained 2.2% in 2018 (contribution to headline inflation: 0.3 pp in December). In this category the highest positive contribution came from petroleum products whose prices reflected the rise in global oil prices that were up by 30.9% on average in 2018 relative to 2017. Electricity price did not go up in 2018 and the contribution of the prices of solid fuels was lower compared to 2017. As regards petroleum products, their contribution to y-o-y inflation was the largest in October (0.7 pp), but then dropped to 0.3 pp in December amid a significant fall in global oil prices.

**Administered prices**, i.e. prices under direct or indirect impact of the Government, grew by 2.4% in 2018,

Chart II.3.1 Contribution to y-o-y consumer price growth (in pp)



Sources: SORS and NBS calculation.

contributing 0.4 pp to headline inflation. The growth in this price group was almost fully determined by the hikes in cigarette prices.

**Core inflation**,<sup>7</sup> as the part of the CPI which is affected by the monetary policy the most, remained low and stable, at 1% y-o-y in December 2018, which was also its average value for the entire year. Such developments in core inflation indicate that low inflationary pressures are of more durable character and largely the result of relative stability of the dinar exchange rate, low and anchored inflation expectations and low inflation abroad. In terms of groups of products and services, the only major positive contribution to core inflation in 2018 came from the prices of travel packages (0.1 pp).

**Table II.3.2 Growth and contribution of components to consumer price growth in 2018**

	Growth rates (in %)	Contribution (in pp)
<b>Consumer prices (CPI)</b>	<b>2.00</b>	<b>2.00</b>
Unprocessed food	6.40	0.68
Processed food	0.80	0.16
Industrial products excluding food and energy	0.90	0.25
Energy	2.20	0.35
Services	2.40	0.59
<b>Core inflation indicators</b>		
CPI excluding energy	2.00	1.67
CPI excluding energy and unprocessed food	1.30	0.99
CPI excluding energy, food, alcohol and cigarettes	1.00	0.47
<b>Administered prices</b>	<b>2.40</b>	<b>0.45</b>

Sources: SORS and NBS calculation.

<sup>7</sup> CPI excluding the prices of energy, food, alcohol and cigarettes, which is the most frequently used measure of core inflation.



## III Macroeconomic environment

### 1 International environment

#### Economic activity and inflation

After a solid growth dynamics in the first part of the year, **global economy** slowed down in H2, recording growth of 3.6% at the level of 2018 (compared to 3.8% in 2017). The deceleration was a consequence of poorer performance by some of the advanced economies, notably in Europe and Asia, as well as of the downturn in industrial and trade activities, which reflected adversely on financing conditions. With the above in mind, the IMF revised its growth projections for 2019 and 2020 slightly down. It noted that risks to the projection are tipped to the downside, as well as that these risks include the persisting protectionist measures and geopolitical tensions, tighter financial conditions, China's weaker growth, uncertainty surrounding Brexit negotiations and a possible turn in capital flows to emerging countries.

**Euro area GDP growth** decelerated from 2.4% in 2017 to 1.8% in 2018 and was dominantly driven by consumption and investment in fixed assets. The slowdown in euro area growth is mainly attributable to dampened external demand, as well as factors specific to certain economies and sectors. Still, it was estimated that the negative effects of these factors will be exhausted in the medium term and that macroeconomic fundamentals will continue to sustain growth in the euro area. This is why the ECB expects euro area growth, projected at 1.1% in 2019, to accelerate to 1.6% in 2020. In April, the IMF revised euro area growth down – by 0.3 pp to 1.3% in 2019 and by 0.2 pp to 1.5% in 2020.

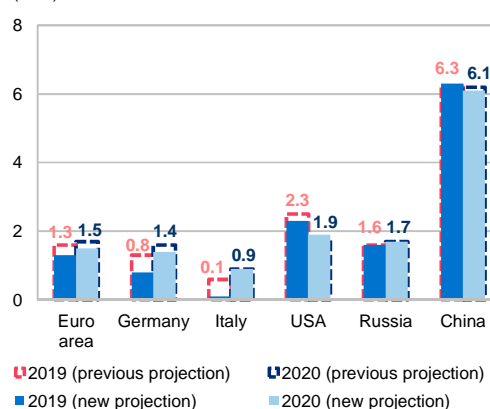
Unemployment rate in the euro area dropped to 7.9% in the last quarter of 2018, reaching its lowest level since

October 2008. In the medium term, growth in the euro area will still be propped up by favourable trends in the labour market, mainly by rising employment and wages.

As for Serbia's key trade partners within the euro area, **German** economy slowed down to 1.4% in 2018 (from 2.2% in 2017), chiefly owing to weaker export performance. In addition, **Italy's** economic growth decelerated considerably, to 0.9% in 2018 (from 1.7% in 2017), as the Italian economy entered a technical recession in H2. Hence, the IMF revised down its growth forecast for the German and Italian economies in 2019 to 0.8% and 0.1% respectively, while in 2020 it expects their GDP to grow 1.4% and 0.9% respectively.

**Inflation in the euro area** continued up, rising from 1.5% in 2017 to 1.8% in 2018 (average, y-o-y), though it

Chart III.1.1 Revisions of real GDP growth forecasts for 2019 and 2020 by the IMF  
(in %)





still trended “below, but close to 2% target.” Inflation movements in 2018 – rise in Q2 and Q3 and deceleration in Q4 2018 – were largely a consequence of changes in the prices of energy and, to a smaller degree, food. Though cost-push pressures strengthened in conditions of high utilisation of economic capacities and favourable labour market developments in the euro area, such as rising employment and wages, they did not spill over onto consumer prices, hence core inflation remained at the same level as in 2017, averaging 1%. As for Serbia’s key foreign trade partners, Germany saw its inflation edge up 0.2 pp to 1.9% on average in 2018, while inflation in Italy dipped 0.1 pp relative to 2017 and equalled 1.2%, measured by the Harmonised Index of Consumer Prices (HICP). As global oil prices declined and global economic activity decelerated, expectations as regards inflation movements in the euro area going forward also declined.

**US economy** in 2018 rose 2.9%, thereby exceeding the 2.2% growth rate from 2017. The major contribution to growth came from personal consumption and investment in fixed assets, while the export of goods slowed down in response to protectionist measures (and posted a drop in Q3), thereby leading to a negative contribution of net exports at the year level. As for 2019, the Fed projects growth exceeding the potential level, while over the medium term GDP is expected to follow the trend trajectory.

The US labour market has been seeing positive developments for quite a while now, as confirmed by the

average employment rate reaching its ten-year maximum in 2018 (60.4%). Also, the average unemployment rate of 3.9% in 2018 is the lowest in almost half a century. The Fed estimates that favourable labour market trends will continue in the medium run, mostly in terms of the continued rise in the number of employed persons and a declining unemployment rate.

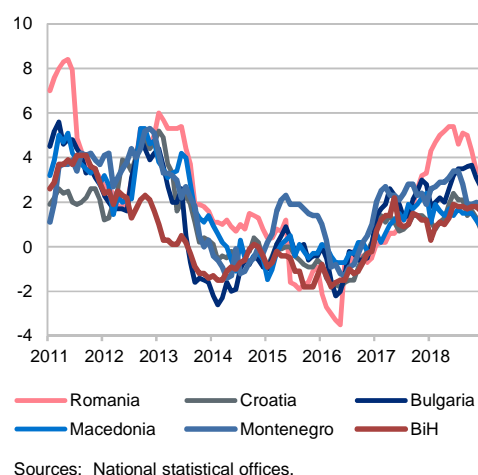
Measured by the personal consumption expenditures price index, both headline and core **inflation in the USA** hovered close to the Fed’s inflation target of 2% in 2018. Headline inflation rose from 1.8% in 2017 to 2.0% in 2018, while excluding the prices of energy and food, inflation climbed from 1.6% to 1.9%. Cost-push pressures at home gained strength amid favourable labour market developments and a robust rise in economic activity. Still, a fall in energy prices resulted in a slowdown in y-o-y inflation at the end of 2018, as well as slightly lower expected inflation for 2019 (1.8%). Measured by the CPI, average y-o-y inflation in 2018 edged up 0.3 pp to 2.4%.

As for **countries of Central and Eastern Europe**, i.e. emerging and developing European countries,<sup>8</sup> the IMF states that growth in this region measured 3.6% in 2018. It decelerated relative to 2017 mostly as a consequence of dampened economic activity in Turkey. The IMF estimates that growth in this region will continue to slow down to 0.8% in 2019, which is also mostly attributable to the anticipated contraction in Turkey’s economic activity. After that, the IMF projects a higher growth rate

Chart III.1.2 **HICP across selected countries**  
(y-o-y rates, in %)



Chart III.1.3 **CPI across selected countries**  
(p.a., in %)



<sup>8</sup> Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Montenegro, North Macedonia, Poland, Romania, Serbia and Turkey.



in the region – 2.8% in 2020, and even higher than 3% over the medium term. As for Serbia, the IMF expects its GDP growth rate to be far above the regional average – 3.5% in 2019 and 4.0% in 2020.

Led by consumption and exports, **Russia's** GDP sped up to 2.3% in 2018 (from 1.6% in 2017), indicating the highest growth in six years. Though the achieved growth exceeded the projections of the Russian central bank, this was mostly attributed to temporary factors, notably higher mining and manufacturing exports and increased lending which supported the economic activity. Bearing in mind the impact of a series of factors in the domestic environment and global economy, the relevant international organisations projected Russia's economic growth at 1.5–1.8% for 2019 and 2020.

According to preliminary data, **China's** economic growth slowed down to 6.6% in 2018 (from 6.8% in 2017). This was largely a result of stricter regulations in the financial sector and the trade dispute with the USA, which is negatively affecting the production sector and export demand. In response to dampened growth, the Chinese government launched incentives for public investments, while monetary authorities mitigated regulatory requirements to ensure additional liquidity in the banking sector. Bearing in mind the factors that are acting as a drag on economic growth on the one hand, and the Chinese government's incentives on the other, the IMF stated in January that its forecast of China's growth for 2019 and 2020 remains unchanged.

Measured by the HICP, the region of **Central Europe** saw inflation in 2018 fall short of the level from 2017 in the Czech Republic and Poland, whereas in Hungary, Slovenia and Slovakia it was higher than in 2017. Overall, it ranged from 1.2% in Poland to 2.9% in Hungary. In the majority of **Southeast European** countries, average y-o-y inflation in 2018 reached a multiple-year maximum and moved between 1.4% in Bosnia and Herzegovina and 4.6% in Romania, which is its highest level in seven years. Inflation in Turkey touched its 15-year high (16.3% y-o-y on average in 2018), mainly as a result of the weakening lira. Still, after reaching 25.2% y-o-y in October, it began to decelerate, propped by monetary policy measures, and declined to 20.3% y-o-y at the end of the year. Average y-o-y inflation in **Russia** was 0.8 pp lower in 2018 than in 2017 and measured 2.9%. However, from mid-year onwards, it again started rising due to the depreciation of the rouble and the announced VAT increase. It reached 4.3% y-o-y in December, overshooting the 4% inflation target.

## Monetary policy

In 2018 **the ECB** kept its interest rates record low (the rate on main refinancing operations at 0%, and rates on deposit and lending facilities at -0.4% and 0.25%, respectively). In June 2018 the first signals of monetary policy normalisation were released, with the announcement that the monthly pace of the net asset purchases would be reduced from EUR 30 bn to EUR 15 bn, from October until the end of the year. At end-2018, after nearly four years of implementation, the programme was ended. However, the ECB assessed that a significant monetary stimulus was still needed, through reinvestment of the principal payments from maturing securities and keeping the interest rates on hold, to ensure the continued sustained convergence of inflation toward the target over the medium term, taking into account the slowdown in euro area's economic growth. In its December press release the ECB enhanced its forward guidance on reinvestment of the principal payments from maturing securities purchased under its asset purchase programme, by linking the period of reinvestment with key interest rate hikes, i.e. stating that it would be continued for an extended period of time past the date when it starts raising the key ECB interest rates. In its March and April press statements, the ECB said it would keep interest record low at least through the end of 2019.

Favourable movements in the labour market and strong growth of economic activity fuelled inflationary pressures in the US, so **the Fed** proceeded with monetary policy normalisation. In 2018, the target range for the federal funds rate was raised four times, by a total of 100 bp, to 2.25–2.50% at year-end. Also, in accordance with the previously announced plan, the Fed downsized its balance sheet throughout the year. The cap under which maturing treasuries are not reinvested was upped by USD 10 bn every three months, until it reached USD 50 bn per month at year-end. However, late in the year there were signals that further monetary policy normalisation could be slower than earlier announced.

Cost pressures in **countries of Central and Southeast Europe** mostly strengthened during 2018, spurred by low unemployment and rising wages, urging their central banks to tighten monetary policies. The pressures were alleviated only at the end of the year, when oil prices went down. In 2018, the Czech National Bank raised its key interest rate five times, by a total of 125 bp, to 1.75%, as the country recorded the lowest unemployment rate among EU member states and the rise in wages which fuelled consumption, as well as greater than

expected weakening of the koruna. The National Bank of Romania increased its monetary policy interest rate three times in H1 2018, to 2.5%, and kept it on hold by the year-end, amid economic slowdown and stabilisation of inflation, which returned within the targeted range in November. The Hungarian National Bank (MNB) continued its monetary policy accommodation by using a set of unconventional measures and keeping its key policy rate at 0.9%. Also, with a view to simplifying monetary policy instruments, the MNB phased out gradually the three-month deposit facility, until it fell to zero by end-2018, and the required reserve ratio assumed the role of the key policy rate. In addition, the Monetary Council communicated its readiness to pursue gradual and cautious monetary policy normalisation, while not specifying when it would start. In 2018, the National Bank of Poland did not change its reference rate, which stood at 1.5% since March 2015.

Due to further strengthening of inflationary pressures, in April and May 2018 the Central Bank of the Republic of **Turkey** raised its late liquidity window facility rate (considered its de facto key policy rate) by a total of 375 bp, to 16.5%. Having been levelled with the rate for late liquidity window operations, the one-week repo rate, which used to measure 8%, as of June again became the key policy rate. In the environment of a significant rise in inflation, it was raised by another 125 bp to 17.75% in June, and by 625 bp to 24.0% in September, exceeding the analysts' expectations.

The Bank of **Russia** extended its monetary policy easing into Q1 2018, cutting the key rate by a total of 50 bp, to 7.25%. However, the rise in inflation and inflation expectations in the ensuing period prompted the central bank to raise the key rate for the first time since 2014, by 25 bp to 7.5% in September and again to 7.75% in December.

