National Bank of Serbia

2016

May

INFLATION REPORT

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Introductory note

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

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

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

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

The May *Inflation Report* was considered and adopted by the NBS Executive Board in its meeting of 17 May 2016.

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

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Ana Gligorijević, Vice Governor

Veselin Pješčić, Vice Governor

Diana Dragutinović, Vice Governor

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

ABBREVIATIONS

bln – billion
bp – basis point
BRICS – Brazil, Russia, India, China and South Africa
CPI – Consumer Price Index
ECB – European Central Bank
EIB – European Investment Bank
EMBI – Emerging Markets Bond Index
EU – European Union
FAO – UN Food and Agriculture Organization
FDI – foreign direct investment
Fed – Federal Reserve System
GDP – gross domestic product
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
LHS – left hand scale
mln – million
NAVA – non-agricultural value added
NBS – National Bank of Serbia
NPLs – non-performing loans
OFO – other financial organisation
OPEC – Organization of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
QE – quantitative easing
q-o-q – quarter-on-quarter
RHS – right hand scale
s-a – seasonally-adjusted
SDR – Special Drawing Right
SORS – Statistical Office of the Republic of Serbia
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I. Overview

Inflationary pressures remained very low as a result of the disinflationary effect of the majority of domestic factors and low cost-push pressures from the international environment.

Like in the previous period, inflationary pressures remained low in the first quarter of the year under the impact of the majority of domestic factors and low cost-push pressures emanating from the international environment due to lower global commodity prices and generally low inflation abroad. Consistent with expectations stated in the February *Report*, year-on-year inflation continued to run below the lower bound of the target tolerance band. Though rising to 2.4% in January, mostly on account of the low prior-year base, inflation decreased from February onwards to 0.4% in April, which, according to our estimate, will be its lowest level this year.

Developments in the international environment in early 2016 were marked by weaker global growth prospects, increased uncertainty in the international financial and commodity markets and the ensuing response of leading central banks towards further monetary accommodation.

Developments in the international environment early in the year continued to be marked by uncertainty in the international financial market, due to diverging monetary policies of leading central banks and China's economic rebalancing, as well as by the uncertainty in the primary commodities market. Due to poorer global growth prospects and further downward revision of the inflation projection for the coming period, the European Central Bank decided to ease its monetary policy further in March, while the Federal Reserve announced a slower dynamics of policy rate hikes. This helped mitigate uncertainties in the international financial market. Under the impact of the above global factors, risk premia of Serbia and other countries of the region increased early in the year, only to decrease after the response of the European Central Bank and the Federal Reserve.

Depreciation pressures, present since late last year, persisted in the initial months of 2016.

The dinar has been under depreciation pressures since end-2015, mostly due to heightened uncertainty in the international financial market and the relatively high foreign exchange demand in the domestic market on account of seasonally higher payments for energy imports and servicing of foreign credit liabilities. On the other hand, pressures on the dinar were moderated by the improved export performance and the inflow of foreign direct investment, testifying to investors' favourable perception of Serbia as a long-term investment destination.

The current degree of monetary expansion has been maintained mostly due to past monetary easing and developments in the international environment.

The key policy rate was cut to 4.25% in February and kept on hold in the months that followed. Though inflationary pressures are low, developments in the international environment warrant caution in running monetary policy. Also, the Executive Board has assessed

that the current degree of monetary expansion provides for low and stable inflation in the medium term and a recovery in economic activity. Owing to past monetary easing, interest rates in the money and loan markets declined further in the first quarter which, along with the expected acceleration of economic growth, ought to support continued growth in lending. Looking ahead, the monetary policy will continue to encourage economic growth through bank lending activity, to the extent permitted by movements in key factors of inflation and uncertainties from the international environment.

The narrowing of fiscal imbalances has continued, contributing to the sustainability of Serbia's public finances and increasing its resilience to external shocks,...

The fiscal outlook improved further in early 2016, guided mostly by a sustainable improvement in tax revenue collection. At around 1.7% of GDP in the first quarter, the consolidated budget deficit was almost a quarter lower than in the same period last year and well below the ceiling under the agreement with the International Monetary Fund. In view of favourable fiscal movements since the start of the year, we estimate that the consolidated budget deficit in 2016 will be lower than in 2015.

...and went in parallel with the narrowing of external imbalances.

Foreign trade imbalances continued to narrow in 2016 as well, mostly on account of investment in tradable sectors during 2015, lower global oil prices and recovery in external demand. As exports of goods and services grew at a much faster pace than imports, the first-quarter current account deficit was more than halved relative to same period a year earlier and came at 3.3% of GDP. Looking ahead, we expect that the share of the current account deficit will be lower than last year and that it will be fully covered by the net inflow of foreign direct investment. According to Moody's, which raised Serbia's credit rating outlook in March, further narrowing of external and internal imbalances could support a credit rating upgrade in the period ahead.

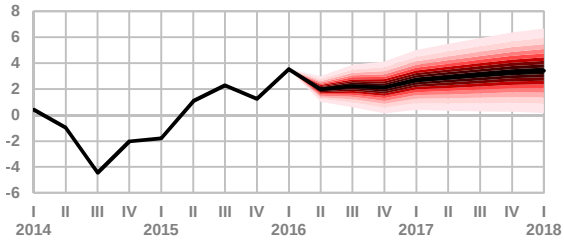
GDP growth accelerated notably in the first quarter, driven by positive movements in industry and construction on the production side, and by net exports on the expenditure side.

Positive trends in industry recorded last year extended into 2016, under the favourable impact of investment in tradable sectors in 2015 and higher external demand. This is signalled by continued growth in activity and exports in over three-quarters of manufacturing branches. Coupled with continued growth in construction, this was the key driver of acceleration in seasonally-adjusted GDP growth to 1.7% in the first quarter. According to the preliminary estimate of the Serbian Statistical Office, a strong, 3.5% growth was recorded in year-on-year terms as well.

According to our estimate, GDP growth will accelerate to 2.25–2.5% in 2016, which is an upward revision relative to the previous *Report*, mostly due to more favourable movements in manufacturing, construction and some service sectors. On the expenditure side, the contribution of net exports in 2016 is likely to be positive instead of neutral, as movements in foreign trade activity since the start of the year have been more favourable than anticipated earlier. Investment is also expected to continue its robust growth, owing to effective implementation of infrastructure projects and further improvement of the investment environment, supported by reduced operating expenses on account of loan interest rates and lower energy prices. Also, trends since the start of the year indicate that the contribution of household consumption could prove to be higher than previously expected.

Economic activity is expected to accelerate to 2.25–2.5% this year and to around 3.0% in 2017, led by investment and exports.

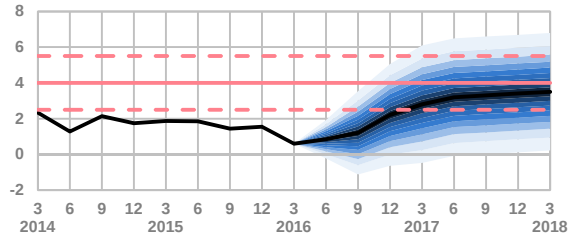
GDP growth projection
(y-o-y rates, in %)



Year-on-year inflation is projected to rise from May onward and make its way back within the target band early next year, stabilising thereafter slightly above 3.0%. Such inflation movements will reflect the low base effect from prices of petroleum products and fruit and vegetables, the expected further recovery in international prices of primary commodities, the strengthening of aggregate demand at home, as well as a gradual rise in inflation abroad, i.e. in the euro area. The risks to the projected inflation path are mostly associated with movements in global prices of oil and primary agricultural commodities and future developments in the international financial market. To a degree, risks also relate to administered price growth in 2016 and the outcome of this year's agricultural season.

According to our latest projection, year-on-year inflation will rise moderately from May and make its way back within the target band early next year, moving until the end of the projection horizon at a level slightly higher than 3.0%.

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



The new inflation projection is slightly lower for 2016 and slightly higher for 2017 than the one published in the February *Report*, while the projected inflation range remains symmetric. The lower projected inflation this year is mainly attributable to the downward revision of the euro area inflation projection for 2016, a further slide in prices of agricultural commodities during the first quarter and slower than expected increase in fruit and vegetable prices since the start of the year. The slightly higher inflation projected for 2017 is mostly due to faster than expected rise in global prices of primary commodities and quicker recovery of economic activity, which will act to support a faster closing of the negative output gap and help reduce disinflationary pressures arising on that account.

The new inflation projection for 2016 is lower than the one published in the February Report, due primarily to the downward revision of the euro area inflation projection, further slide in global prices of primary agricultural commodities during the first quarter, and slower than expected increase in fruit and vegetable prices since the start of the year.

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

As inflationary pressures are likely to stay relatively low in the period ahead, the monetary policy stance of the National Bank of Serbia should remain expansionary. Further monetary easing will depend on the Executive Board's assessment of the intensity of the inflationary and disinflationary impact of inflation factors, notably the impact of developments in the international commodity and financial markets.

II. Monetary policy since the February *Report*

The key policy rate was cut to 4.25% in February 2016 and kept unchanged in the months that followed.

The decision to keep the key policy rate on hold was based on developments in the international environment, marked by persistent uncertainties in the financial and commodity markets. The uncertainties mainly related to movements in global prices of oil and other primary commodities, geopolitical risks and diverging monetary policies of leading central banks. It has also been assessed that the current degree of monetary expansion provides for a low and stable inflation in the medium term and a gradual recovery in economic activity.

Investors' risk appetite and capital flows to emerging economies, Serbia included, could be negatively affected by the slowdown in the global economy and the normalisation of the Fed's monetary policy. On the other hand, the impact of risks from the international environment should be moderated by Serbia's improved macroeconomic fundamentals, sustained by the narrowing of internal and external imbalances, and the accommodative monetary policy of the ECB, which was eased further in March.

Since the February *Report*, y-o-y inflation has been low, running below the lower bound of the target tolerance band, while economic activity growth accelerated. Under the projection released in February, inflation's return within the target tolerance band was expected to be slower than previously anticipated, mostly on account of a fall in global prices of primary commodities. According to this projection, inflation was expected to return within the target tolerance band late this or early next year, and move at around 3.0% thereafter. Gradual inflation growth in 2017 was expected to reflect the weakening of disinflationary pressures amid an expected rise in international primary commodity prices, gradual increase in aggregate demand at home and inflation abroad. The risks to the projected inflation path were associated primarily with external factors, i.e. future developments in the international commodity and financial markets. As for economic activity at home, GDP growth was projected to accelerate to 1.8% in 2016 and 2.2% in 2017, driven mostly by investment.

In consideration of such inflation and GDP projections, and taking into account new information on developments at home and abroad, the NBS Executive Board decided to cut the key policy rate by 25 bp (to 4.25%) in February 2016 and keep it unchanged thereafter. The Executive Board's decisions were taken primarily in consideration of uncertainty prevailing in the international environment and the anticipated effects of past key policy rate cuts on inflation movements in the period ahead.

The international environment was marked by uncertainty regarding movements in prices of primary commodities, particularly oil. Though oil prices in the global market remained relatively low due to high supply and weak demand, their volatility increased amid announcements of a possible agreement of oil producers on an output cap in mid-April. News of growth slowdown in China and a number of emerging economies, and concerns over its impact on global growth, greatly influenced the prices of oil and other primary commodities. Further uncertainty in the international environment was generated by geopolitical tensions, primarily in the Middle East.

Investors' risk appetite and capital flows to emerging economies, Serbia included, could be negatively affected

by the slowdown in the global economy and the normalisation of the Fed's monetary policy. The Fed's start of monetary normalisation in December sent ripples across financial markets, but did not worsen much the financial conditions for emerging economies. Although in March the Fed signalled its monetary normalisation would be slower than announced in December, it is likely to continue raising its policy rate gradually in the period ahead in consideration of economic developments that cannot be anticipated by market players. For that reason, their response and the adjustment of the global financial system to normalisation of financial conditions could be sudden and, as such, pose a threat to emerging economies. In the case of Serbia, improved macroeconomic fundamentals, supported by the narrowing of internal and external imbalances, and the accommodative monetary policy of the ECB, which was eased further in March, ought to moderate the impact of risks from the international environment.

The Executive Board has assessed that the current degree of monetary expansion provides for a low and stable inflation in the medium term and a gradual recovery in economic activity. For that reason, the NBS has decided to continue to pursue a cautious monetary policy stance.

III. Inflation movements

Like in the previous period, inflationary pressures remained muted in Q1 as a result of the majority of domestic factors, lower global prices of oil and primary agricultural commodities, and generally low inflation abroad, particularly in the euro area as Serbia's most important foreign trade partner. Broken down by component, the quarterly price increase was driven primarily by the seasonal leap in unprocessed food prices.

Owing to low inflation and anticipation of subdued inflationary pressures in the period ahead, inflation expectations of all sectors continued to run within the target tolerance band, except for the corporate sector which expects April 2017 inflation to move below the lower bound of the target tolerance band.

Inflation movements in Q1

Consistent with the expectations presented in the February *Inflation Report*, in Q1 y-o-y inflation continued below the lower bound of the target tolerance band. Despite rising to 2.4% in January, driven mainly by the low prior-year base[1], y-o-y inflation slipped again in February and ended the quarter at 0.6%.

Inflation's movement below the lower bound of the band was led primarily by low primary commodity prices, as indicated by falling prices of petroleum products over the past year (contribution to March y-o-y inflation: -0.5 pp), and stagnating prices of industrial-food products (0.0 pp) reflecting low prices of raw materials, i.e. primary agricultural commodities. In Q1, inflation was dragged down also by fruit and vegetable prices (-0.7 pp in March). Furthermore, disinflationary pressures in the past period were generated by euro area inflation and aggregate demand, as reflected in the relatively low core inflation (1.7% y-o-y in March; 0.7 pp). Conversely, due to the earlier increase in electricity and cigarette prices,

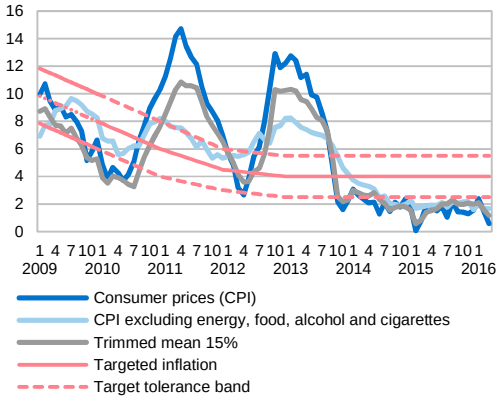
Table III.0.1 **Consumer price growth by component**
(quarterly rates, in %)

	Share in CPI	2015 II	2015 III	2015 IV	2016 I
Consumer prices (CPI)	100.0	0.7	-0.1	-0.5	0.4
Unprocessed food	11.6	-0.2	-6.3	-5.9	5.5
Processed food	20.5	0.3	0.9	-0.3	0.9
Industrial products excluding food and energy	28.7	0.9	0.5	1.7	-0.2
Energy	15.5	0.7	2.2	-2.0	-1.4
Services	23.7	1.5	0.4	0.7	-0.5
Core inflation indicators					
CPI excluding energy	84.5	0.7	-0.5	-0.2	0.7
CPI excluding energy and unprocessed food	72.9	0.9	0.6	0.8	0.0
CPI excluding energy, food, alcohol and cigarettes	45.1	1.0	0.2	0.9	-0.4
Administered prices	18.7	0.8	3.7	1.0	0.1

Sources: SORS and NBS calculation.

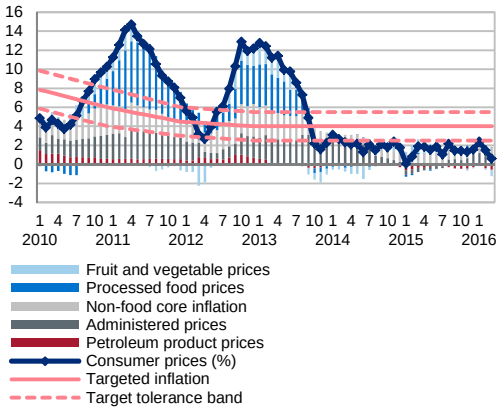
[1] See Text box 3, p. 46.

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



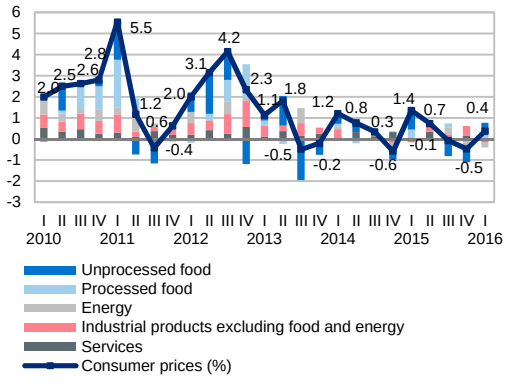
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

administered prices added 1.1 pp to y-o-y inflation in March.

In quarterly terms, consumer price growth of 0.4% in Q1 was slightly below our expectations. The growth was supported by food prices, predominantly the seasonal increase in unprocessed food prices – in accordance with our expectations, whereas the prices of energy, services and industrial products excluding food and energy declined.

While negative in H2 2015, the contribution of prices of food and non-alcoholic beverages to quarterly inflation turned positive in Q1 (0.8 pp). **Unprocessed food** prices were up by 5.5% (contributing 0.6 pp), chiefly on account of the seasonal increase in prices of vegetables (15.5%, 0.6 pp). Fruit prices also edged up, though to a lesser degree (6.9%, 0.1 pp), while fresh meat prices headed down (3.6%, -0.1 pp). **Processed food** prices gained 0.9% (0.2 pp), mirroring higher prices of milk and dairy products.

Reflecting a further drop in global oil prices late last and early this year, **petroleum product** prices in the domestic market continued down for the third consecutive quarter (4.1%, contribution: -0.2 pp). In March, they were 10% lower than a year earlier. Given the relatively unchanged prices of electricity, gas and heating fuels, lower prices of petroleum products weighed down on prices in the **energy** group (1.4%, -0.2 pp).

Services prices dipped 0.5% in Q1 (-0.1 pp), mainly on the back of the seasonal decline in travel packages prices (21.5%, -0.2 pp), while the rise in cable TV subscription prices worked in the opposite direction (5.3%, 0.1 pp). Other prices changed marginally.