## Financial and commodity markets

Although global financial conditions remained favourable, 2018 saw a mild tightening, mainly due to Fed's monetary policy turning restrictive. Growing volatility in the **international financial market** mirrors the concerns regarding the rising protectionism, global growth outlook and sustainability of the upward profitability trend of US companies, primarily those in the technology and trade sectors, as well as the heightened uncertainty as to the pace of normalisation of Fed's monetary policy. Geopolitical tensions and the

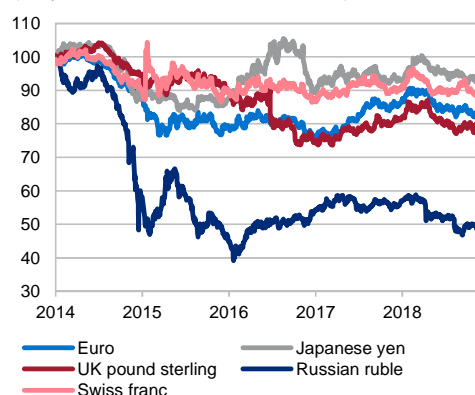
tightening of trade tensions added to the volatility of currencies of emerging economies.

Better growth outlook for the US than for the euro area and increasing expectations that Fed's monetary policy normalisation might be faster than initially assumed, widened the spread between the **yields on ten-year US treasuries and German bonds** to a multi-decade maximum in Q2 (2.6 pp), which roughly persisted in Q3 2018 as well. US stock indices plunge and increased investors' risk aversion in Q4 reflected on lower yields on US treasuries which dropped to their lowest level since January 2018 (2.7%), though remaining higher than at end-2017. The yields on comparable German bonds declined, to 0.2% in late 2018, which is below their end-2017 level, due to investors' concerns about euro area growth prospects, rising volatility in the stock markets and budget tensions between Italy and the EU.

The **euro's weakening against the dollar** (4.5% in 2018) reflected weaker economic growth in the euro area, as well as tensions associated with Brexit, the Italian budget and political uncertainty in France. Deterioration in the global growth outlook towards the year-end sparked risk aversion of investors and additionally bolstered the dollar, which is considered a safe currency.

In 2018, the **Brent oil price** averaged 71 dollars per barrel, which is 31% more than the average price in 2017. In H1 2018, oil prices went up, due to the agreement between OPEC countries and other major

Chart III.1.4 **Exchange rates of selected national currencies against the dollar\***  
(daily data, 31 December 2013 = 100)



Source: IMF database.

\* Growth indicates appreciation.

Chart III.1.5 Oil and copper price movements  
(average monthly prices, in USD)

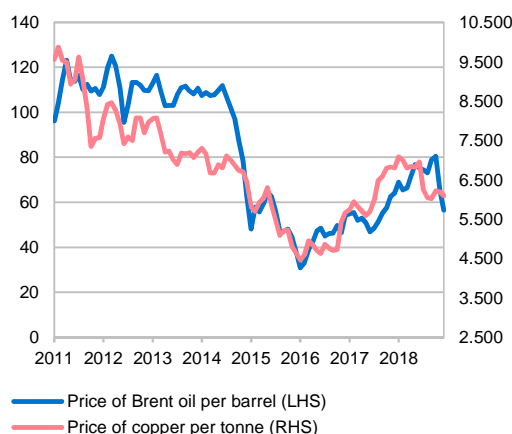
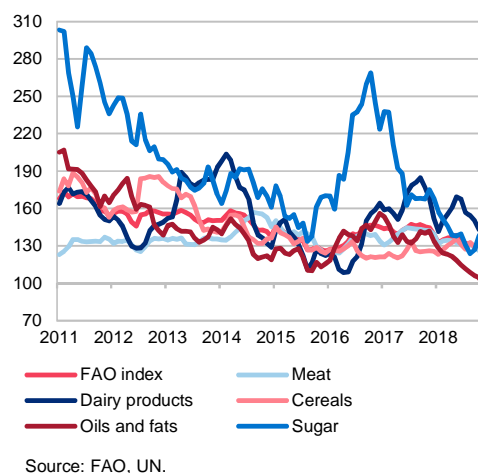


Chart III.1.6 World food price index  
(in real terms, 2002–2004 = 100)



exporters to cap oil production, dwindling production in Venezuela, the US's decision to withdraw from the Iran nuclear agreement and the announcement it would reimpose sanctions. Although at end-June OPEC countries and Russia agreed to step up supply by one million barrels a day, Venezuela's and Angola's output continued to shrink, so oil prices extended their rise into Q3. At the start of Q4, the oil price reached its four-year peak (86.1 dollars per barrel), amid growing market concerns over the reimposing of sanctions to Iran. However, since the US, Russia and Saudi Arabia considerably stepped up their supply, while the global growth prospects weakened, and hence the potential oil demand on that account, in late 2018 the oil price plunged to 53 dollars per barrel, which is below its end-2017 level (67 dollars per barrel).

According to the World Bank index of primary commodities, **prices of metals and minerals** dropped by 9.6% at end-2018 relative to end-2017, due to the weaker global demand.

Measured by the FAO index, at end-2018 **global food prices** were 8.8% lower relative to end-2017. Edible oil prices plunged the most (26.1%), reaching at end-2018 the lowest level in more than ten years, due to the dented global demand and high inventories in countries which are the main producers. The price of sugar also dropped in Q3 (16.0%), touching the lowest level since the end of 2007, and prices of dairy products and meat followed suit (12.0% and 8.6%, respectively). Among the food

products comprising the FAO index, only the price of cereals rose relative to end-2017 (5.1%), due to the expectedly weaker wheat yield in Argentina and depleted inventories in Russia, as well as higher corn demand.

## 2 International transactions

### Balance of payments trends and FX reserves

**The current account deficit** reached EUR 2.2 bn in 2018. In accordance with the NBS projection, its share in GDP (5.2%) stayed at the 2017 level. The projection was achieved despite the global oil price hike and elevated imports of equipment and raw materials for investment and industrial purposes, which resulted in the widening of the deficit in trade in goods. The deficit was largely compensated for by a higher surplus in trade in services and the secondary income account, and a smaller deficit on the primary income account. At the same time, the inflow on the financial account, consisting predominantly of FDI, was more than sufficient to cover the current account deficit. This boosted FX reserves and increased Serbia's resilience to external shocks.

In 2018, **goods exports** rose by 8.3% to EUR 15.2 bn. As in the prior period, the growth was led by manufacturing exports (9.1%). Due to the weakening of external demand, notably from the euro area, which is our major foreign trade partner, the growth in manufacturing exports was somewhat slower in 2018 than in earlier years, but remained robust and broad-based (it was

recorded in 21 out of 23 areas). Exports to other markets gained increasingly in importance, diminishing the effects of the euro area slowdown on our exports. The exports of agricultural products were similar as in 2017 (down by 0.6%). After weaker performance in H1 2018, under the impact of low export inventories due to the drought in 2017, more favourable trends were recorded with the onset of the new season as of mid-2018. The growth in H2 2018 was boosted primarily by cereal exports, which would have probably been higher but for the low Danube water levels. At the same time, **goods imports** were up by 13.4% to EUR 20.5 bn, owing primarily to the industry's increased needs for equipment and intermediate goods, within the current investment cycle. According to SITC, the highest increase in imports was recorded for energy products, raw materials<sup>9</sup>, industrial and power machines, electrical and telecommunications devices, chemical products and other finished products. Around 89% of growth in the value of imports of oil, petroleum products and gas (EUR 449 mn) reflected their rising prices in the global market,

while the rest was the result of a higher imported quantity due to increased needs of the economy.

The surplus in **trade in services** widened further in 2018, by 13.0% to EUR 1.1 bn, whereby it continued to work towards a reduction in the current account deficit. The surplus increased most notably on account of information-communications and business services, whose net exports are rising year after year.

At the same time, the deficit on the **primary income account** declined by 12.9% y-o-y to EUR 2.2 bn in 2018. This is due primarily to smaller FDI expenditure, as dividend payments declined, while the amount of reinvested earnings was similar to last year's, suggesting that investors already present in Serbia are prepared to step up their investment in the country. Smaller expenditure was recorded also on account of portfolio investment, due to a more favourable fiscal position and the government's diminished need to borrow, the maturing of earlier issued securities at higher rates, and more favourable terms of new borrowing. A smaller deficit was determined by lower loan interest expenses as well.

The surplus on the **secondary income account** increased further (by 17.7% to EUR 4.1 bn), notably as a result of a higher remittances inflow, which increased by 16.8% from 2017 to EUR 3.2 bn.

In 2018, the **inflow on the financial account** (EUR 2.8 bn<sup>10</sup>) was up by EUR 930.0 mn from 2017, primarily owing to the high FDI inflow. The continued improvement in macroeconomic indicators and further upgrade of the business environment resulted in a net **FDI** inflow of EUR 3.2 bn in 2018 (7.5% of GDP), ensuring, for the fourth year in a row, full coverage of the current account deficit (143.4%). Investment was highly diversified by project and geography. As before, the bulk went to export-oriented sectors, which should ensure further growth in exports at high rates. Most investment (around 27%) was channelled to manufacturing, followed by transportation, financial sector, construction, mining and trade. As usual, the major part of investment came from EU countries (around 61%), while the share of investment from Asian countries continued up, to around 26%.

In 2018, an outflow worth EUR 913.0 mn was registered in respect of **portfolio investment**, triggered chiefly by

Table III.2.1 **Serbia's balance of payments**  
(in EUR mn)

	2017	2018
<b>I CURRENT ACCOUNT</b>	-2,050.8	-2,222.8
<b>1. Goods</b>	-3,997.5	-5,245.3
1.1. Credit	14,066.3	15,238.1
1.2. Debit	-18,063.8	-20,483.4
<b>2. Services</b>	966.1	1,091.6
2.1. Credit	5,245.7	6,000.3
2.2. Debit	-4,279.6	-4,908.7
<b>3. Goods and services</b>	-3,031.4	-4,153.7
3.1. Credit	19,312.0	21,238.4
3.2. Debit	-22,343.4	-25,392.2
<b>4. Primary income</b>	-2,533.4	-2,206.6
<b>5. Secondary income</b>	3,513.9	4,137.5
<b>II CAPITAL ACCOUNT</b>	4.8	-6.6
<b>III FINANCIAL ACCOUNT</b> <b>(excluding reserve assets)</b>	1,876.3	2,806.3
1. Direct investment, net	2,418.1	3,187.9
2. Portfolio investment, net	-827.1	-913.0
3. Financial derivatives, net	20.6	-21.0
4. Other investment, net	264.8	552.4
4.1. Trade credit and advances, net	-503.8	-347.2
4.2. Financial loans, net	159.2	1,302.9
4.3. Currency and deposits, net	623.1	-404.0
4.4. Other, net	-13.7	0.7
<b>IV Reserve assets</b>	-228.2	-1,123.2
<b>V NET ERRORS AND OMISSIONS</b>	397.9	546.3
<b>VI OVERALL BALANCE</b>	228.2	1,123.2

Source: NBS.

Note: Preliminary data.

<sup>1)</sup> BPM6 methodology, except sign convention.

<sup>9</sup> SITC 6 – products made of miscellaneous materials: iron, steel, non-ferrous metals, construction material, paper, wood, leather, India rubber etc.

<sup>10</sup> Excluding a change in FX reserves.



the maturing eurobond in December, when EUR 787.8 mn was paid to non-residents. This at the same time ensured a further reduction in the share of public debt in GDP. An outflow was also recorded based on debt repayment (mainly early) to the London Club worth EUR 141 mn in April, whereby Serbia's obligations towards the Club were fully settled. In H1 2018, non-residents continued to step up investment in government securities in the primary market, most notably longest-maturity dinar securities.

An inflow worth EUR 552.4 mn was recorded for **other investment** in 2018, which is twice more than in 2017. In 2018, resident debt towards foreign creditors increased significantly – a net inflow worth EUR 1.3 bn was recorded based on **financial loans**. For the second year in a row, bank borrowing increased (by EUR 603.2 mn), which confirms that the process of deleveraging ended. The borrowing of enterprises was worth EUR 509.6 mn, while government obligations towards foreign creditors expanded by EUR 198.0 mn. Exporters approved more trade loans than were used by our importers – as a result, a net outflow of EUR 347.2 mn was recorded for **trade loans**. A net outflow of EUR 404.0 mn was registered in respect of **cash and deposits**, as banks increased their deposits abroad by EUR 546.9 mn, and non-residents increased their deposits with banks by EUR 142.9 mn.

Owing to the above trends in the current and financial accounts, **Serbia's FX reserves** (according to the

balance of payments methodology<sup>11</sup>) expanded by EUR 1.1 bn in 2018.

At end-2018, gross NBS FX reserves stood at EUR 11.3 bn, up by EUR 1.3 bn y-o-y. The net effect of FX transactions was positive (the FX inflow exceeded the FX outflow) at EUR 1.1 bn, as well as net market effects (currency changes, changes in the price of gold and market value of securities) at EUR 213.6 mn. At end-2018, FX reserves ensured the coverage of money supply M1 with 168% and more than five months' worth of the imports of goods and services, which is almost twice more than the standard on the adequate level of reserves. Net FX reserves rose EUR 580.0 from end-2017 to EUR 8.9 bn, this being their highest level at a year-end since monitoring began (2000).

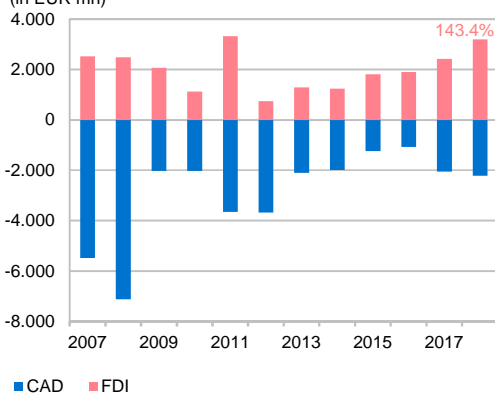
At end-2018, foreign securities accounted for the bulk of FX reserves (57.8%), followed by FX balances in accounts abroad (21.7%), foreign cash (13.4%), gold (6.5%) and SDRs (0.6%). In accordance with basic principles of security and liquidity, funds were invested with prime institutions (central banks, international financial institutions and first-class banks), and in highly liquid securities issued by the most advanced countries in the world and international financial institutions.

In 2018, the NBS recorded an FX inflow from IFEM interventions (EUR 1.5 bn net) and the disbursement of loans for the Republic of Serbia (EUR 692.2 mn). In

Chart III.2.1 FDI/CAD coverage\*

(in %)

(in EUR mn)

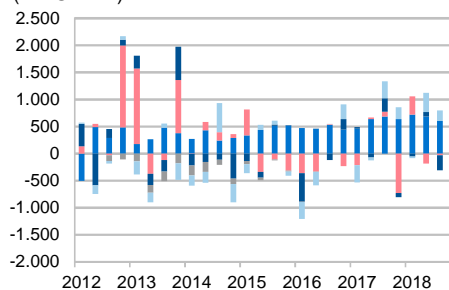


Sources: SORS and NBS.

\* Preliminary data.