Industrial product prices excluding food and energy declined as well (0.2%, -0.1 pp), mainly because of the seasonal reduction in clothes and footwear prices.

Core inflation (measured by CPI excluding prices of energy, food, alcohol and cigarettes) fell by 0.4% in Q1, reflecting lower prices of travel packages, clothes and footwear, whilst higher cable TV subscription prices added impetus. In y-o-y terms, core inflation has been moving below the lower bound of the target tolerance band as of August 2014, touching 1.7% in March.

Up by mere 0.1% in Q1, **administered prices** had a neutral effect on quarterly inflation. At end-Q1, they were 5.6% higher y-o-y (contribution to y-o-y inflation: 1.1 pp), mainly on account of the electricity and cigarette price hike in the past year (0.6 pp each).

Producer and external prices

Industrial producer prices in the domestic market inched back slightly in Q1 (0.3%), predominantly on account of an 8.6% drop in prices of petroleum product manufacturers (contribution to the change in producer prices: -0.5 pp), which reflected tumbling global oil prices in the past period. Another, smaller contribution came from a 7.4% fall in prices of tobacco product manufacturers (-0.2 pp). In contrast, producer prices picked up in food production (1.0%, 0.2 pp) and the production of paper and paper products (2.8%, 0.1 pp).

In terms of purpose, Q1 saw a downturn in producer prices of energy and intermediate goods and an upturn in producer prices of capital and non-durable consumer goods. Producer prices of durable consumer goods stayed flat.

Y-o-y, industrial producer prices in the domestic market declined by 1.5% in March.

Following a Q4 drop, **agricultural producer prices**[2] were up by 1.4% in Q1 because of higher fruit and vegetable prices, whilst producer prices of wheat, corn, livestock and industrial plants went down. In y-o-y terms, the fall in agricultural producer prices moderated to 0.4% in March.

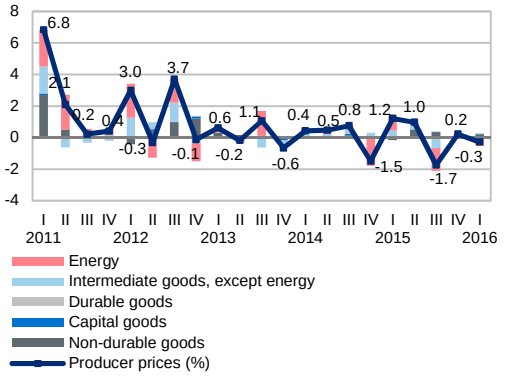
Deflationary cost-push pressures persisted in construction as well since **prices of elements and materials incorporated in construction** lost 0.7% in quarterly terms. Y-o-y, they fell by 1.5% in March, slightly less than in December 2015.

Following stagnation in Q4, dinar external prices rose marginally in quarterly terms (0.6%). They picked up on account of the March increase in oil prices, as well as the dinar's weakening against the euro. By contrast, German export prices, used to approximate external prices of intermediate goods and equipment, continued down in Q1. Food prices also declined. In y-o-y terms, external prices fell more sharply, by 2.7% in March.

Inflation expectations

Owing to low inflation for almost three years and anticipation of subdued inflationary pressures in the period ahead, short- and medium-term inflation expectations remain low and relatively stable.

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



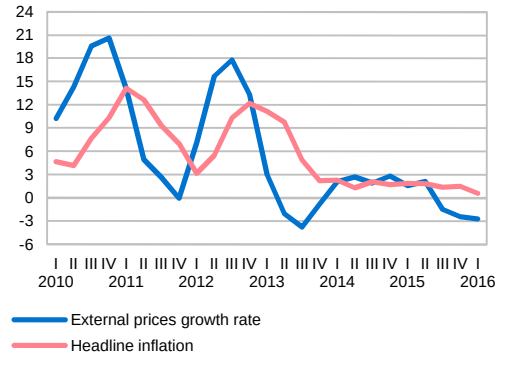
Sources: SORS and NBS calculation.

Table III.0.2 **Price growth indicators**
(y-o-y rates, in %)

	2015			2016
	June	Sep.	Dec.	March
Consumer prices	1.9	1.4	1.5	0.6
Domestic industrial producer prices	1.2	-1.2	0.7	-1.5
Agricultural producer prices	-5.8	5.8	-2.2	-0.4
Prices of elements and materials incorporated in construction	1.0	-1.7	-1.6	-1.5

Sources: SORS and NBS calculation.

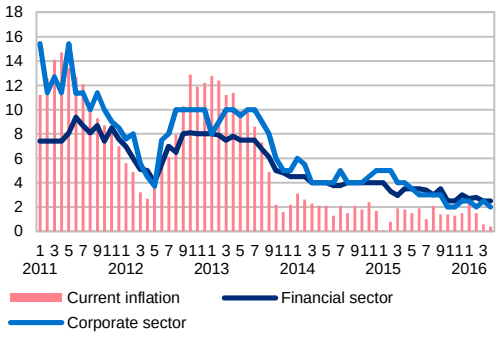
Chart III.0.5 **Domestic inflation and external prices**
(y-o-y rates, in %)



Sources: Destatis, FAO, Bloomberg and NBS calculation.

[2] Producer prices in agricultural and fishing sectors.

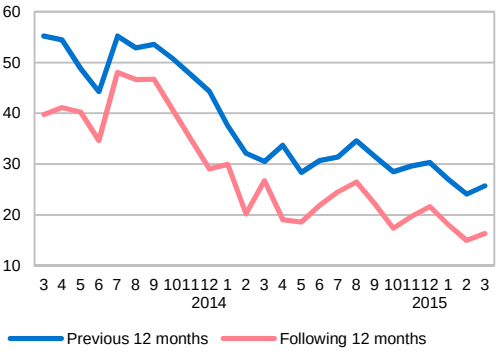
Chart III.0.6 **Current inflation and one-year ahead inflation expectations***
(y-o-y rates, in %)



Sources: Gallup, Ipsos/Ninamedia and NBS.

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

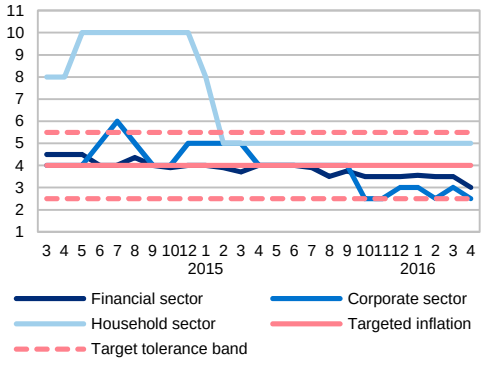
Chart III.0.7 **Household perceived and expected inflation**
(in index points)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).

* Survey was not conducted in November 2014.

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



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).

* Survey was not conducted in November 2014.

According to the **Bloomberg** survey, **one-year ahead** financial sector expectations have been within the target tolerance band for more than two and a half years, and between 3.3% and 3.5% over the past months. They headed further down in May – to 2.8%. Judging by the **Ninamedia**[3] survey, since early 2016 financial sector expectations have been on a downward path – from 2.7% in January to 2.5% in April. Corporate sector expectations of April 2017 inflation are the lowest, at 2.0%.

Usually higher than in other sectors, inflation expectations of households stabilised at 5% from October 2015 to April 2016, with a temporary pick-up to 6.0% in March. Positive trends are also signalled by the qualitative household survey, according to which expectations and perceived inflation are on a decline. At the same time, households on average still believe that prices increased more than they actually did over the past twelve months. Expected inflation is lower than perceived inflation, which implies that even households believing that prices went up in the past twelve months do not expect the trend to continue over the next year.

Medium-term inflation expectations of all sectors have been relatively stable and within the target band for more than a year. For several months already, the financial sector has expected two-year ahead y-o-y inflation of around 3.5%, but pared back its expectations to 3.0% in April. Corporates expect even lower inflation over the first months of 2017 (2.5–3.0%). Medium-term household expectations are higher, but stable at 5.0% since February last year.

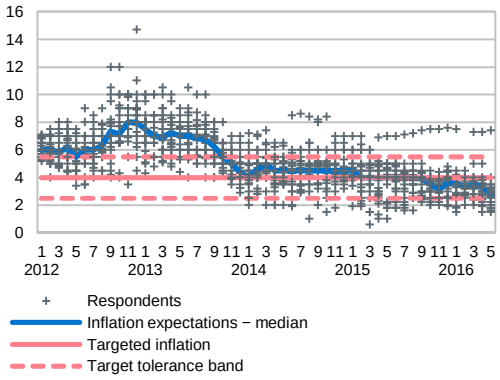
The dispersion of financial sector responses – the lowest compared to other sectors, remains relatively stable according to both Bloomberg and Ninamedia surveys. The dispersion of corporate sector responses increased in the first two months of the year, but narrowed in March, whereas the dispersion in the household sector has been on a mild rise since early 2016.

Following a reduction in the past period, the net percentage[4] of enterprises expecting their input prices to grow in the next three months and the net percentage of enterprises expecting an increase in prices of their products were relatively stable in Q1 (in March 14.0% and 4.6% respectively). Owing to achieved

[3] Ninamedia clipping d.o.o. Novi Sad has been conducting a survey on expectations of economic entities since December 2014.

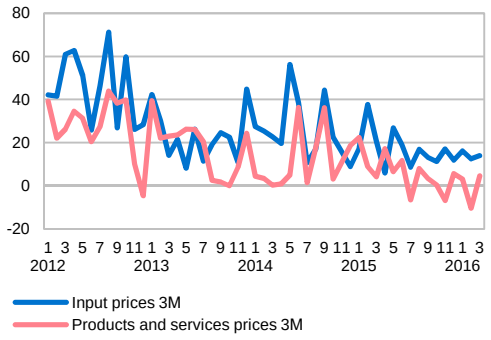
[4] The difference between the percentage of enterprises expecting an increase and those expecting a reduction in prices of their inputs, products and services. To increase representation, data are weighted by operating revenue.

Chart III.0.9 **Targeted inflation and one-year ahead inflation expectations – financial sector**
(y-o-y rates, in %)



Sources: Bloomberg and NBS.

Chart III.0.10 **Expectations of enterprises regarding a change in prices of their inputs, products and services**
(net percentage, "+" = increase, "-" = decrease)



Sources: Ipsos/Ninamedia and NBS (Ninamedia since December 2014).

macroeconomic stability, the percentage of enterprises not expecting a change in their product prices rose from 87.2% at end-Q4 to 89.7% at end-Q1.

IV. Inflation determinants

1. Financial market trends

Continued monetary policy easing prompted a further decline in rates in the interbank money and government securities markets. Households borrowed at more favourable terms than at end-2015, while the rate on dinar corporate loans was declining until March, when it picked up and landed slightly above the end-2015 level.

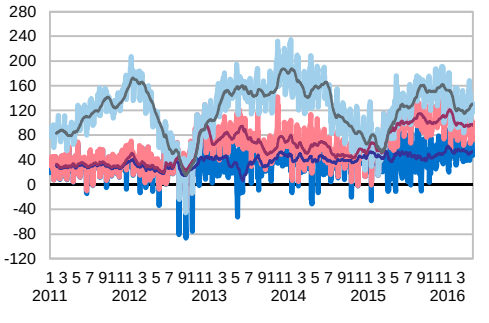
Depreciation pressures which started late last year prevailed in the initial months of 2016, mostly on account of heightened uncertainty in the international financial market and the seasonally higher FX demand of energy importers. The pressures were moderated by better export performance and FDI inflow, testifying to favourable investors' perception of long-term investment in Serbia. Serbia's credit rating outlook was raised further, reflecting the country's improved macroeconomic prospects and the results achieved in the narrowing of internal and external imbalances.

Interest rates

The spread between the average repo rate[5] and the key policy rate narrowed in February, after the NBS Executive Board made the decision to narrow the corridor of interest rates relative to the key policy rate from ±2.0 pp to ±1.75 pp. Throughout Q1, the average repo rate was almost close to the deposit facility rate and equalled 2.5% at end-March.

Trading volumes in the interbank overnight money market expanded in Q1 to RSD 2.8 bln on average, up by RSD 1.1 bln from Q4 2015. However, a reduction in excess bank dinar liquidity, typical for early-year, did not reflect on the BEONIA which trended close to the deposit facility rate throughout Q1. In March, its average value remained unchanged from December 2015 at 2.6%.

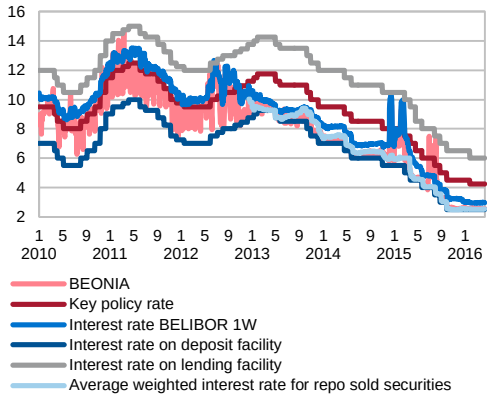
Chart IV.1.1 **Dinar liquidity**
(daily stock and 30-day moving averages, in RSD bln)



Source: NBS.

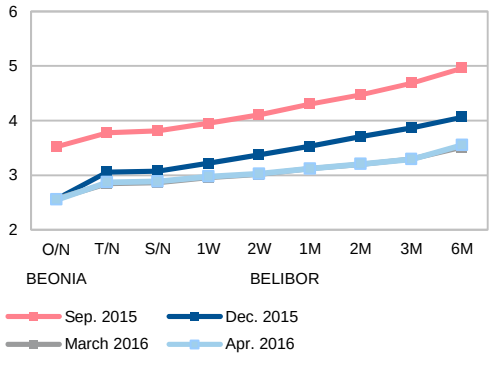
[5] Rate recorded at repo auctions weighted by the amount of sold securities.

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



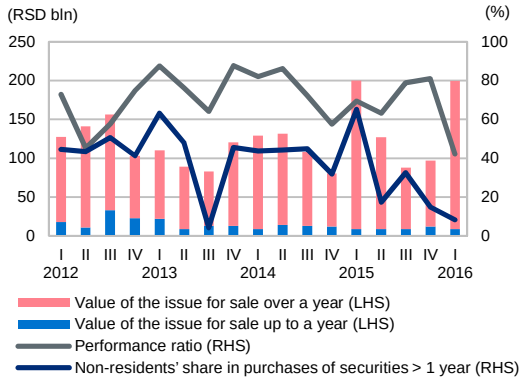
Sources: Thomson Reuters and NBS.

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



Sources: Thomson Reuters and NBS.

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



Source: Ministry of Finance.

BELIBOR rates continued down in Q1. The fall was somewhat steeper for longer maturities, also on the back of low expected inflation. In March, average BELIBOR rates ranged between 2.8% for the shortest and 3.5% for six-month maturity, down between 0.2 pp and 0.6 pp compared to December 2015.

Trading volumes in the interbank money market were somewhat lower in April, while interest rates remained unchanged relative to March.

Monetary accommodation induced a further fall in government borrowing costs. Rates on dinar government securities declined slightly in Q1 and moved between 2.8% for three-month and 6.0% for three-year maturity, steering the dinar yield curve to its new all-time low. Compared to auctions held in Q4 2015, the rates on three-month and one-year securities fell by 0.2 pp and 0.1 pp respectively. The rates on six-month and two-year securities remained flat. The rate on three-year securities fell by 0.6 pp relative to the earlier, October 2015 auction. At the only April auction, the rates on three-year government securities slipped further by 0.6 pp to 5.4%. At the auction of two-year amortised bonds at a variable coupon linked to the key policy rate, the fixed margin declined further (by 0.1 pp to 0.5%).

Following the start of the Fed's monetary policy normalisation, foreign investors began to reduce their exposure to emerging economies, including Serbia. In Q1, they participated only in auctions of two- and three-year dinar securities, buying a much smaller amount than the amount due. However, at the last auction held in April, foreign investor participation stepped up (37.1%).

Rates at auctions of euro government securities also declined, between 0.2 pp and 0.5 pp. In late Q1, they moved from 1.1% for one-year to 3.5% for five-year securities.

Trading volumes in the secondary government securities market amounted to RSD 79.4 bln in Q1, less by almost a fourth compared to Q4 2015. Foreign investors were more active on the sale side in Q1 as well, though to a lesser degree than in the previous quarter. Most traded were securities at the original two- and three-year maturity. The rates of return generally mirrored the primary market rates, ranging between 3.2% for the remaining six-month and 7.8% for the remaining 71-month maturity in March.

Most rates on private sector loans continued down in Q1, touching their new all-time lows since the current interest

rates statistics is in place. The price of new dinar corporate loans was also declining in January and February, but picked up in March, exceeding somewhat its end-2015 level.

The average price of dinar household loans fell by 0.5 pp from late 2015 to 11.6% in March. Among dinar household loans, the sharpest fall was observed for rates on consumer (1.0 pp) and other loans (1.4 pp), to 10.0% and 10.7% in March respectively. The price of the most widely used – cash loans, fell by 0.2 pp to 11.9%. Rates on home refurbishment loans were up by 0.7 pp to 7.4%.

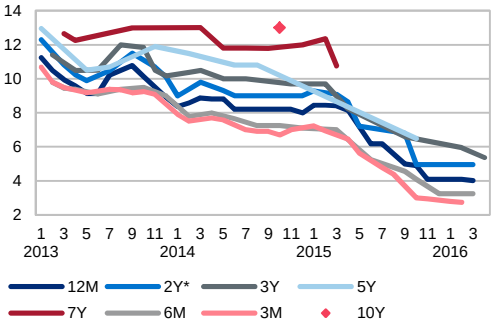
In the first two months of 2016, the weighted average rate on new dinar corporate loans fell by 0.5 pp to 5.7% in February, but rose to 6.6% in March. Rates on export loans declined further (to 4.4% in March). The rate on current assets loans stayed unchanged from late 2015 (6.1%), while the price of investment and other loans went up to 8.1% and 7.2% respectively.

Within new dinar loans, the share of household loans increased, these loans being more expensive than corporate loans. The weighted average rate on dinar corporate and household loans went up by 0.7 pp to 9.5% in Q1.