Chart III.2.2 Structure of the financial account\*

(in EUR mn)



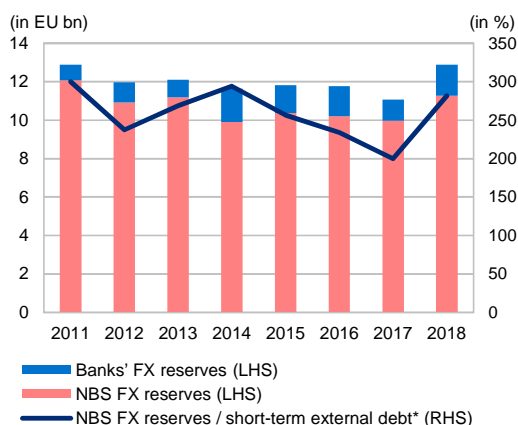
Financial loans of residents  
IMF loan and SDR allocation  
Other  
Portfolio investment – net  
Direct investment – net

Source: NBS.

\* Preliminary data.

<sup>11</sup> Excluding currency changes, a change in the market value of securities and the price of gold.

Chart III.2.3 FX reserves and coverage of short-term external debt



Source: NBS.

\* Short-term debt by remaining maturity.

addition, the NBS recorded an FX inflow in respect of the sale of euro government securities in the domestic financial market (EUR 567.3 mn), temporary payment operations with Kosovo and Metohija (EUR 466.5 mn), grants (EUR 330.8 mn), and the collection of coupons (EUR 72.6 mn).

Obligations to foreign creditors (principal and interest) were regularly settled, amounting to EUR 1.3 bn in 2018. Total EUR 905.8 mn was paid from FX reserves in respect of maturing government securities based on the dollar eurobond (issued in the international financial market in 2013) – FX funds were ensured throughout the year, mainly from dinar funds, contributing to a reduction in public debt and the improvement of its currency structure. Total EUR 840.0 mn was paid based on maturing euro securities in the domestic financial market, while EUR 11.3 mn was paid based on unredeemed FX household savings, pursuant to the Law on the Settlement of the Public Debt of the Republic of Serbia Arising from Unpaid Foreign Exchange Savings of Citizens.

### International investment position

At end-2018, the international investment position of Serbia as a net debtor equalled EUR 37.5 bn, up by EUR 1.8 bn compared to end-2017. This reflects primarily the rise in the most desirable investment from abroad – **FDI**,

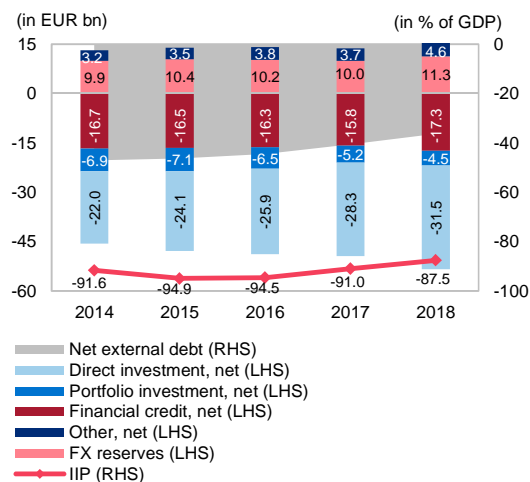
whose net stock exceeded 80% of the net international investment position of Serbia in 2018. The trend of a reduction in the share of the net international investment position in GDP continued for the third year in a row – its share in estimated GDP in 2018 was reduced by 3.4 pp to 87.5%. This is at the same time its **lowest share in GDP since 2013**.

Serbia's foreign financial assets went up by EUR 3.4 bn to EUR 24.5 bn in 2018, led by other resident investment abroad and an increase in the country's FX reserves, with resident FDI abroad also higher than in the earlier years. Another boost to financial assets came from currency and other changes (EUR 297.0 mn) – as a result, the increase in total assets driven by balance of payments transactions reached EUR 3.1 bn.

**Other resident investment abroad** increased the most – by EUR 1.7 bn, owing to a rise in trade loans and advance payments to non-residents (EUR 934.1 mn), a rise in resident deposits abroad (EUR 570.0 mn), and partly owing to a rise in loans to non-residents (EUR 134.0 mn) and insurance technical reserves (EUR 114.3 mn). Thus, the share of other investment in Serbia's financial assets increased to 39.2%. The **country's FX reserves** (46%) still constituted the bulk of total assets – in the course of 2018, they recorded a considerable increase, by EUR 1.3 bn, reaching EUR 11.3 bn at year-end. **Resident FDI abroad** also went up in 2018, by EUR 325.5 mn – at year-end, claims were worth EUR 3.3 bn, or 13.6% of total assets. As **portfolio investment of residents abroad** went up by EUR 11.4 mn, the stock of foreign securities owned by investors from Serbia remained modest – at EUR 248.6 mn at end-2018.

In 2018, **foreign financial liabilities of Serbia** increased from EUR 56.7 bn to EUR 61.9 bn. Currency and other changes contributed EUR 420.9 mn to the 2018 rise in residents' foreign liabilities. The positive trend from earlier years continued – residents' foreign liabilities continued up in 2018, reflecting mainly a rise in **non-resident FDI in Serbia**, which went up by EUR 3.5 bn to EUR 34.8 bn. Thus, their share in total resident foreign liabilities increased. The highest increase was noted for resident liabilities based on non-resident investment in equity (40.3%), followed by liabilities in respect of reinvested earnings (33.8%), and intercompany loans (25.9%). Owing to a significant rise in FDI, the share of resident liabilities in total foreign liabilities rose to 56.2%.

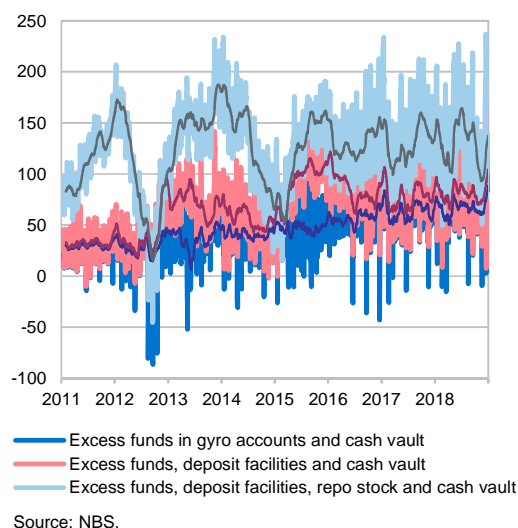
Chart III.2.4 International investment position\*



Source: NBS.

\* Preliminary data.

Chart III.3.1 Dinar liquidity (daily stock and moving averages, in RSD bn)



Source: NBS.

In addition to FDI, the rise in total liabilities was prompted by an increase in **other non-resident investment in Serbia**, by EUR 2.4 bn – at end-2018, they stood at EUR 22.4 bn, accounting for 36.1% of total liabilities. Within other investment, the highest increase was observed for financial loans (by EUR 1.6 bn to EUR 17.7 bn), followed by trade loans and advance payments (by EUR 586.2 mn to EUR 2.9 bn). Liabilities based on **non-resident portfolio investment in Serbia** (primarily government liabilities) went down by EUR 661.1 mn, measuring EUR 4.7 bn, or 7.7% of total liabilities at end-2018. These liabilities contracted on account of balance of payments transactions (by EUR 889.5 mn), as the eurobond issued by Serbia in 2013 fell due, while currency and other changes in the international financial market pushed them up (by EUR 228.4 mn).

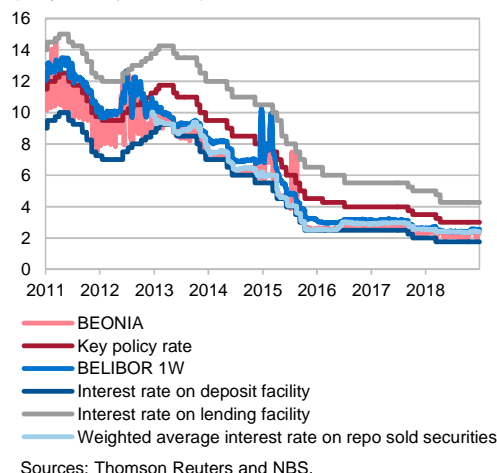
### 3 Financial market trends

#### Interest rates

The cuts in the NBS key policy rate impacted the average repo rate,<sup>12</sup> which in Q1 fell by 0.2 pp to 2.4%. As the key policy rate stayed on hold until year-end, the average repo rate remained broadly unchanged, despite minimum volatility, and stood at 2.4% at year-end.

Average daily trading volumes in the **overnight interbank money market** amounted to RSD 2.9 bn in

Chart III.3.2 Interest rate movements (daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

2018, mirroring the 2017 levels. BEONIA declined – in the first three quarters, it fell from 2.4% to 2.0%, reflecting a reduction in the key policy rate and rising excess dinar liquidity. However, in Q4 BEONIA recorded a moderate rise. In December, it moved at 2.2% on average. BELIBOR rates of all maturities displayed marginal volatility in 2018. In Q1, BELIBOR rates of all maturities recorded a moderate fall of around 0.2 pp. In the following nine months, BELIBOR rates of all maturities recorded a minimum rise – at year-level, they

<sup>12</sup> The rate achieved at repo auctions weighted by the amount of sold securities.

Chart III.3.3 **Stock of sold dinar government securities**  
(in RSD bn)

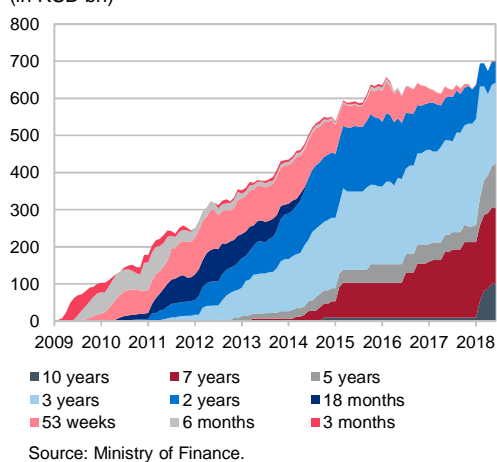
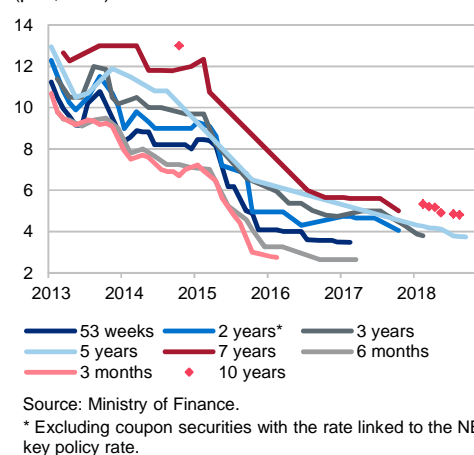


Chart III.3.4 **Interest rates in the primary market of government securities**  
(p.a., in %)



fell by around 0.1 pp, moving in December from 2.4% to 3.2%.

The year 2018 saw a further decline in interest rates in the **primary market of dinar government securities**, reflecting continued monetary accommodation by the NBS and an improved fiscal position. At auctions of three-year securities early in the year, interest rates were cut by 0.5 pp relative to end-2017, measuring 3.8% in February 2018. Besides, the government issued five- and ten-year benchmark bonds, with interest rates reduced by over 0.5 pp in 2018, to 3.7% and 4.8%, respectively. The last auction of dinar bonds was held in early September, as 2018 saw better than planned fiscal policy results, which further reduced the government's need to borrow. This is also confirmed by the decision to organise late in the year two auctions of early redemption of dinar three-year securities, which were due on 22 February 2019. The planned buyback volume of RSD 10 bn was realised at both auctions, with the rates of 2.9% in November and 3.0% in December.

The rates declined also on account of non-residents' increased interest in long-term dinar securities, which was particularly pronounced for ten-year dinar bonds, when non-residents purchased over 75% of issued securities.

In H1 2018, the government also held **auctions of euro government securities**, with interest rates also on a decline. The drop was the most pronounced for five-year securities, with interest rates down from 2.4% in November 2017 to 1.8% in April 2018. Shorter-maturity rates declined somewhat less – in mid-2018, they moved from 0.45% for one-year to 1.2% for three-year maturity.

In 2018, the government offered for the first time seven-year euro securities, with the rate matching the coupon rate of 2.5%.

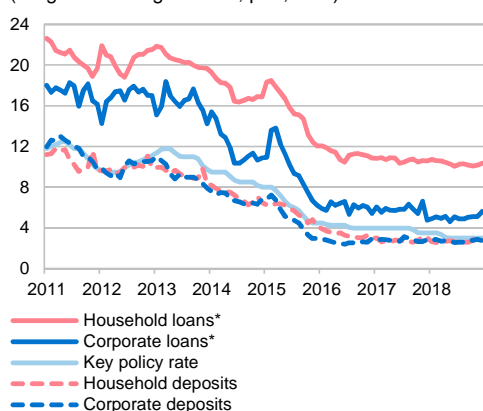
Consistent with trends in the primary market, the **rates of return in the secondary market** also declined – relative to December 2017, they were down by over 0.5 pp. At end-2018, they moved from 2.8% for one-month to 4.7% for nine-year maturity (110 months). It is worth noting that the issue of ten-year dinar bonds extended the yield curve from seven to ten years. Also, the rate of return was reduced by over 0.5 pp for the longest maturity, while at end-2017 the rate for seven-year maturity (82 months) equalled 5.4%. Total trading volumes in the secondary market in 2018 amounted to RSD 377.6 bn, down by 8% compared to 2017.

In the course of 2018, the **weighted average rate on new dinar bank loans** to households fell by 0.2 pp to 10.3% in December. This reflects primarily the movement in the interest rate on cash loans, which fell by 0.4 pp to 10.8% in December. The same period saw a reduction in rates on consumer loans, from 8.3% to 7%, while there was a slight increase in rates on other non-categorised loans (by 0.2 pp to 9.3%). The weighted average rate on dinar corporate loans oscillated around 5% from January to November, only to rise to 5.6% in December. At the year-level, rates on dinar loans increased primarily owing to a rise in rates on current assets loans, which stood at 5.9% in December 2018.

**The decline in rates on euro-indexed loans** to households continued in 2018. In December, the average rate was 3.9%, down by 0.3 pp y-o-y. The average rate on



**Chart III.3.5 Interest rates on dinar loans and deposits of corporates and households\***  
(weighted average values, p.a., in %)



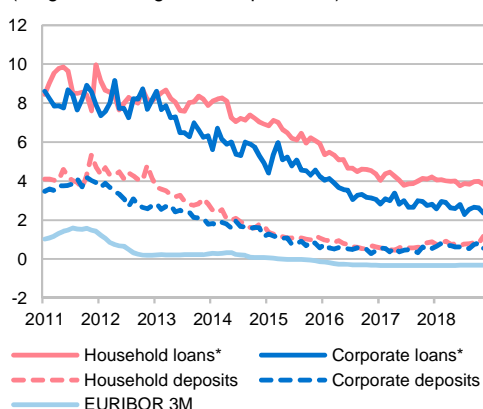
Source: NBS.