A continued drop in rates in the euro area money market pushed down further the rates on euro-indexed and euro loans. The weighted average rate on new euro and dinar euro-indexed loans fell by 0.3 pp to 4.1% in March. The average rate on corporate loans fell by the same amount, equalling 3.9% in March, while the price of household loans dipped by 0.6 pp to 5.3%. The price of FX-indexed corporate loans declined, reflecting a further drop in rates on investment loans to 4.3% on average. The rates on these loans thus fell below the price of current assets loans (4.5%), which was marginally higher (0.1 pp) than at end-2015. The rates on other loans increased by the same amount (0.1 pp) – they averaged 3.7% in March. In the segment of household loans, as in the case of dinar loans, a decline was noted for rates on cash (to 4.9%), consumer (to 6.1%) and other loans (to 6.8%). The price of housing loans remained unchanged from late 2015 at 3.8% on average.

Rates on new corporate and household deposits declined further since early-year. The drop was steeper for dinar deposit rates, which fell by 0.3 pp to 2.7% on average in March. The average rate on dinar corporate deposits equalled 2.7%, while the rate on dinar household deposits was down by 0.6 pp to 3.6%. The weighted average rate

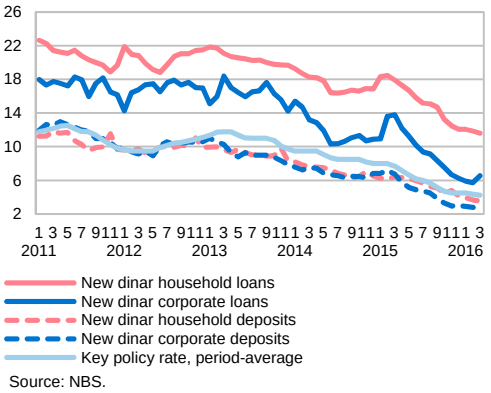
Chart IV.1.5. **Interest rates in the primary market of government securities**
(p.a., in %)



Source: Ministry of Finance.

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

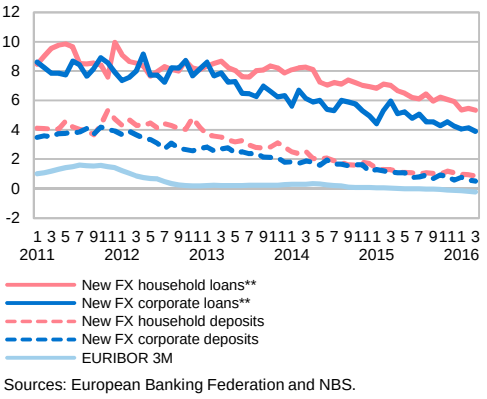
Chart IV.1.6 **Interest rates on new dinar loans and new corporate and household deposits***
(weighted average values, p.a., in %)



Source: NBS.

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

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

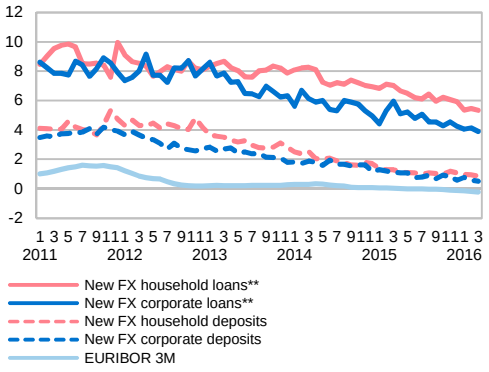


Sources: European Banking Federation and NBS.

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

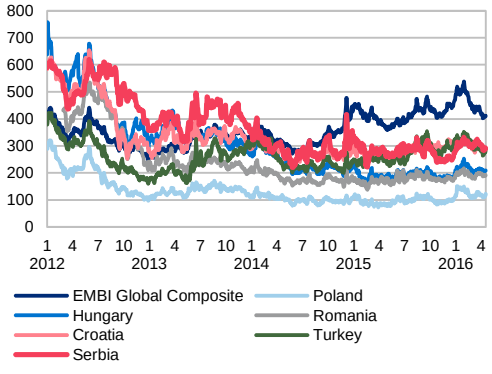
** Euro and euro-indexed.

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



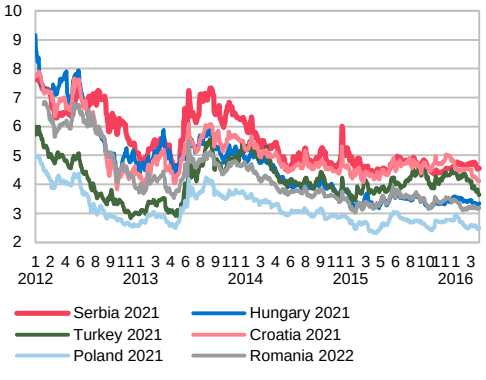
Sources: European Banking Federation and NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.
** Euro and euro-indexed.

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



Source: JP Morgan.

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



Source: Bloomberg.

on new euro deposits was 0.7% in March, down by 0.1 pp from end-2015. The rates on new corporate deposits and rates on household savings deposits fell by 0.1 pp and 0.2 pp on average to 0.5% and 0.9% respectively.

Risk premium

Measured by EMBI, Serbia's risk premium, i.e. the difference in returns on Serbia's dollar euro bonds and US treasury securities, was under the dominant sway of global factors in Q1. The first half of the quarter was marked by heightened uncertainty in international financial and commodity markets over the slowdown in China's growth and renminbi's depreciation, concerns over weaker than expected global growth, a fresh decline in prices of oil and other primary commodities. Those were the main drivers of growth in emerging economies' risk premia. However, primary commodity prices recovered in the second half of the quarter. New expansionary measures of the ECB and the announced slower normalisation of the Fed's monetary policy gave a positive impulse to investor sentiment and risk propensity, and thus to investment and risk premia in emerging economies. As in the majority of other European emerging countries that are net oil importers, Serbia's risk premium did not decline in late Q1 relative to end-2015. In Q1, Serbia's risk premium rose by 70 bp to 324 bp.

In Q1, risk premia increased in the majority of other countries of the region: Hungary, Poland, Romania and Turkey. It was only Croatian risk premium that declined – by 14 bp. EMBI Global fell to a similar extent (12 bp). In the course of January up to mid-February, it stood above 500 bp, but lost almost 100 bp until end-March (to 434 bp) – the level similar to that in late 2015.

As uncertainties in the international financial market abated, Serbia's risk premium fell by 34 bp in April to 290 bp. EMBI Global declined as well – by 24 bp to 410 bp.

Foreign capital inflow

The current account deficit narrowed sharply in Q1 – to 3.3% of GDP. It was twice lower y-o-y, notably owing to the narrowing in the foreign trade deficit. The financial account saw a net capital outflow in respect of portfolio investment and a reduction in resident foreign credit liabilities, whereas an inflow came from FDIs. Moreover, bank holdings in accounts abroad increased.

A stable net **FDI** inflow continued into 2016. According to preliminary data, it amounted to EUR 330.0 mln in Q1

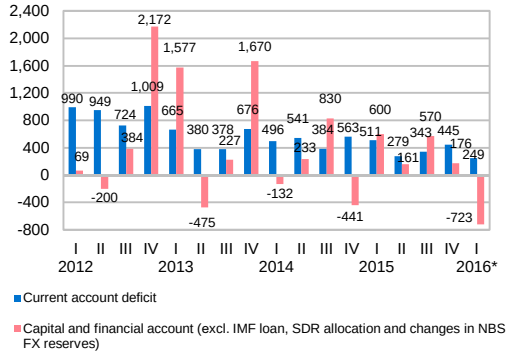
– close to the level achieved in the same period of 2015. Originating mainly from EU countries, FDIs were predominantly channelled to the financial sector, manufacturing and telecommunications. Net foreign payments in respect of dividends and interest amounted to EUR 29.3 mln and EUR 8.8 mln respectively.

We expect a net FDI inflow worth around EUR 1.6 bln in 2016, which should fully cover the current account deficit. This year as well, investments are likely to be diversified across a number of projects, contributing to sustainable economic growth. Continued structural reforms, further improvement in the business and investment climate, recovery of the euro area and continuation of the European integration process should give a key contribution to the FDI inflow.

Non-residents cut back on their investment in government securities in Q1 – net capital outflow in respect of **portfolio investment** amounted to EUR 357.2 mln, while interest payments were worth EUR 196.9 mln. Elevated investor risk aversion to emerging economies was influenced by uncertainty in the international financial market, which heightened with the start of the Fed's monetary normalisation. These effects were, however, mitigated after the adoption of additional expansionary measures by the ECB and the announced slower normalisation of the Fed's monetary policy. Domestic factors, notably a further expected reduction in internal and external imbalances, should positively affect foreign investor sentiment.

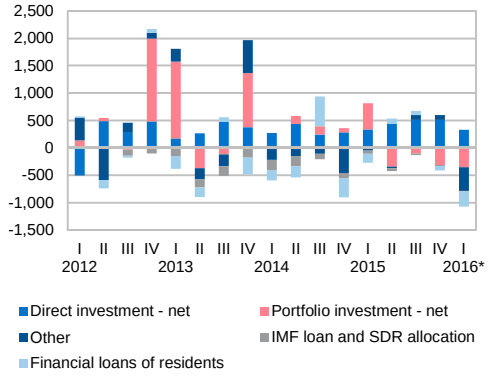
Resident liabilities arising from **financial loans** declined by EUR 284.3 mln in Q1. Of this, banks net repaid EUR 92.6 mln and the government repaid EUR 53.8 mln. The government serviced its due liabilities worth EUR 201.7 mln. Among the loans disbursed (EUR 147.9 mln) there was EIB's loan for Corridor 10. The NBS settled its liabilities to foreign creditors in the amount of EUR 11.7 mln, of which EUR 7.4 mln concerned repayments under the 2009 stand-by arrangement. The highest degree of debt repayment was observed among enterprises, whose liabilities under cross-border loans contracted by EUR 126.2 mln. A net outflow (EUR 106.7 mln) was recorded under trade loans, on account of stepped-up lending to foreign partners in trade transactions.