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

housing loans declined somewhat less (0.2 pp) – as of February 2018, these loans were extended at the rate of 2.8%.

Similarly to end-2017, euro-denominated corporate loans were extended at the rate of 2.8% in December 2018. However, moderate changes in interest rates were recorded for new corporate loans, as the rates on current assets loans were reduced (from 0.2 pp to 2.4%), as well as on investment loans (by 0.1 pp to 3.2%), while the rates on other non-categorised loans went up – from 2.7% in December 2017 to 2.9% in December 2018.

**Chart III.3.6 Interest rates on FX loans and deposits of corporates and households\***  
(weighted average values, p.a., in %)



Sources: NBS and European Banking Federation.

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

\*\* Euro and euro-indexed.

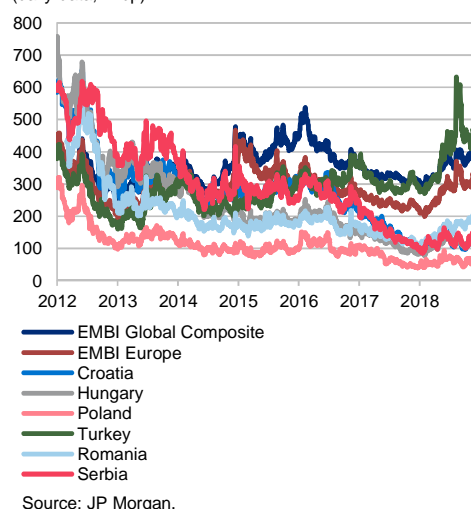
The rates on **dinar household savings** equalled 3.1% in December 2018, staying broadly unchanged y-o-y, while interest rates on **euro savings** went up by 0.1 pp to 1.0%. The rates on term euro corporate deposits also increased in 2018, by 0.2 pp to 0.7% in December, while the rates on dinar term deposits fell by 0.1 pp to 2.75%.

## Country risk premium

The main sources of uncertainty in 2018 were the mounting protectionism in international trade, geopolitical tensions and the pace of normalisation of monetary policies of leading central banks which put an upward pressure on the global risk premium of emerging markets. Furthermore, the deterioration of macroeconomic situation in some Latin American countries and Turkey triggered capital outflows from these countries and a led to a sharp rise in their risk premia. In 2018, the composite risk indicator of emerging markets, EMBI Global Composite, edged up on average by 34 bp, and the risk premium of European emerging markets, EMBI Europe, by 39 bp.

Serbia's risk premium was 30 bp lower compared to 2017, averaging 123 bp in 2018. Early in the year it dropped to a record low level (85 bp) and while it did rise afterwards under the impact of global factors, it remained among the lowest in the region. Domestic factors that worked to reduce Serbia's risk premium were primarily a significant narrowing of internal and external imbalances, which reduced the government's borrowing needs, and favourable growth prospects. At the same time, this

**Chart III.3.7 Risk premium indicator – EMBI by country**  
(daily data, in bp)



Source: JP Morgan.

boosted the country's resilience to potential shocks from the international environment, as confirmed by Standard & Poor's which in December 2018 improved Serbia's outlook to positive from stable and affirmed the country's credit rating at BB.

## Trends in the FX market and exchange rate

In 2018, the dinar gained 0.2% vis-à-vis the euro. Appreciation pressures which prevailed in 2017 persisted in the major part of 2018, reflecting the continuation of positive macroeconomic trends and favourable prospects for the period ahead. This was confirmed by a further rise in long-term investment of foreign investors and the improved credit rating outlook. Divergent pace of economic growth and normalisation of monetary policies of the US and the euro area caused the euro to lose 4.4% against the dollar in 2018, which reflected on the dinar's weakening relative to the US currency, by 4.1%.

The depreciation pressures in January were triggered by seasonal factors, typical for the start of the year – above all higher FX demand of energy importers. In the following months, appreciation pressures prevailed, rising on the back of a high FDI inflow and continued export growth, as well as high interest of non-residents in

long-term dinar government securities, who stepped up their investment in February and March. Appreciation pressures persisted in the following months, supported by the lower current account deficit and a high FDI inflow. Looking at the factors in the domestic FX market, appreciation pressures were fuelled by high purchases of foreign cash, the rise in FX-indexed assets of banks<sup>13</sup>, as well as higher volume of non-resident card payments in Serbia (i.e. a higher inflow of foreign currency from tourism). All the way until September these inflows by far exceeded corporate and non-resident demand for foreign currency. In the months thereafter, FX supply and demand were almost balanced, which weakened the appreciation pressures and occasionally gave rise to milder depreciation pressures in Q4. This was caused by somewhat higher FX demand of energy importers and non-residents, which at the quarterly level remained fully covered by FX supply.

To ease excessive short-term volatility of the dinar exchange rate, in 2018 the NBS intervened in the IFEM on both the purchase and the sale side. At the annual level, the NBS purchased EUR 1,580.0 mn net, thus boosting the country's FX reserves.

The average daily interbank trading volume in the IFEM<sup>14</sup> in 2018 reached EUR 27.6 mn, down by 2.2 mn from 2017. Consistent with lower trading volumes, the

Chart III.3.8 Movements in EUR/RSD exchange rate and NBS FX interventions

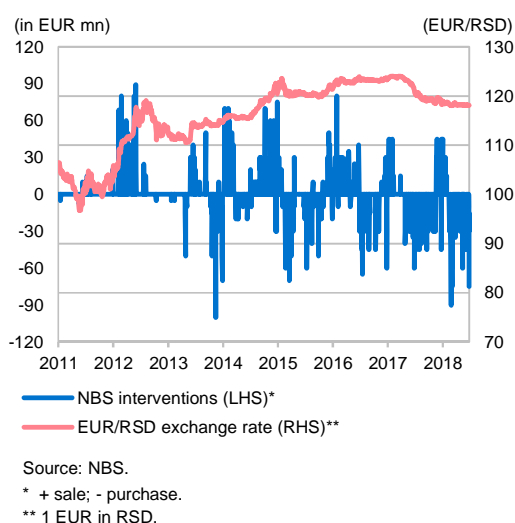
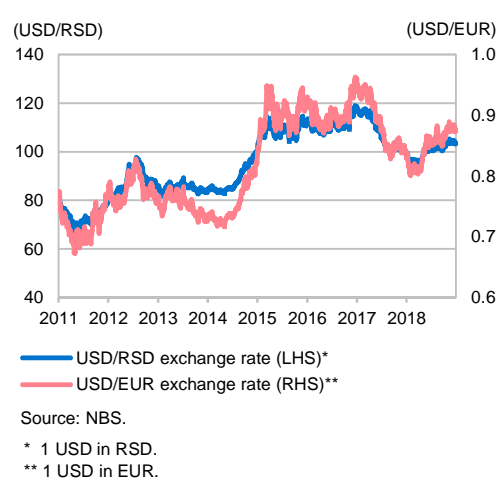


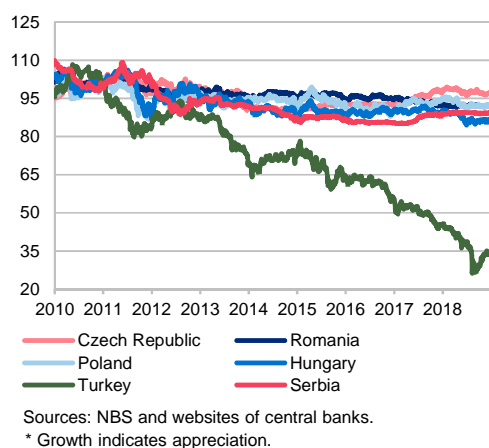
Chart III.3.9 Movements in RSD/USD and EUR/USD exchange rates



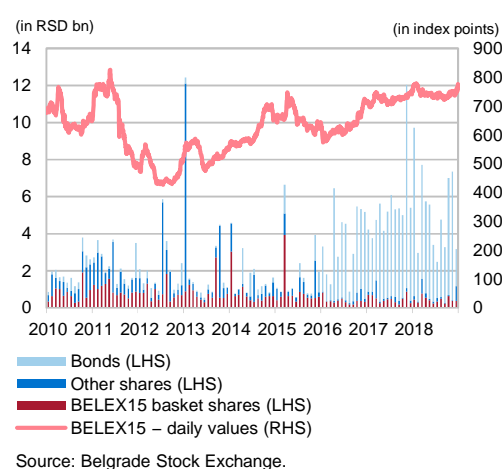
<sup>13</sup> Aiming to balance their open long FX position and thus reduce the exposure to FX risk, banks sell foreign currency, which leads to strengthening of the dinar.

<sup>14</sup> Excluding the NBS.

**Chart III.3.10 Movements in exchange rates of national currencies against the euro\***  
(daily data, 31 December 2010 = 100)



**Chart III.3.11 BELEX15 and Belgrade Stock Exchange turnover**



volatility of the RSD/EUR exchange rate eased mildly, as measured by EWMA<sup>15</sup> and EGARCH<sup>16</sup>.

The dinar was the only currency among regional peers under the similar exchange rate regimes which mildly strengthened in 2018. The Romanian leu weakened by a slight 0.1%, while the Czech koruna lost 0.7%, the Polish zloty 3.0%, the Hungarian forint 3.5% and the Turkish lira 24.6%.

## Stock exchange trends

Both Belgrade Stock Exchange indices oscillated in 2018. After declining in H1, they turned upward by the year-end. At end-December, BELEX15 equalled 761.7 index points, rising somewhat relative to end-2017 (759.8 index points), while the general index BELEXline, measuring 1,589.4 index points at year-end, was lower by 4.6%.

March 2018 saw the launching of Serbia: IPO Go! project, implemented by the BSE and financed by the EBRD. In November, a private energy company launched the first initial public offering<sup>17</sup> in Serbia in nearly 80 years.

In 2018, the BSE recorded weaker investor activity than in 2017, with total share trading reaching RSD 7.8 bn, down by 5.4% from 2017. The bulk of trading (65.9%) referred to BELEX15 shares. Non-resident share trading accounted for 38.6% of the total turnover (RSD 3.0 bn). Non-residents were more active on the sale side, as net sellers of RSD 1.4 bn in 2018.

Compared to 2017, total bond trading in 2018 contracted by 5.6%, to RSD 55.4 bn. Almost the whole turnover related to long-term RS bonds, while EBRD bonds accounted for RSD 0.3 bn.

The BSE market capitalisation decreased by RSD 26.1 bn. The market value of shares listed in the regulated segment lost RSD 6.4 bn net (total value of shares in the open market segment decreased by RSD 20.8 bn, while the value of shares in the prime and standard segment increased by RSD 14.4 bn). The capitalisation of the MTP<sup>18</sup> segment decreased by 8.1%, to RSD 223.3 bn. Thus, the share of market capitalisation in estimated GDP fell to 10.2% at end-2018.

In the majority of regional exchanges, share indices were on a decline (Sofia -12.2%, Zagreb -5.1%, Bucharest -

<sup>15</sup> EWMA (Exponentially Weighted Moving Average) – method of weighted moving averages where percentage daily changes in the exchange rate are assigned different weights for different points in time, with weights declining exponentially the further they are from the present moment.

<sup>16</sup> EGARCH (Exponential General Autoregressive Conditional Heteroskedasticity) – method of estimating conditional variance showing the asymmetrical effect of positive and negative shocks on conditional variance estimation.

<sup>17</sup> The Initial Public Offering (IPO) is a transaction by which a company is transformed from some of the closed forms into an open, public joint-stock company, offering for the first time its shares to the public, i.e. potential investors. The company's capital is corporatised through IPO, i.e. expressed in terms of the number and value of shares.

<sup>18</sup> MTP is a multilateral trading platform. It is set up by the Belgrade Stock Exchange and incorporates shares of companies that are currently not eligible for regulated market listing.

4.8%, Budapest -0.6%, Ljubljana -0.2%), while an upward trend was recorded in Skopje (36.6%), Sarajevo (11.5%), Podgorica (6.5%) and Banjaluka (3.0%).

## 4 Money and loans

### Monetary aggregates M1, M2 and M3

After a seasonal fall early in the year, all monetary aggregates recorded a rise since March. Stronger economic and lending activity had a positive impact on money supply in 2018. On the other hand, higher government deposits in the banking system, resulting from the fiscal surplus and successful auctions of five- and ten-year securities (primarily in H1), worked in the opposite direction.

In December 2018, money supply M1, M2 and M3 recorded y-o-y growth rates of 18.3%, 16.7%, and 14.5%, respectively. Positive contributions came from both dinar and FX components, while low and stable inflation, anchored inflation expectations and relative stability of the exchange rate pushed the dinarisation of corporate and household deposits up by 1.4 pp to 32.2% in 2018.

Growth in dinar monetary aggregates in 2018 was driven by the increase in demand deposits (by RSD 104.0 bn), primarily owing to higher transaction deposits of corporates (by RSD 62.0 bn). Thanks to the accelerated economic growth, deposits in manufacturing, trade and construction sectors rose the most. At the same time, balances in household transaction accounts went up by RSD 41.3 bn. Other sectors also recorded deposit growth.

A positive contribution to M2 growth also came from term dinar deposits which increased by RSD 23.2 bn in 2018, mainly owing to the rise in household deposits. Dinar savings of households<sup>19</sup> posted vibrant growth in 2018 (by 22.2% to RSD 60.5 bn at end-December), supported by the preserved macroeconomic stability, as well as more favourable interest rates and tax treatment compared to FX savings. Term dinar deposits of the corporate sector also increased, by RSD 9.4 bn – mainly owing to the rise in deposits of trade and construction companies.

The rise in FX deposits (by EUR 1.6 bn) was driven by the corporate sector. FX inflows from exports, FDI and external borrowing of companies boosted FX deposits of

corporates by EUR 904.8 mn. At the same time, households increased their FX deposits by EUR 574.1 mn, to EUR 9.6 bn at end-December 2018.

Chart III.4.1 **Monetary aggregates and CPI**  
(y-o-y rates, in %)

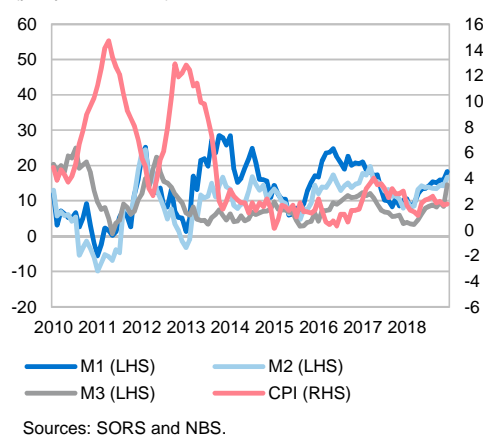


Table III.4.1 **Monetary survey**  
(RSD bn)

	Dec. 2017	Dec. 2018	Changes in 2018
<b>Net foreign assets</b>	<b>986,304</b>	<b>1,115,637</b>	<b>129,332</b>
Bank net foreign assets	-200,575	-223,347	-22,772
<b>Net domestic assets of the banking sector</b>	<b>1,289,121</b>	<b>1,490,216</b>	<b>201,095</b>
Net domestic loans	2,420,598	2,607,225	186,627
Net claims on government	353,123	345,646	-7,477
Government loans	634,455	646,691	12,235
Government deposits	-281,332	-301,045	-19,712
Loans to other resident sectors	2,067,475	2,261,579	194,104
Loans to households	904,948	1,017,998	113,050
Loans to the corporate sector	1,102,713	1,188,180	85,468
Loans to other financial corporations	30,915	27,068	-3,846
Loans to local authorities	27,627	26,730	-897
Loans to non-profit and other organisations	1,273	1,603	329
Other net assets	-1,131,477	-1,117,009	14,468
<b>Money supply M3</b>	<b>2,275,425</b>	<b>2,605,853</b>	<b>330,428</b>
Money supply M2	872,007	1,017,826	145,819
Money supply M1	669,673	792,332	122,659
Currency in circulation	163,931	182,615	18,684
Sight deposits	505,742	609,717	103,976
Dinar savings and term deposits	202,334	225,494	23,160
FX deposits	1,403,418	1,588,027	184,608

Source: NBS.

<sup>19</sup> Including only resident assets.

## Bank loans

Excluding the exchange rate effect<sup>20</sup>, in December 2018 total domestic loans recorded y-o-y growth of 9.9% (from 7.3% in December 2017), while their share in GDP equalled 43.4%. Faster lending growth reflects the rise in corporate and household loans which accelerated to 8.1% and 12.5% y-o-y respectively in the face of continued NPL resolution efforts of banks. In 2018, banks wrote off RSD 36.0 bn-worth of NPLs and directly sold from their balance sheets RSD 34.8 bn. Excluding the NPL write-off and sale effect<sup>21</sup>, in December 2018 domestic loans recorded y-o-y growth of 12.2%, with corporate loans rising by 11.6% and household by 13.6%.

Lending was mostly financed from domestic sources. Banks' credit potential received the greatest positive contribution from the rise in non-monetary sector deposits<sup>22</sup> and capital, along with the increase in net external liabilities (since external liabilities rose more than external receivables).

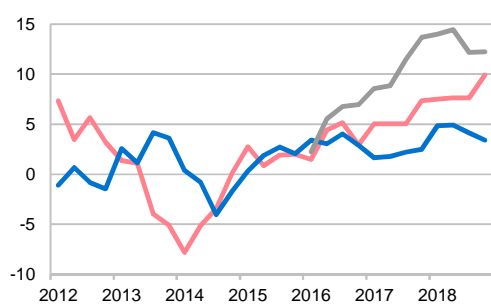
Excluding the exchange rate effect, in 2018 corporate loans went up by RSD 85.9 bn, or 8.1%, with company loans accounting for almost 85% of this growth. The greatest increase in lending was recorded for manufacturing, trade, real estate and transport sectors. In terms of purpose, liquidity and current assets loans

accounted for the bulk of banks' corporate receivables in 2018 (42.9%), followed by investment loans with 39.4%.

The volume of new corporate loans in 2018 (RSD 934.7 bn) increased by 2.2% relative to 2017 and the major part were liquidity and current assets loans (52.2%). The amount of new investment loans reached maximum RSD 242.7 bn, rising by 14.0% relative to 2017, whereby the share of these loans in total new corporate loans edged up to 26.0% (from 23.3% in 2017). The findings of the NBS bank lending survey show that, under the impact of competition in the banking sector, greater risk appetite and positive expectations regarding the general economic situation, banks eased their corporate credit standards in Q2 2018 and kept them unchanged thereafter. Corporate borrowing terms were more favourable in 2018, in terms of the lower price of loans, increased maximum amount and repayment term and relaxed collateral requirements. Throughout the year banks noted higher loan demand of corporates, driven by current assets and investment financing and, as of Q2, also by acquisitions.

In 2018, excluding the exchange rate effect, household loans rose by RSD 112.3 bn. In terms of purpose, cash loans recorded the strongest growth (including refinancing loans), rising by RSD 63.7 bn. It should be noted that these loans are almost always approved in dinars (over 99%). Concurrently, housing loans,

**Chart III.4.2 Lending activity and GDP**  
(y-o-y rates, in %)

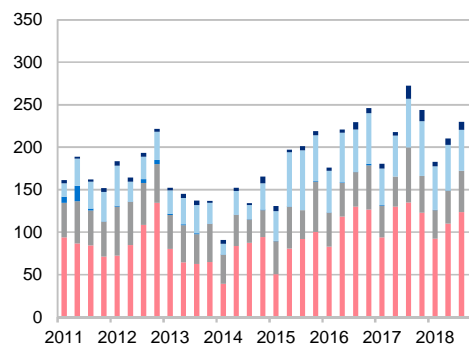


Sources: NBS and SORS.

\* Excluding the exchange rate effect.

\*\* Excluding the effect of NPL write-off and sale since early 2016.

**Chart III.4.3 Structure of new corporate loans**  
(RSD bn)



Source: NBS.

<sup>20</sup> Calculated at the dinar exchange rate against the euro, Swiss franc and US dollar as at 30 September 2014, taking into account the currency structure of loan receivables.

<sup>21</sup> Excluding the effect of NPL write-off and sale since the beginning of 2016. As at end-December 2018, banks wrote off RSD 182.3 bn and sold to non-bank entities RSD 88.8 bn-worth of NPLs that were in their balance sheets at the time.

<sup>22</sup> Mainly owing to a significant rise in deposits in December, LTD ratio decreased by 4.6 pp, to 92.5% in 2018.

<sup>23</sup> The NBS conducts the survey since early 2014, on a quarterly basis. Participation is voluntary and the response rate almost 100%.

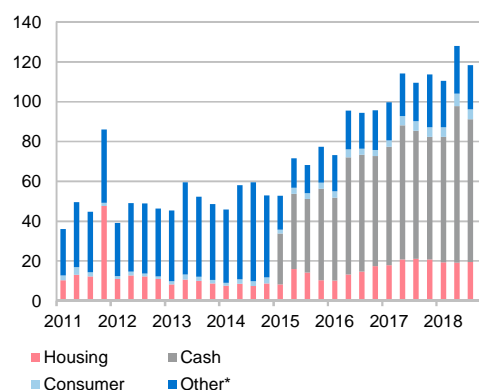


supported by low interest rates, continued to extend a positive contribution to household lending growth. In 2018, housing loans gained RSD 27.0 bn, an increase higher than in the last two years combined and the strongest since 2011, when the subsidised lending programme was in place.

The volume of new household loans in 2018 (RSD 473.4 bn) expanded by 8.4% compared to 2017. The major part were cash loans (59.2% of new household loans). The amount of new housing loans in 2018 – RSD 78.3 bn, also confirms that the recovery in this segment of lending extended for the second consecutive year.<sup>23</sup> Consumer loans went up as well, and current account overdrafts increased mildly. Credit card borrowing was somewhat lower than in 2017.

Bank lending surveys indicate that household credit standards were further eased in 2018. The relaxation primarily concerned the dominant loan categories – dinar cash loans and FX-indexed housing loans and was mainly prompted by interbank competition and lower costs of funding, and, to a lesser extent, by increased risk appetite and more favourable prospects in the real estate market. Borrowing terms for households were more favourable due to lower interest margins and associated costs, relaxation of collateral requirements and, in the first three

**Chart III.4.5 Structure of new household loans (RSD bn)**

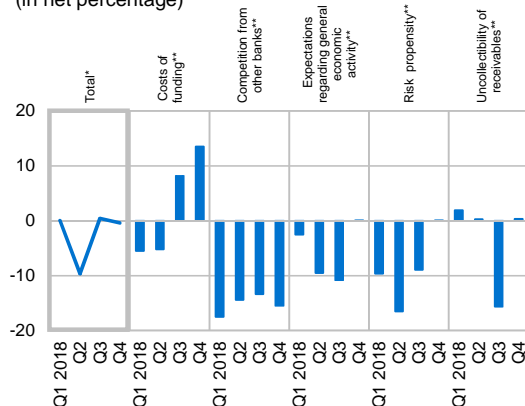


Source: NBS.

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

quarters, also the extension of repayment terms. According to survey results, household demand continued to expand, and the greatest demand was registered for dinar cash loans and refinancing loans, as well as for FX-indexed housing loans. According to banks, the main factors behind demand growth were the refinancing of current obligations and real estate purchases, prompted by the favourable situation in the real estate market.

**Chart III.4.4 Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to enterprises (in net percentage)**

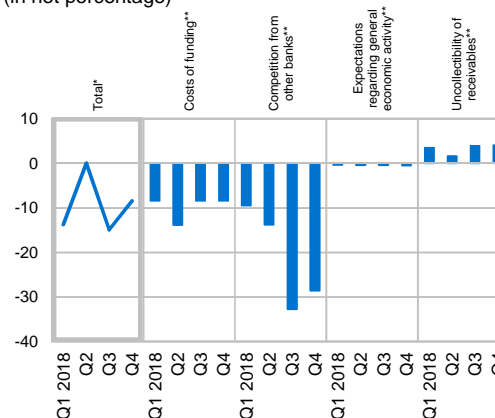


Source: NBS.

\* 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 III.4.6 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.

<sup>23</sup> The NBS conducts the survey since early 2014, on a quarterly basis. Participation is voluntary and the response rate almost 100%.

Thanks to the NBS's measures and successful implementation of the NPL Resolution Strategy, as well as growth in economic and credit activity, the NPL share in total loans continued to decline. In 2018, the gross NPL ratio edged down by 4.2 pp to 5.7% in December, its lowest level since this asset quality indicator is monitored. At the same time, in 2018 the corporate NPL ratio dropped by 5.4 pp to 5.0%<sup>24</sup>, and household NPL ratio by 1.3 pp to 4.4%<sup>25</sup>. It is important to note that the NBS continued to be proactive, strengthening the resilience of the banking system. In this context, the NBS Executive Board adopted a number of regulatory measures in December 2018 with a view to preventing new NPLs in the banking system and warding off potential negative consequences on financial stability and citizens. These measures are mainly targeting cash, consumer and other household loans (with the exception of housing loans and current account overdrafts) with the repayment term of eight years or longer. In terms of maintaining financial stability, it is important to underline that NPL coverage is high. In December, total allowances for loan impairment came at 78.7% of NPLs, while loan loss reserves continued to fully cover gross NPLs and equalled 162.2%. Also, after the introduction of Basel III standards,<sup>26</sup> the capital adequacy ratio rose further, to 22.3% in December, indicating high capitalisation of the domestic banking sector.

## 5 Dinarisation

During 2018, the NBS continued to implement activities aimed at bolstering the use of the dinar in Serbia's financial system.

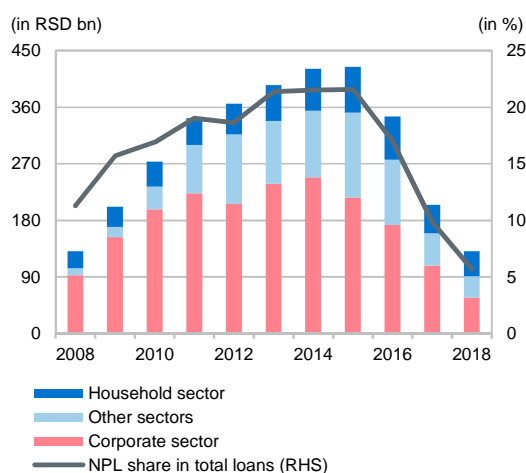
Monetary policy measures implemented by the NBS helped preserve price stability, relative stability of the EUR/RSD exchange rate and stability of the financial system, this being the key precondition for further building up confidence in the dinar.

The reserve requirement policy was used to further encourage banks to rely more on dinar sources of funding. Namely, the required reserve ratios on dinar sources of funding remained significantly lower than on FX sources, and the NBS offered remuneration only on the allocated dinar required reserves.

The NBS continued to work on the development of basic FX hedging instruments. During 2018, regular two-week and three-month FX swap auctions were organised, encouraging interbank swap trading and the development of instruments for liquidity management and FX hedging.

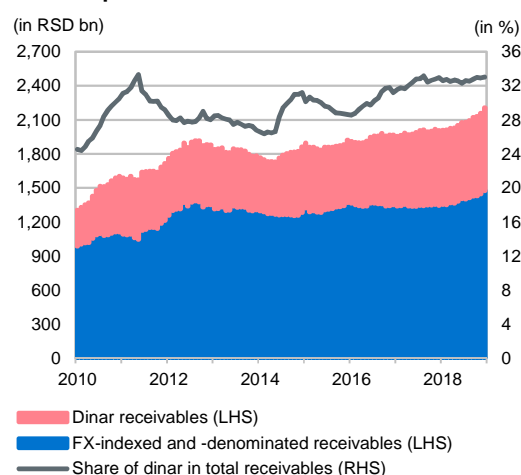
Bearing in mind that since the conclusion of the Memorandum on the Strategy of Dinarisation of the

**Chart III.4.7 NPL share in total loans, gross principle**



Source: NBS.

**Chart III.5.1 Share of dinar receivables in total corporate and household receivables**



Source: NBS.

<sup>24</sup> Includes companies and public enterprises. Observing companies only, in December 2018 the NPL share in total loans equalled 5.2%, dropping by 5.6 pp compared to one year ago.

<sup>25</sup> With entrepreneurs and private households included, the share decreased by 1.5 pp to 4.4%.

<sup>26</sup> The regulatory Basel III framework is applied as of 30 June 2017.