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



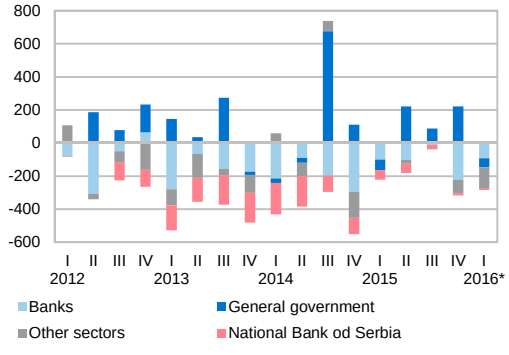
Sources: SORS and NBS.
* Preliminary data.

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



Sources: SORS and NBS.
* Preliminary data.

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



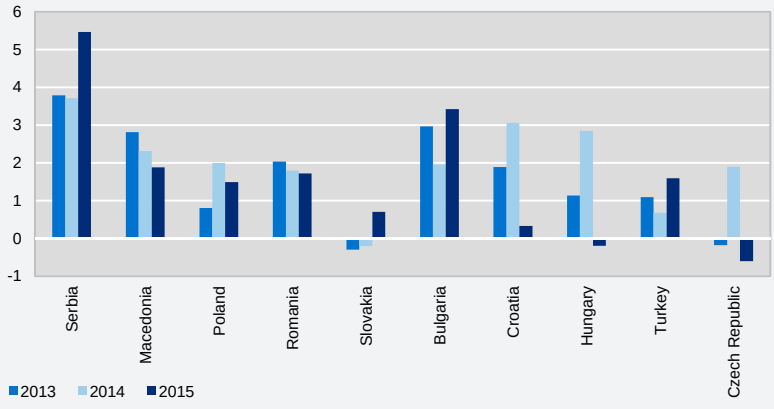
Source: NBS.
* Preliminary data.

Text box 1: Inflow of capital in Serbia and other countries in the region

Increased volatility and altered structure of capital inflows in Serbia, as in other countries in the region, stand out when compared to the period before the outbreak of the global economic crisis. This was induced primarily by turbulences in the international financial market and slow global recovery, which came about through the trade channel and worsened investment sentiment. Negative effects on capital inflows were eased by the expansionary monetary policies of the ECB and the Fed.

As regards the structure of capital inflows, cross-border interbank loans and FDIs recorded a fall, while debt instruments financing increased. This change in the structure mainly reflects caution on the part of investors prompted by sluggish global recovery, especially with regard to long-term investments abroad. In view of the above, FDI inflow to Serbia over the past several years is of particular significance as it shows that the country's improved macroeconomic performances, business ambience and investment climate have made a change. During the past three years, Serbia attracted FDIs in the total net amount of EUR 4.3 bln, or EUR 1.4 bln per annum on average (4.3% of GDP). In terms of their share in GDP, Serbia was ranked the highest among countries in the region. Last year, the net inflow of FDIs rose to EUR 1.8 bln or 5.5% of GDP. Investments were channelled mainly into export-oriented sectors and distributed across a number of projects, which should be conducive to sustainable economic growth. As for the structure of inflows, we expect FDIs to remain dominant, being the most desirable investment to sustain economic growth, with a 4.7% share in GDP this year. Looking at countries across the region, a notable net inflow of FDIs last year was recorded in Bulgaria (3.4% of GDP), Macedonia (1.9% of GDP) and Romania (1.7% of GDP), while the Czech Republic registered net outflow, having itself become an important direct investor abroad.

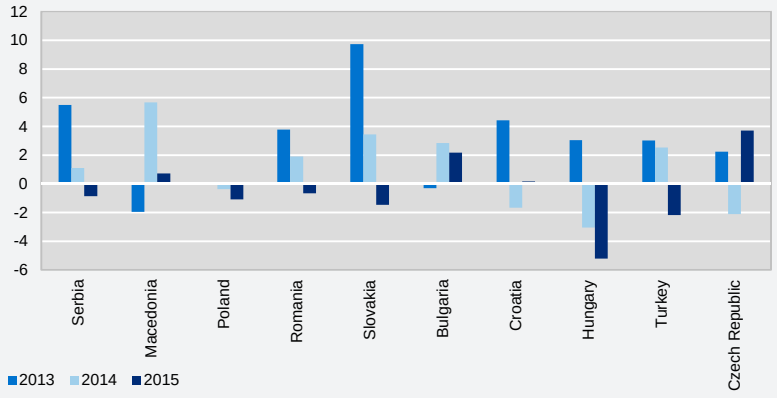
Chart O.1.1. **Foreign direct investment, net**
(in % of GDP)



Source: Websites of central banks for balance of payments (BPM6) and Eurostat for GDP, except for Turkey, whose source is the national statistical office.

While waiting for the Fed to decide on the beginning of monetary policy normalisation, in 2015 foreign investors reduced their portfolio investments in emerging countries. During Q3 2015, when the international financial market was shaken by signals of a slowdown in China's growth and uncertain consequences on global growth, emerging economies as a whole recorded the largest outflow of portfolio investments since 2008, driven primarily by the portfolio outflows from the BRIC countries. Most of the countries in the region also recorded outflows of portfolio investments, though to a much lesser degree, especially in comparison to the amount of inflows in the previous period. In 2015, Serbia recorded a moderate, 0.9% of GDP, net outflow of portfolio investments in contrast to the relatively high net inflows recorded in the previous years – 5.5% of GDP in 2013. Also, the abovementioned portfolio outflow was offset by the government's financial borrowing. Portfolio repositioning by foreign investors led to a more sizeable net outflow in Hungary (5.2% of GDP) and Turkey (2.2%). Contrary to the trend in the region, the Czech Republic and Bulgaria registered higher inflows of portfolio investments (3.7% and 2.2% respectively).

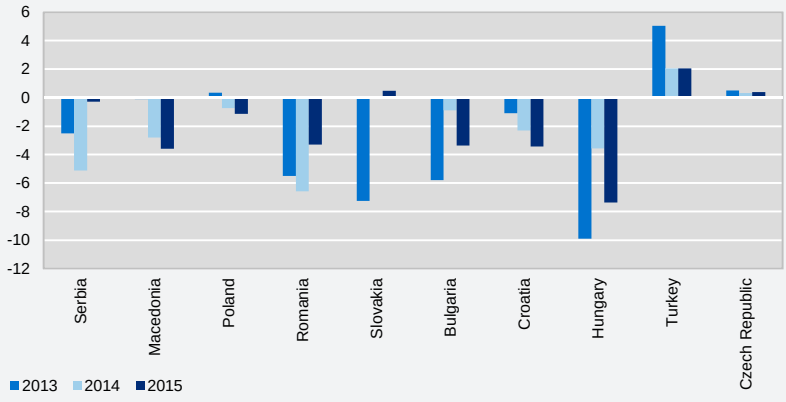
Chart O.1.2. **Portfolio investment, net**
(in % of GDP)



Source: Websites of central banks for balance of payments (BPM6) and Eurostat for GDP, except for Turkey, whose source is the national statistical office.

For most countries in the region, the past several years were marked by cross-border financial deleveraging of banks and corporates, and Serbia was no exception to this trend. Yet, last year saw a much lower outflow on this account than earlier years. Cross-border repayment by banks was half the amount in 2014, and the repayment of corporates also slowed down. Hence, in 2015, Serbia recorded a much smaller net outflow under other investments (0.4% of GDP) than in the previous period. Of the observed countries, only Turkey and, to a lesser degree, the Czech Republic upheld the trend of cross-border borrowing for other investments. All other countries were deleveraging on this account.

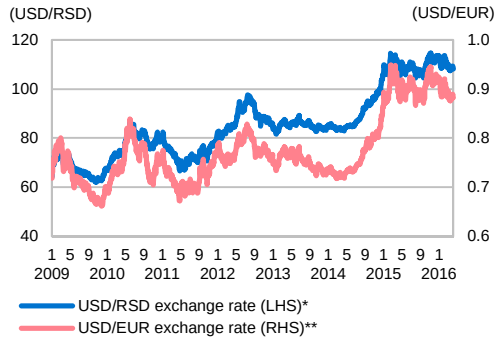
Chart O.1.3. **Other investment, net**
(in % of GDP)



Source: Websites of central banks for balance of payments (BPM6) and Eurostat for GDP, except for Turkey, whose source is the national statistical office.