Chart III.5.2 Receivables by sector

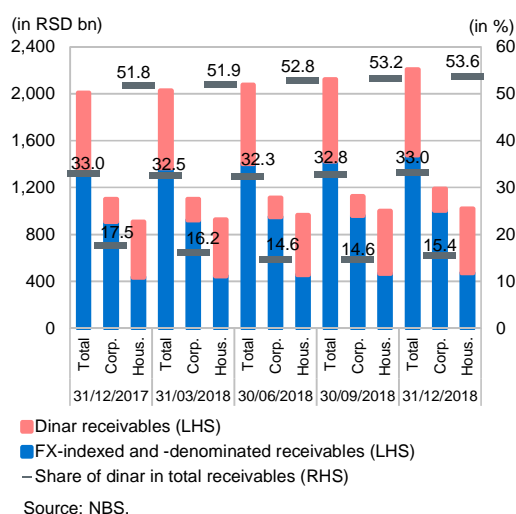
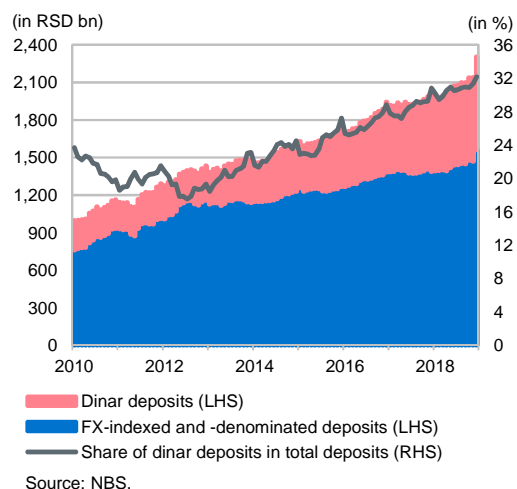


Chart III.5.3 Share of dinar deposits in total corporate and household deposits



Serbian Financial System in 2012, macroeconomic stability was ensured and financial stability strengthened, conditions were created to improve the existing dinarisation strategy. Recognising the fact that dinarisation is a gradual and long-term process, the Serbian Government and the NBS signed a new Memorandum on the Dinarisation Strategy in December 2018, in which they reviewed the results of the measures and activities undertaken so far, and, based on them, defined additional measures and activities that will ensure further dinarisation and reduce FX risk in the system.

In accordance with the new Memorandum, and through its reserve requirement policy, the NBS will continue to encourage banks to rely more on dinar sources of funding and increase the share of dinar in total loans. To support the further development of the financial market, the NBS will continue to implement measures and activities aimed at strengthening the credibility of interest rates in the interbank money market as the basis for improving the domestic money and capital market, with particular attention being paid to further development of the market of FX risk hedging instruments. By using the data and information obtained from surveys and other sources, the NBS will carry out the necessary analyses, which will be the basis for the adoption of regulatory and prudential measures aimed at increasing the degree of dinarisation. Also, the NBS will continue to promote the use of FX risk hedging instruments, to raise awareness of the need to hedge against FX risks, as well as to conduct educational

activities on investment options in dinars in the domestic market.

In 2018, the degree of dinarisation, measured as the share of dinar in total bank receivables from corporates and households remained unchanged relative to end-2017 (33.0%), reflecting proportional growth in dinar and FX/FX-indexed receivables.

Dinarisation of household receivables continued increasing in 2018 mainly as a result of the rise in cash loans, which are typically approved in dinars. FX and FX-indexed loans to households rose modestly in this period, which led to an increase in the dinarisation of household receivables from 51.8% at end-2017 to 53.6%. This is the highest degree of this indicator since its monitoring began in June 2008.

The degree of dinarisation of corporate receivables decreased by 2.1 pp, to 15.4% at end-2018, driven mainly by the growth in FX-indexed and FX loans. As for the composition of these loans, the approval of investment loans stepped up the most as they are a significant source of financing investment in equipment. Also, such fall in the dinarisation of corporate receivables is largely attributable to banks' NPL resolution efforts involving write-off and sale of a part of those receivables to non-banking sector entities, given that the bulk of those loans are in dinars.



Chart III.5.4 Deposits by sector

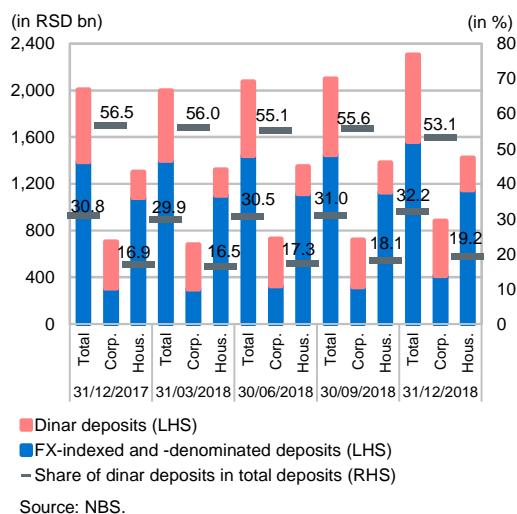
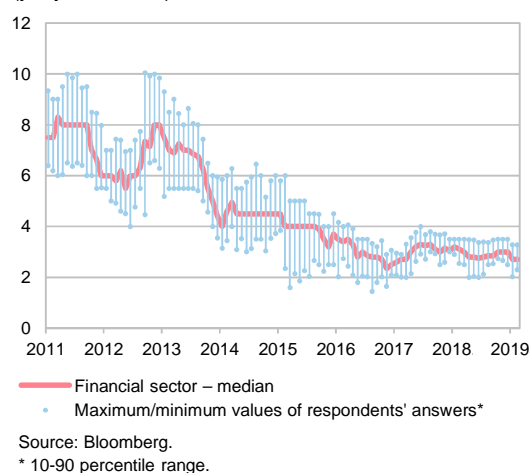


Chart III.6.1 One-year ahead inflation expectations of the financial sector (y-o-y rates, in %)



Excluding the exchange rate effect<sup>27</sup>, the dinarisation of receivables rose from 32.9% at end-2017 to 33.0% at end-2018.

The degree of dinarisation of deposits, measured as the share of dinar in total corporate and household deposits with banks, continued to increase in 2018, reaching the highest level on record – 32.2%, up by 1.4 pp relative to end-2017.

Sector-wise, this share edged up in the household segment to 19.2% at end-2018 (by 2.3 pp), owing to the rise in transaction deposits of households and also to the dynamic growth in dinar savings, which can be associated with favourable developments in the labour market. Dinar savings<sup>28</sup> went up in 2018 by RSD 10.9 bn (21.8%).

The degree of dinarisation of corporate deposits dropped in the same period to 53.1% (by 3.4 pp), reflecting mainly dynamic growth in FX deposits on account of good export results of the economy.

## 6 Inflation expectations

Two-year ahead inflation expectations of the financial and corporate sectors continued to move around the target midpoint as a result of the preserved macroeconomic, fiscal and financial stability, low inflationary pressures even in conditions of strong economic growth, as well as

timely and well-calibrated NBS's decisions. Anchored inflation expectations enhance the efficiency of monetary policy indicating the confidence of market participants in the measures taken by the NBS.

According to the results of the Ipsos and Bloomberg surveys, **one-year ahead inflation expectations of the financial sector moved within the target tolerance band (3±1.5%) throughout 2018**. According to Ipsos, short-term inflation expectations of the financial sector declined from 3.0% in Q1 to 2.5% in December, probably as a result of lower inflation in 2018, which averaged 2.0%. Also, according to Bloomberg, one-year ahead inflation expectations were somewhat lower at end-2018 than at the start of the year, standing at 3.0% in Q4 relative to 3.2% in January. Looking at a longer horizon, the financial sector expected price stability and inflation within the NBS target tolerance band for more than five years now (since October 2013). Anchored inflation expectations are also reflected in the significantly lower dispersion of individual expectations of financial sector representatives.

Low inflationary pressures are also indicated by the **one-year ahead inflation expectations of corporates**, which moved around the lower bound of the NBS target tolerance band for the greater part of 2018. After standing at the 3.0% target midpoint in Q1, one-year ahead inflation expectations of corporates gradually declined to 2.2% in December.

<sup>27</sup> Calculated at the dinar exchange rate against the euro, Swiss franc, US dollar, pound sterling and the Japanese yen as at 30 September 2014, taking into account the currency structure of loan receivables.

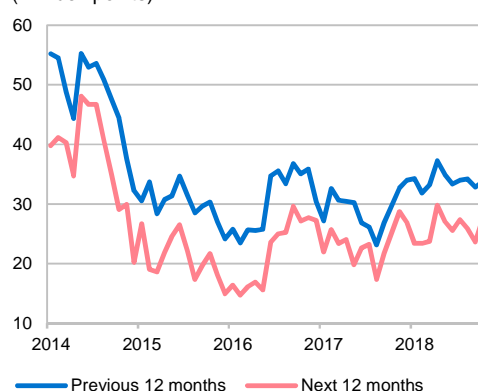
<sup>28</sup> Including savings of both residents and non-residents.

**Inflation expectations of the household sector**, which are usually higher than those of other sectors, stood at 5.0% in H1 2018. They recorded a temporary rise in July and October, probably on the back of media reporting on meat, vegetable and petroleum product price hikes. At end-2018, inflation expectations of households stood at 6.0%.

At the same time, the **results of the qualitative survey of household inflation expectations**<sup>29</sup> show that the index of expected inflation continued to record lower values than the index of perceived inflation, meaning that households expected inflation in the coming twelve months to be lower than in the previous year.

**Medium-term inflation expectations of the financial and corporate sectors continued to move within the NBS target tolerance band throughout 2018.** After reaching 3.5% in January, two-year ahead inflation

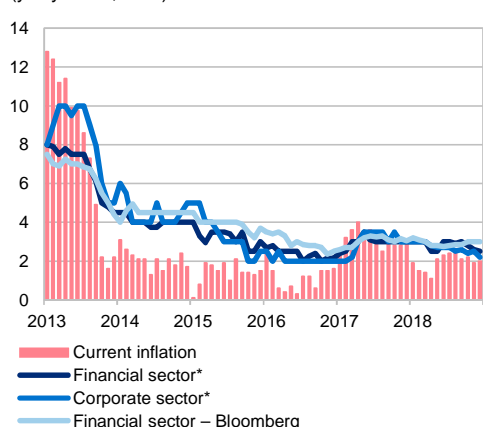
**Chart III.6.3 Inflation perceived and expected by households\***  
(in index points)



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

\* Ipsos and Gallup agencies until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

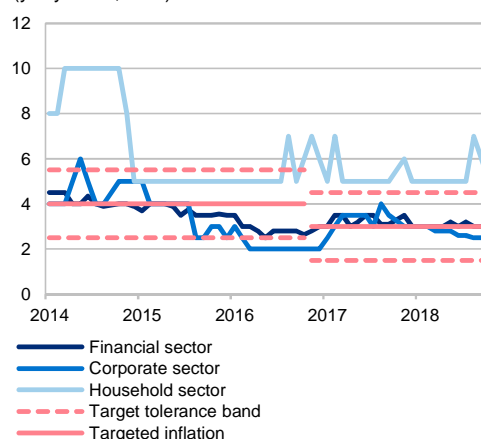
**Chart III.6.2 Current inflation and one-year ahead inflation expectations\***  
(y-o-y rates, in %)



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

\* Ipsos and Gallup agencies until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

**Chart III.6.4 Two-year ahead inflation expectations\***  
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS.

\* Ipsos and Gallup agencies until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

expectations of the financial sector stood at the 3.0% target midpoint most of the time. Corporates lowered their medium-term expectations from 3.0% in January to 2.3% in December, while household expectations were stable at 5.0% for the greater part of the year.

## 7 Fiscal trends

Public finances posted a surplus in 2018, for the second year in a row. Fiscal trends in 2018 were significantly more favourable than expected – instead of a deficit envisaged by the Fiscal Strategy (0.7% of GDP), consolidated budget recorded a surplus of RSD 32.2 bn or 0.6% of GDP. Excluding interest expenses, the surplus

<sup>29</sup> For more details on the qualitative expectations of households see the February 2016 Inflation Report – Text box 2, p. 15

Chart III.7.1 Fiscal revenues, expenditures and result  
(in % of GDP)

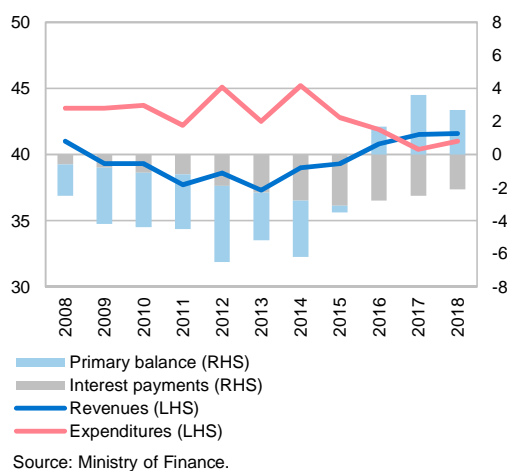
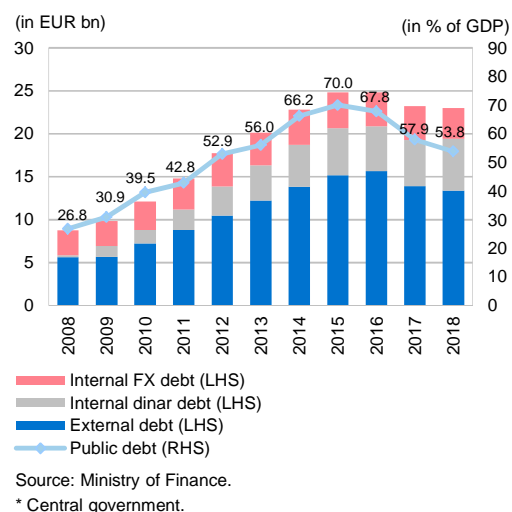


Chart III.7.2 Public debt\*



equalled 2.7% of GDP. The continuation of positive fiscal developments in 2018 was largely underpinned by economic growth and positive labour market trends, which resulted in better than planned public revenue performance. A considerable rise in government capital expenditure and higher public sector wages and pensions boosted investment and consumption growth, while not causing any major inflationary pressures.

**Consolidated revenue** went up by 4.6% in real terms in 2018 (41.6% of estimated GDP) compared to 2017. More favourable labour market trends brought about higher revenues from contributions, by 7.1% in real terms, which, observed on individual basis, were the main driver of revenue growth. The 4.8% growth in real terms was recorded on account of personal income tax. Government receipts from VAT went up by 2.2% in real terms largely on the back of rising final consumption, while the real excise income growth of 1.6% resulted from regular adjustments of excise tax. A significant contribution to the rise in total revenue stemmed from non-tax revenue which rose by 6.5% on account of both better collection of regular non-tax revenue and payment of profit to the budget by some public enterprises.

**Consolidated expenditure** reached 41.0% of estimated GDP in 2018, up by 5.8% in real terms relative to 2017, driven mainly by rising capital expenditure (45.9%) whose share in GDP climbed from 2.8% in 2017 to 3.9% in 2018. Successful implementation of the fiscal consolidation programme in the past three years created room for some fiscal relaxation in 2018 that would not jeopardise the

main medium-term fiscal policy goals. A portion of the budget funds was used for targeted public sector wage and pension increases. Employee expenses were increased by 7.8% in real terms and their share in GDP amounted to 9.3%. At the same time, budget allocations for pensions made up 10.4% of GDP, up by 3.4% in real terms compared to 2017. The rise in outlays for the purchase of goods and services (11.6% in real terms) reflects primarily higher spending of the National Health Insurance Fund and local governments. On the other hand, interest expenses fell (12.1% in real terms) amid decreasing government need for borrowing and lower borrowing price, driven by the NBS monetary policy easing and the fall in the country risk premium. Payments under issued guaranties, as well as the amount of budget loans, also went down from 2017. Subsidies moved in the same direction, falling by 5.1% in real terms.

Positive fiscal result and the maturing of the 2013 eurobond (USD 1 bn) brought **the central government public debt further down** and sustained the falling trajectory of the share of public debt in GDP initiated in 2016. This shows that the past fiscal consolidation measures have achieved the desired effects.

The share of public debt in projected GDP in 2018 was reduced by 4.1 pp to 53.8%. At end-2018, 74% of public debt was in foreign currency, while the share of debt in USD was cut to 26.5%. The targeted medium-term fiscal deficit of around 0.5%, envisaged by the 2019–2021 Fiscal Strategy, will ensure that public debt remains on a downward path in the coming period.

## 8 Aggregate demand

### Domestic demand

Prolonged positive developments in the labour market, reflected in employment growth, unemployment decline and average wage increase, contributed to a 3.3% rise in **household consumption** in 2018, which in turn had a positive effect of 2.2 pp on GDP growth. That household consumption is on the rise is further confirmed by increased turnover in retail trade and catering, as well as the number of domestic tourist arrivals and overnight stays. The upward-trending household consumption is also supported by its key sources – 4.4% growth in real wages and 3.4% in pension outlays, followed by the 10.8% rise in newly-approved cash loans in 2018, facilitated by favourable borrowing terms which are attributable mainly to the NBS's past monetary policy easing. Also, the net inflow from remittances, measuring EUR 3.2 bn in 2018, was 16.8% higher than in 2017.

Apart from household consumption, **government consumption** also gave a contribution (0.6 pp) to GDP, having risen 3.6% in real terms in 2018. Higher government consumption resulted from increased expenditures for the purchase of goods and services, as well as wage outlays for public sector employees in the wake of the successful fiscal consolidation implemented over the past three years.

Owing to intensive implementation of infrastructure projects and favourable financial conditions, **fixed investments** posted real growth of 9.2% in 2018, with a 1.8 pp contribution to GDP. Government investment accounted for the majority of this contribution (1.2 pp), as it posted real growth of around 46% in 2018, after decelerating slightly in 2017. The resumed increase is largely attributable to faster implementation of road infrastructure projects. The rise in private investment, propped up by low borrowing costs and a stable macroeconomic environment, continued for the fourth year in a row (3.5%). This is confirmed by the increased production of machinery and equipment, as well as by higher equipment import in 2018. Rising investments were also suggested by the achieved positive dynamics of construction indicators – growth in the production of construction materials, employment and number of issued construction permits.

The main sources of investment financing also recorded a rise in 2018. The net FDI inflow rose by more than 30%

to EUR 3.2 bn owing to a stable macroeconomic climate. New investment loans posted two-digit growth (14%), and were disbursed in 2018 in the amount of RSD 243 bn. Similarly to 2017, we estimate that companies covered a portion of the sources of investment financing from own funds, having previously recorded good business results.

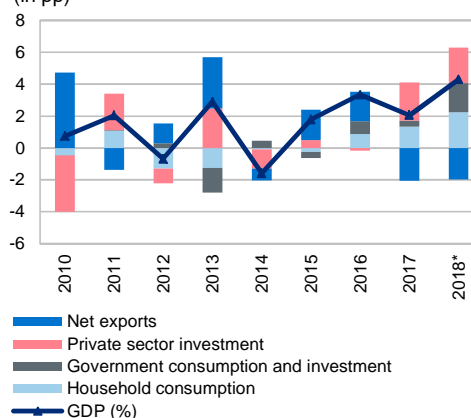
A change in **inventories** was also conducive to GDP growth (1.6 pp), as confirmed by the 5.9% rise in the inventories of finished industrial products at end-2018 relative to end-2017.

### Net external demand

Real growth in the export of goods and services in 2018 accelerated to 8.9%, driven by a further increase in the manufacturing and services exports. However, the real import of goods and services rose at a faster pace (11.1%), primarily owing to the higher import of equipment and intermediate products for production and investment purposes, and to a lesser extent due to the recovery of private consumption; hence the contribution of net exports to GDP movements remained negative in 2018 as well (2.0 pp).

Despite subdued external demand from the euro area, the euro-denominated export of goods continued to post relatively high growth in 2018 as well – according to foreign trade data, it measured 8.3% and was driven by manufacturing exports (9.1%). Growth in manufacturing exports remained broadly diversified (in 21 of the 23

Chart III.8.1 Contributions to annual GDP growth rate – expenditure side (in pp)

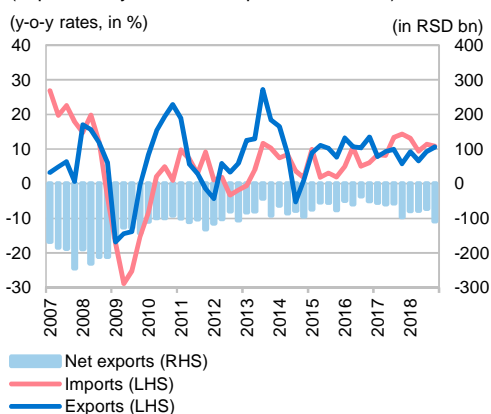


Sources: SORS and NBS calculation.

\* NBS estimate.

**Chart III.8.2 Exports and imports of goods and services**

(in previous-year constant prices, ref. 2010)

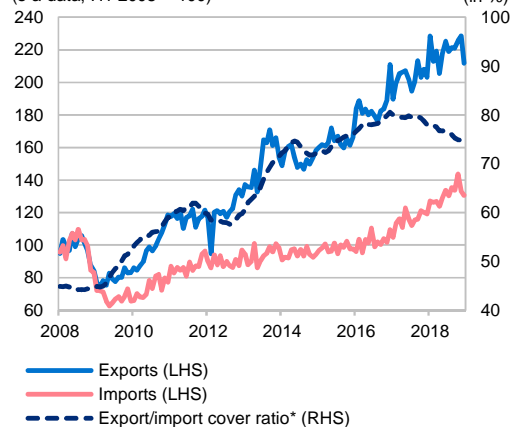


Sources: SORS and NBS calculation.

Note: NBS estimate for Q4 2018.

**Chart III.8.3 Commodity trade in euros**

(s-a data, H1 2008 = 100)



Sources: SORS and NBS calculation.

\* 12-month moving average.

manufacturing areas), with the export of base metals rising by 18.4% and providing the biggest push. Thanks to the robust export growth (by 39.6% to EUR 749.5 mn), the Smederevo steel plant<sup>30</sup> became the largest individual exporter in Serbia. As before, a high contribution came from the export of rubber and plastic products, chemical products, machinery and equipment, and petroleum products.

The export of agricultural products in 2018 was similar to last year's (down by 0.4%). Also, after poor performance at the start of the year, the export of agricultural products recovered during H2 owing to an above-average agricultural season in 2018. A major contribution to this recovery came from the export of cereals, which rose to EUR 587.4 mn in 2018.

Favourable tendencies continued in the services export, which rose 14.4% in 2018. As before, the main contribution to growth came from the export of information and communication services, which exceeded EUR 1.1 bn in 2018. In addition, a high contribution also came from business services and, to a lesser degree, from tourist and transport services.

The continuation of the investment cycle and increased needs of industry and the construction sector for imported raw materials and intermediate goods triggered the further growth in goods import. According to foreign trade data, the euro-denominated import of goods rose 13.4% in

2018, with the 15.4% rise in the import of equipment and 11.7% of intermediate goods. In addition, import growth expressed in euros was significantly affected by higher oil prices (almost 90% of the EUR 449 mn worth of the rise in the value of oil, petroleum products and gas imports is attributable to their global price hikes). Another contribution to import growth came from the recovery in domestic consumption, which resulted in a rise in the import of consumer goods of 11.8% y-o-y. Similar trends are indicated by the structure of imports observed by the EU economic destination, which shows that the main contribution to import increase came from intermediate goods and energy, and to a smaller degree from capital goods and non-durable consumer goods.

The export-to-import ratio in 2018 was 74.6%, or 83.8% if services are also included. The export of goods in December was 113.8% higher than pre-crisis,<sup>31</sup> while the import of goods exceeded its pre-crisis level by 30.9%.

## 9 Economic activity

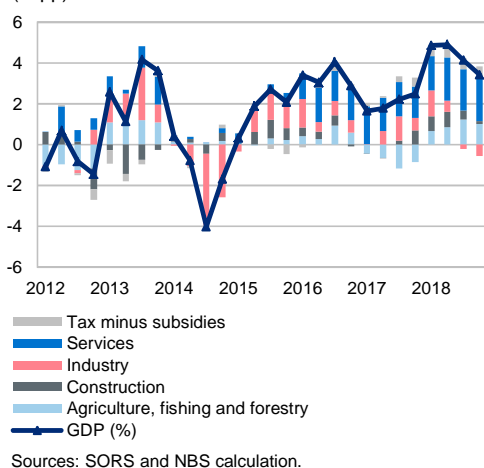
According to the data of the Serbian Statistical Office, real GDP growth in 2018 measured 4.3% (calculated as the sum of quarterly figures), which is its highest growth in the last ten years. The main contribution to growth came from the above-average results in agriculture and construction, as well as from the stepped-up activity in the majority of the service sectors. Another positive

<sup>30</sup> Since April 2017 it operates under the name HBIS GROUP Serbia Iron & Steel.

<sup>31</sup> Level from H1 2008.



Chart III.9.1 Contributions to y-o-y GDP growth rate – production side (in pp)



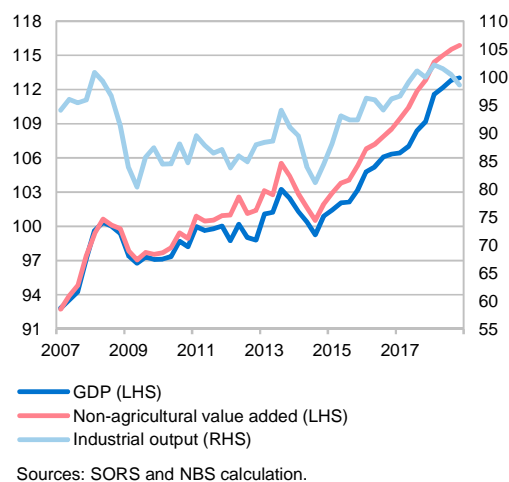
contribution came from the rising industrial production, despite the slowdown in external demand in H2.

Relative to the pre-crisis level,<sup>32</sup> economic activity at end-2018 was higher by 13.0%, measured by GDP, and by 15.9%, measured by NAVA.

**Industrial production** in 2018 recorded 1.0% growth in gross value added and provided a positive contribution of 0.2 pp to GDP. Slower growth than in previous years is attributable to the economic downturn in the euro area, Serbia's key foreign trade partner. Major overhauls in thermal power plants and low water level in rivers also played a part and were mirrored in industrial production as a 4% decline in mining activity and a 1% rise in the energy sector activity.

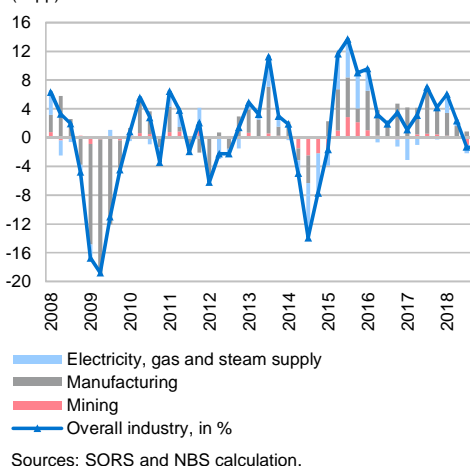
The increase in the physical volume of the manufacturing industry was particularly pronounced in H1 (3.2% y-o-y), though it slowed down in H2 (to 0.6% y-o-y) under the impact of lower external demand, hence it measured 1.8% at the year level. Lower production in the food industry reflected the introduction of tariffs, initially of 10% and later 100%, for products delivered to Kosovo and Metohija. In annual terms, growth in the physical volume of production was recorded in 18 out of 24 areas, with major contributions coming from the production of petroleum products (0.4 pp) and base metals (0.2 pp). Conversely, the production of motor vehicles was reduced due to the current stage of the cycle of Fiat's car model manufactured in Serbia.

Chart IV.9.2 Economic activity indicators (s-a, H1 2008 = 100)



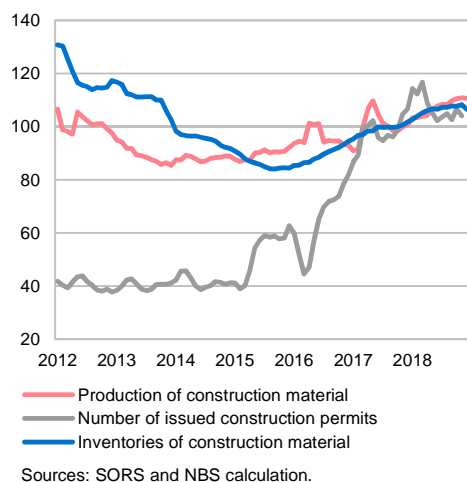
Accelerated implementation of infrastructure projects, reflected in the rise in the government's capital expenditures of 46% in 2018, as well as the real estate market recovery, helped the **construction sector** to post growth of 12.7% in 2018, with a 0.5 pp contribution to GDP. Robust growth is also confirmed by indicators of construction activity – the production of construction materials rose 7.8% in 2018, as did the number of persons formally employed in the construction sector, whereby it reached its highest level in five years. The number of issued construction permits and the value of

Chart III.9.3 Contributions to y-o-y growth of the volume of industrial production (in pp)



<sup>32</sup> Level from H1 2008.

Chart III.9.4. **Construction activity indicators**  
(quarterly averages s-a, 2017 = 100)



works projected based on those permits also increased – by 5.5% and 8.7% respectively.

The continued rise in private consumption in 2018 led to an increase in activity in the **service sectors**, which posted cumulative growth in the gross value added of 3.8%, contributing 2.0 pp to GDP growth. By sector, the major contribution to GDP growth came from trade (0.6 pp), as indicated by the 4.2% real growth in retail trade turnover. In addition, indicators in the tourism sector suggest positive developments, having recorded two-digit

growth rates in 2018 after real turnover in the catering industry rose by 10.1% and the number of tourist arrivals and overnight stays went up 11.2% and 12.1%. Also, stepped-up activity in the transport sector is indicated by the 5.3% rise in the physical volume of transport.

Growth in the gross value added of **agricultural production** in 2018 equalled 15.6%, with a 0.9 pp contribution to GDP. This means that in 2018 agricultural production overshot its multiple-year average, mostly owing to favourable weather conditions. This is indicated by the data about the recorded yields, mostly in terms of cereals, while the majority of agricultural crops posted two-digit growth rates relative to the ten-year average.

## 10 Wages and employment

Favourable labour market trends throughout 2018 were largely a result of accelerated economic growth. Formal employment kept rising and unemployment dropped to its lowest levels in the past 25 years, that is, since comparable data are available. The average wage also increased in all branches of the economy.