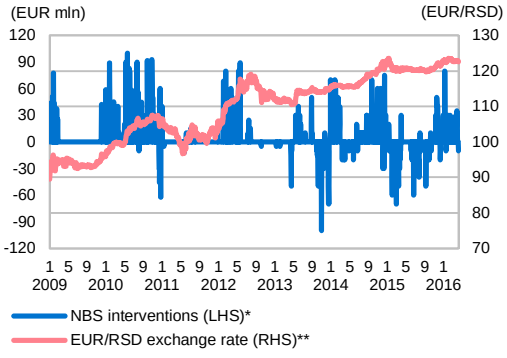
Owing to Serbia's improved macroeconomic performances and implementation of structural reforms, we expect the structure of Serbia's capital inflow to sustain the achieved positive trend. FDIs are expected to remain dominant in the structure of inflows, as confirmed by movements in Q1 2016.

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



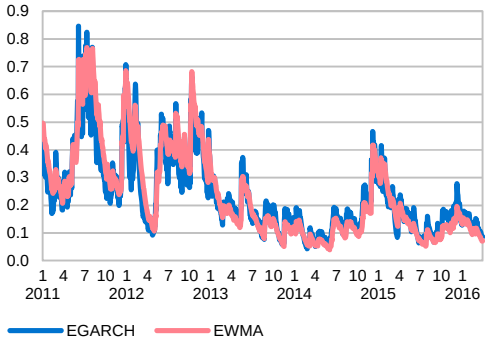
Source: NBS.
* 1 USD in RSD.
** 1 USD in EUR.

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



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

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



Source: NBS.

Trends in the FX market and exchange rate

Depreciation pressures which started in Q4 2015 continued in the initial months of 2016, mostly on account of heightened uncertainty in the international financial market and the seasonally higher FX demand, primarily of energy importers. During Q1, the dinar depreciated against the euro by 1.1% (end-of-period) and by 1.6% on average q-o-q.

In Q1, it became more likely that the Fed's monetary easing will be slower than initially expected. This, together with the March announcement of the ECB's officials that no further reduction in the euro area policy rate was anticipated, helped the euro gain 3.4% against the dollar. As a result, the dinar appreciated by 2.4% against the dollar in Q1 (end-of-period).

FX demand of domestic companies was relatively high in Q1, due to seasonally higher payments of energy imports but also to servicing of foreign credit liabilities. Foreign investors contributed to depreciation pressures, reducing further their portfolio of government securities amid uncertainty in the international money market in the conditions of the Fed's monetary tightening. Banks generated FX demand as well, because of the need to match their FX positions due to a drop in their foreign currency-indexed assets.

The foreign trade deficit, on the other hand, narrowed further and depreciation pressures were also moderated by the inflow of foreign remittances, which reflected on foreign cash purchases from exchange offices. FDI inflows continued, testifying to investors' favourable perception of Serbia as a long-term investment destination. After Fitch and Standard & Poor's, Moody's also raised Serbia's credit rating outlook from stable to positive, to reflect improvements in the country's macroeconomic prospects and the results achieved in the narrowing of internal and external imbalances, as factors supporting greater stability of the FX market.

In April as well, foreign investors continued to contribute to depreciation pressures by reducing their exposure to government securities issued in the domestic market, while higher purchases in exchange transactions and subdued FX demand of residents acted towards their moderation. In April, the dinar gained 0.2% against the euro (end-of-period).

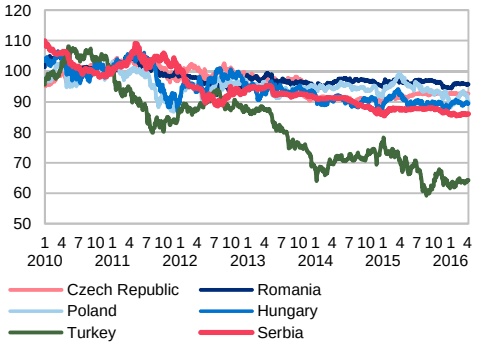
Volatility of the dinar against the euro, as measured by EWMA[6] and EGARCH,[7] increased late last year but decreased in Q1. Average daily trading volumes in the IFEM were slightly lower than in a quarter earlier (by EUR 0.3 mln), equalling EUR 32.5 mln in Q1. The highest average daily trading volumes were recorded in January (EUR 36.1 mln), and the lowest in March (EUR 27.1 mln).

To ease excessive short-term volatility of the exchange rate, the NBS intervened in the IFEM in the first four months of the year by net selling of EUR 705.0 mln, mostly in the course of January. It intervened twice on the buying side (in February and April) and each time bought EUR 10.0 mln.

The amount of FX swaps was somewhat lower than in Q4 2015. At regular FX swap auctions organised by the NBS, EUR 89.0 mln was sold and bought at two-weekly auctions, and EUR 30.0 mln at three-month auctions. The amount of interbank FX swaps in Q1 (EUR 48.0 mln) was lower than in Q4 2015.

Most currencies of other countries of the region with a similar exchange rate regime depreciated mildly during Q1.

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



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

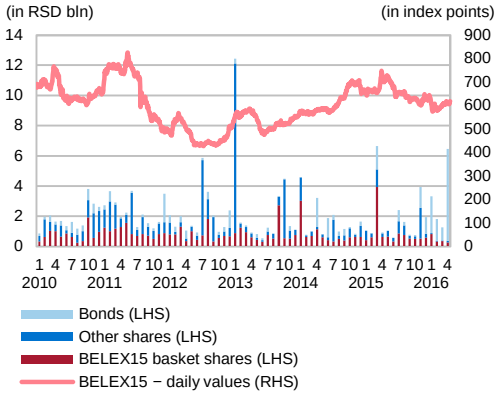
Stock exchange trends

BSE indices began to rally in March. At end-March, BELEX15 (most liquid shares) was 606.1 index points and BELEXline (general index of shares) 1,330.3. As this upturn (of around 3%) did not suffice to offset the fall recorded in the first two months of 2016, BELEX15 lost 5.9% and BELEXline 3.6% in the quarter as a whole.

Total trading in shares was RSD 1.7 bln in Q1, down by RSD 2.4 bln from a quarter earlier. Over 90% of trading related to shares from the BELEX15 index basket, and the highest trading volumes (RSD 0.9 bln) were recorded in January.

By contrast, trading in bonds continued rising. Total trading in bonds was RSD 4.7 bln in Q1, up by RSD 2.2 bln relative to Q4 2015. The bulk of trading (RSD 4.2 bln) referred to trading in long-term bonds of the RS. At RSD

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

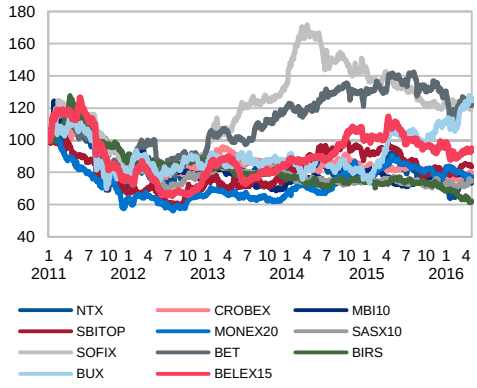


Source: Belgrade Stock Exchange.

[6] EWMA (Exponentially Weighted Moving Average) – weighted moving average method where percentage daily changes in the exchange rate are assigned different weights for different points in time, where weights exponentially decline as they move away from the present moment.

[7] EGARCH (Exponential General Autoregressive Conditional Heteroskedasticity) – method of assessing the conditional variance which shows the asymmetric effect of positive and negative shocks on the assessment of the conditional variance.

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



Sources: BSE and regional stock exchanges.

0.6 bln, trading in the remaining series of frozen FX savings bonds (A2016) was slightly lower than in Q4. Yield rates on this series climbed to 3.9% in late Q1.

Municipal bonds of the Stara Pazova Municipality were only traded in January. These and the bonds issued by the town of Šabac were transferred from the open market to the MTP segment in late 2015 due to insufficient liquidity.

The BSE market capitalisation equalled RSD 654.2 bln at end-March, or RSD 29.2 bln down from end-2015. Of this, regulated market capitalisation decreased by RSD 57.8 bln, while MTP[8] capitalisation rose by RSD 28.6 bln. The share of market capitalisation in estimated GDP went down by 0.9 pp to 16.3% at end-Q1.

Most stock exchange indices in the region declined in Q1, most notably in Banja Luka (6.8%). The only to increase were the indices in Budapest and Ljubljana stock exchanges (10.6% and 4.3%, respectively).

2. Money and loans

The money supply decreased in Q1, particularly its dinar component. Dinar deposits of corporates declined the most, as seasonally expected, while household savings continued up. Subdued lending to the private sector, usual for the start of the year, also contributed to a contraction in the money supply.

Monetary aggregates

In Q1, dinar reserve money lost 12.8% in nominal and 13.1% in real terms. Banks' FX deposits with the NBS decreased in January and February due to further cuts in general reserve requirement ratios, contributing to a contraction in total reserve money in Q1 by 14.1% in nominal and 14.5% in real terms.

Net FX sales of the NBS in the IFEM contributed most to a reduction in dinar reserve money in Q1, with RSD 65.8 bln withdrawn on this account. Also, the government bought FX from the NBS to service FX obligations, mopping up RSD 4.2 bln of banks' liquidity. By contrast, FX payment transactions with Kosovo and Metohija (RSD 10.9 bln) and slightly lower investment by banks in repo securities (by RSD 0.6 bln) led to a rise in dinar reserve money.