The total average nominal net wage increased by 6.5% in 2018, reflecting robust economic growth and higher minimum wage. Owing to excellent fiscal policy results in the past four years, public sector wages were rising in parallel with those in the private sector.

Chart III.9.5 **Contributions to annual GDP growth rate – production side**  
(in pp)

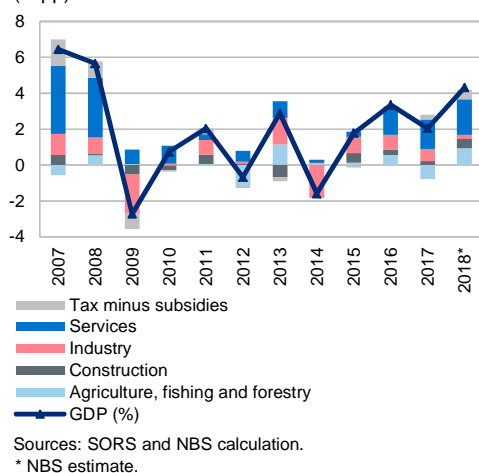
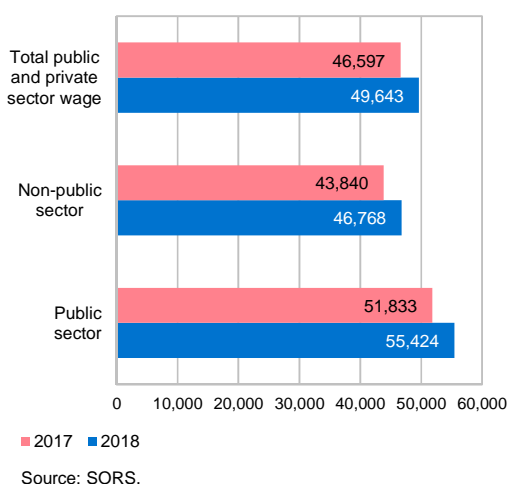
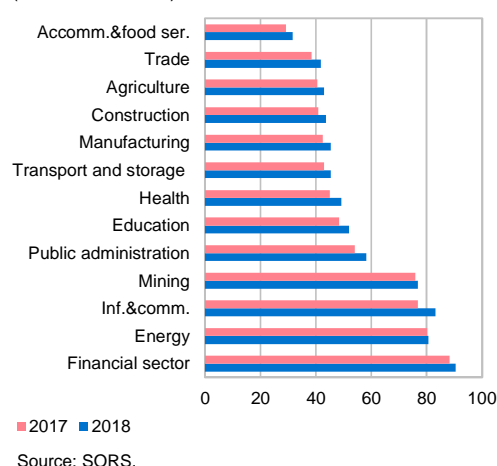


Chart III.10.1 **Average nominal net wage**  
(in RSD)

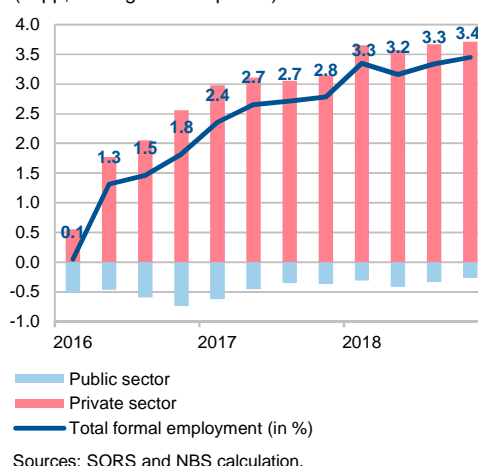




**Chart III.10.2 Average nominal net wage by economic sector**  
(in RSD thousand)



**Chart III.10.3 Composition of y-o-y growth in formal employment**  
(in pp, average for the period)



All economic branches recorded higher average wages in 2018, confirming that labour market recovery, as well as economic growth over the year, were broad-based. The most robust growth was recorded in services (information and communication, accommodation and catering, transport) and in public sector-dominated branches (public administration, health and social protection, and education). Trade, manufacturing, construction and agriculture also recorded wage increases, and were, together with services, the key contributors to the 2018 GDP growth.

The nominal net wage bill went up by 9.4% in 2018 owing to the formal employment increase and higher average wages in the private and public sector. In addition, the overall economic productivity rose as GDP grew faster than employment.

Growth acceleration also brought about the rise in total formal employment, which averaged 3.3% in 2018. According to the data of the Statistical Office obtained from the Central Registry of Mandatory Social Insurance, formal employment growth was driven by an increase in employment with legal persons, and in the number of entrepreneurs and their employees, while the number of individual farmers continued decreasing.

The private sector was a formal jobs generator in 2018, primarily manufacturing, construction, trade and services. On the other hand, employment dropped in the sectors of

agriculture and mining, as well as, energy, water supply and public administration, dominantly as a result of continued public sector right-sizing, as public enterprises recorded the largest decrease in the number of employees.

The downward unemployment trend continued into 2018 on the back of the improved business and investment environment and the implementation of active labour market policies<sup>33</sup>. According to the National Employment Service (NES), 2018 recorded a drop in unemployment to the new low in the past quarter of a century. At end-2018, the number of unemployed people registered with NES equalled 552,513, down by 66,314 relative to end-2017. Unemployment was cut in all occupational groups, the

**Table III.10.1 Formal employment and unemployment in 2018**  
(y-o-y growth rates, period average)

	Q1	Q2	Q3	Q4
Total number of formally employed	3.3	3.2	3.3	3.4
Employed with legal persons	3.3	3.1	3.2	3.4
Entrepreneurs and their employees	6.2	6.2	6.7	6.4
Individual farmers	-7.3	-7.7	-8.2	-8.3
Unemployed	-10.1	-10.1	-10.5	-10.8
First-time job seekers	-10.7	-10.8	-10.9	-11.5
Used to be employed	-9.8	-9.7	-10.3	-10.5

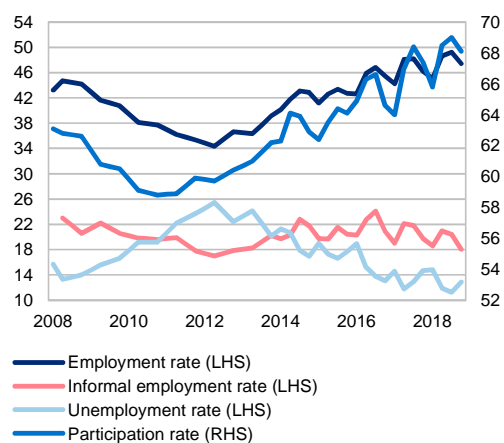
Sources: SORS and National Employment Service.

<sup>33</sup> Active labour market policies entail: job matching services, career guidance and counselling, employment subsidies, support to self-employment, further education and training, special programmes for youth in transition from the education system to the labour market, etc.

largest reduction being in occupations relating to manufacturing, trade, catering and tourism which at the same time recorded employment gains. Unemployment also dropped in agriculture-, transport- and construction-related occupations.

The results of the Labour Force Survey, which covers the informal segment of the labour market as well, also indicate favourable labour market trends. In 2018 the participation rate of the working age population (15–64) was at the level of 67.9% on average, up by 1.2 pp relative to 2017. The employment rate also went up, by 0.9 pp to 47.6% entirely as a result of a formal employment increase. Further labour market recovery is also indicated by the average unemployment rate, which dropped to 12.7% in 2018 (13.5% in 2017), and by the 7.6% long-term unemployment rate, these being their lowest levels since comparable data are available. In addition, average youth unemployment (15–24) continued down, by 2.2 pp to 29.7% in 2018.

**Chart III.10.4 Labour market indicators under the Labour Force Survey**  
(in %)



Source: SORS.



## Appendix 1 Monetary Policy Programme of the National Bank of Serbia in 2018

### Monetary Policy Programme of the National Bank of Serbia in 2018

1. Pursuant to the Law on the National Bank of Serbia, the primary objective of the National Bank of Serbia and its monetary policy is to achieve and maintain price stability, which contributes to the preservation of stability of the financial system and sustainable economic growth.
2. In 2018, the National Bank of Serbia will conduct its monetary policy pursuant to the Memorandum of the National Bank of Serbia on Inflation Targeting as Monetary Strategy<sup>1</sup> and the National Bank of Serbia's Memorandum on Inflation Targets until 2020.<sup>2</sup>
3. The monetary policy objective of the National Bank of Serbia is expressed numerically as the **annual percentage change in the consumer price index** and is set at  $3.0\% \pm 1.5$  percentage points for 2018. The target was lowered to 3.0% as of the beginning of 2017, which confirms the commitment of the National Bank of Serbia to preserve price stability in the medium run, together with the Government. In this way, the National Bank of Serbia contributes to improvement in the business and investment climate, a reduction in long-term dinar interest rates and a greater use of the dinar in financial transactions, and thus to lower costs of funding and reduced exposure to the currency risk of the corporate, household and government sectors.
4. The National Bank of Serbia will aim to achieve the defined inflation target by using the interest rate in main open market operations as its key monetary policy instrument. In 2018 as well, the National Bank of Serbia will change the level of this interest rate in a consistent and predictable manner, taking into account the inflation projection, economic developments in the domestic and international environment, and the impact of these changes on financial stability. In addition, if the need arises, the National Bank of Serbia will make use of other instruments under its remit in order to achieve the inflation target in the medium run, taking account of the stability and resilience of the financial system.
5. The National Bank of Serbia will continue to pursue the managed floating exchange rate regime. It will intervene in the foreign exchange market to ease excessive short-term volatility of the exchange rate, preserve price and financial stability, and maintain an adequate level of foreign exchange reserves.
6. In addition to monetary policy instruments, the National Bank of Serbia has at its disposal macroprudential policy instruments, whereby, without prejudice to its primary objective, it contributes to the preservation and strengthening of stability of the financial system. The National Bank of Serbia will continue to implement regular testing of the resilience of the financial system to potential macroeconomic risks. The selection of a concrete macroprudential instrument is part of a wider process of identifying and measuring the systemic risk, which will be further improved.
7. The National Bank of Serbia will make monetary policy decisions and undertake activities in the field of microprudential and macroprudential policies in the manner which ensures the maintenance of low and stable inflation, the preservation of financial stability, and support to the implementation of economic policy of the Government.
8. The implementation of the NPL Resolution Strategy has resulted in a significant drop in the share of non-performing loans (NPLs) in total bank loans, and will continue to contribute to their further decline in 2018. This should additionally contribute to growth in lending, strengthening of the credit channel and more effective transmission of monetary policy measures to the real sector.

<sup>1</sup> Adopted at the meeting of the NBS Monetary Policy Committee of 22 December 2008.

<sup>2</sup> Adopted at the meeting of the NBS Executive Board of 7 December 2017.

9. Successful implementation of fiscal consolidation and structural reforms, and full coordination of monetary and fiscal policy measures helped narrow internal and external imbalances and increase the resilience of the domestic economy to potentially adverse effects from the international environment. Having in mind uncertainties stemming from the international environment, in 2018 the National Bank of Serbia will maintain caution in making monetary policy decisions.

10. In an environment of low and predictable inflation and a relatively stable exchange rate, the National Bank of Serbia will continue to implement the dinarisation strategy in order to reduce the exposure of the corporate, household and government sectors to the currency risk, while at the same time increasing the efficiency of monetary policy instruments.

11. In accordance with the principles of transparency and accountability, and with a view to anchoring inflation expectations within the target band, the National Bank of Serbia will communicate with the public through a) press releases, b) press conferences, c) the Inflation Report, d) the Financial Stability Report, and e) other publications.

## List of charts and tables

### Charts

II.2.1	Key policy rate and interest rate corridor	9
II.2.2	Stock of sold/bought NBS securities	10
II.2.3	Volume of sterilisation by monetary policy instruments	10
II.3.1	Contribution to y-o-y consumer price growth	12
III.1.1	Revisions of real GDP growth forecasts for 2019 and 2020 by the IMF	15
III.1.2	HICP across selected countries	16
III.1.3	CPI across selected countries	16
III.1.4	Exchange rates of selected national currencies against the dollar	18
III.1.5	Oil and copper price movements	19
III.1.6	World food price index	19
III.2.1	FDI/CAD coverage	21
III.2.2	Structure of the financial account	21
III.2.3	FX reserves and coverage of short-term external debt	22
III.2.4	International investment position	23
III.3.1	Dinar liquidity	23
III.3.2	Interest rate movements	23
III.3.3	Stock of sold dinar government securities	24
III.3.4	Interest rates in the primary market of government securities	24
III.3.5	Interest rates on dinar loans and deposits of corporates and households	25
III.3.6	Interest rates on FX loans and deposits of corporates and households	25
III.3.7	Risk premium indicator – EMBI by country	25
III.3.8	Movements in EUR/RSD exchange rate and NBS FX interventions	26
III.3.9	Movements in RSD/USD and EUR/USD exchange rates	26
III.3.10	Exchange rates of selected national currencies against the euro	27
III.3.11	BELEX15 and Belgrade Stock Exchange turnover	27
III.4.1	Monetary aggregates and CPI	28
III.4.2	Lending activity and GDP	29
III.4.3	Structure of new corporate loans	29
III.4.4	Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to enterprises	30
III.4.5	Structure of new household loans	30
III.4.6	Impact of individual factors on changes in credit standards as applied to the approval of loans and credit lines to households	30
III.4.7	Share of NPLs in total receivables, gross principle	31
III.5.1	Share of dinar receivables in total corporate and household receivables	31
III.5.2	Receivables by sector	32
III.5.3	Share of dinar deposits in total corporate and household deposits	32
III.5.4	Deposits by sector	33
III.6.1	One-year ahead inflation expectations of the financial sector	33
III.6.2	Current inflation and one-year ahead inflation expectations	34
III.6.3	Inflation perceived and expected by households	34
III.6.4	Two-year ahead inflation expectations	34

III.7.1	Fiscal revenues, expenditures and result	35
III.7.2	Public debt	35
III.8.1	Contributions to annual GDP growth rate – expenditure side	36
III.8.2	Exports and imports of goods and services	37
III.8.3	Commodity trade in euros	37
III.9.1	Contributions to y-o-y GDP growth rate – production side	38
III.9.2	Economic activity indicators	38
III.9.3	Contributions to y-o-y growth of the volume of industrial production	38
III.9.4	Construction activity indicators	39
III.9.5	Contributions to annual GDP growth rate – production side	39
III.10.1	Average nominal net wage	39
III.10.2	Average nominal net wage by economic sector	40
III.10.3	Composition of y-o-y growth in formal employment	40
III.10.4	Labour market indicators under the Labour Force Survey	41

#### Tables

II.3.1	Contribution to y-o-y consumer price growth	12
II.3.2	Growth and contribution of components to consumer price growth in 2018	13
III.2.1	Serbia's balance of payments	20
III.4.1	Monetary survey	28
III.10.1	Formal employment and unemployment trends	40





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