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

	2015			2016	Share in M3 March 2016 (%)
	June	Sep.	Dec.	March	
M3	5.8	2.7	5.6	7.2	100.0
FX deposits	6.1	1.0	2.1	4.6	67.4
M2	5.2	6.2	12.7	13.0	32.6
Time and savings dinar deposits	7.5	3.0	6.4	-9.6	7.9
M1	4.3	7.6	15.3	22.8	24.7
Demand deposit	5.4	10.6	19.6	26.3	18.1
Currency in circulation	1.7	0.4	5.6	14.2	6.6

Source: NBS.

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

In terms of the structure of dinar reserve money, banks' overnight deposits held with the NBS decreased most (by RSD 22.0 bln), while excess balances on banks' gyro accounts declined by RSD 12.4 bln. Required reserves allocated in dinars were RSD 8.7 bln lower due to the trimming of general reserve requirement ratios and the consequent reduction of the part of required reserves allocated in dinars. Currency in circulation also contracted (by RSD 8.4 bln), which is usual for the start of the year. Balances in accounts of local governments and other sectors were RSD 1.7 bln lower, while vault cash fell by RSD 0.6 bln.

Broader monetary aggregates also contracted in Q1. As all categories of dinar deposits seasonally declined, M1 and M2 lost 3.1% and 8.5% in real terms, respectively. As a result, despite the rise in FX deposits, M3 decreased by 1.4% in real terms as well.

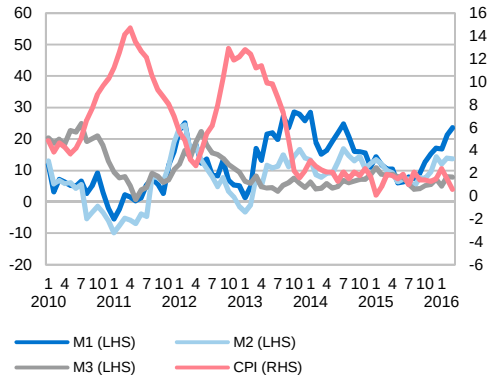
A breakdown by M3 component shows that longer-term dinar deposits fell most in Q1 (by RSD 42.3 bln). This was a consequence of reduced balances in company accounts, mostly in the trade and manufacturing sectors, but also of lower balances in OFO accounts. Balances in gyro accounts of corporates and household current accounts also contracted, which reflected most on a fall in demand deposits (RSD 6.4 bln).

Household savings increased further in 2016, by RSD 1.4 bln, and reached RSD 46.8 bln in March. Although the share of the dinar in total household savings remained low, the currency composition of savings has been improving steadily and in March the share of the dinar reached 4.4%. In the same period, FX savings went up by EUR 19.0 mln and reached EUR 8.4 bln at end-Q1.

By contrast to dinar deposits, corporate FX deposits increased, sustained by better export performances. Thanks to this and the rise in OFO deposits and household FX savings, total FX deposits gained EUR 188.9 mln in Q1.

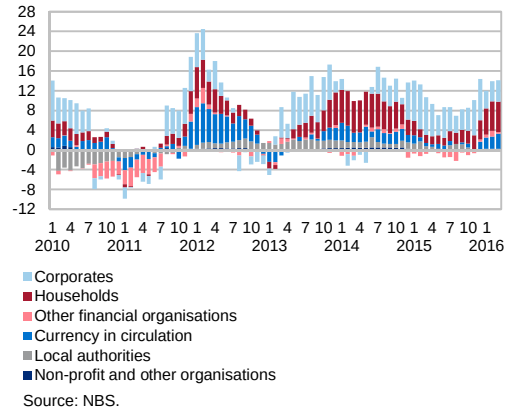
Y-o-y, the growth in monetary aggregates accelerated further – M1, M2 and M3 were higher by 22.8%, 13.0% and 7.2%, respectively, in March relative to the same month a year earlier. An impulse to this also came from economic recovery over the past year supported, among other things, by bank lending.

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



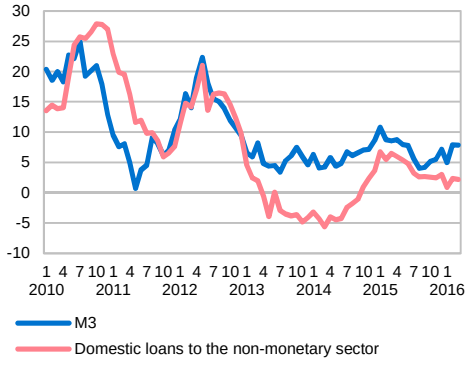
Sources: SORS and NBS.

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



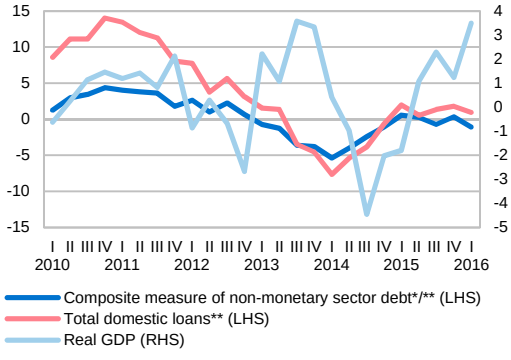
Source: NBS.

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



Source: NBS.

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

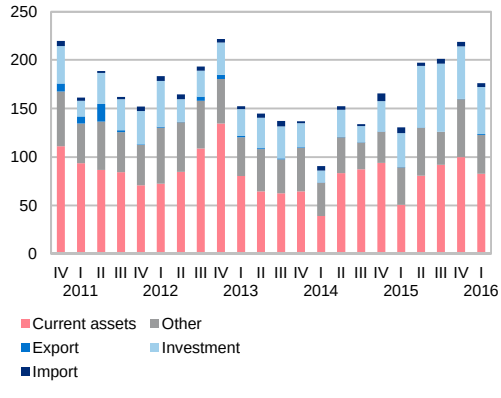


Sources: NBS and SORS.

* As an indicator of total borrowing, it includes domestic loans to the private sector, public enterprises and local authorities, and cross-border borrowing of enterprises and households.

** Excluding the exchange rate effect.

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



Source: NBS.

Loans

As usual, lending activity subsided early in the year. Excluding the exchange rate effect[9], domestic loans lost 1.7% in March relative to December 2015, while their share in estimated GDP fell by 1.1 pp to 47.6%. By sector, loans to households and non-profit organisations increased from the start of the year, and those to other sectors decreased.

Y-o-y, growth in domestic lending slowed in the initial months of 2016 to 1.0% in March. Growth in household loans accelerated to 5.1%, while corporate loans entered into negative territory in February, falling by 1.7% y-o-y in March.

Lending recovery begun in 2015 is expected to continue in 2016 thanks to the effects of past monetary easing, expected acceleration of economic activity at home and continuing low euro area rates. Also, additional lending potential was released in the first two months of 2016 as part of the cycle of cuts in the reserve requirement ratios launched in September 2015.

Corporate loans lost 4.0% in March. They fell by RSD 46.4 bln from December 2015, excluding the exchange rate effect. This was due to the usually lower volume of lending in this part of the year, but also to the maturing of subsidised loans. Still, as the amounts of maturing subsidised loans have been declining from the start of the year, the negative impact on the stock of receivables in this respect should wane by June, when final loans approved within the 2014 programme of credit support to the economy will mature for payment. Loan receivables also declined as a result of banks' efforts to tackle the issue of NPLs, which included the write-off and sale of a part of these receivables to entities outside the banking sector.

Total new corporate loans in Q1 (RSD 176.1 bln) were 35% higher than in the same period a year earlier, and 24% of this amount referred to existing loans with the same bank but with modified terms. Corporates continued to resort most to current assets loans, which made up around 46% of new lending to corporates. Positive trends in the investment loans market continued, confirming greater reliance on loans for investment financing. From the start of the year, these loans accounted for around

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

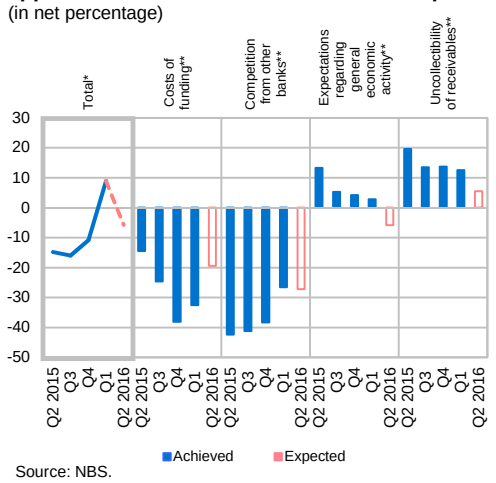
28% of new corporate loans, which is equal to last year's average. As a result, the share of this loan category in the stock of corporate receivables gained further 1.6 pp in 2016. In March, investment loans made up a third (33.2%) of banks' corporate loan receivables. The maturity of the loan portfolio was extended further, with the share of loans with the maturity of over two years up by 0.9 pp in Q1 to 65.2%.

According to the results of the April Bank Lending Survey[10], banks tightened credit standards for corporates, contrary to expectations stated in the prior Survey. After a relaxation for three quarters in a row, standards were tightened for dinar and FX loans alike. This was mostly due to risks relating to the collection of receivables and diminished readiness to assume the risks, while cheaper sources of funding and competition acted in the opposite direction. Banks expect an easing of standards in the period ahead, supported by the expected acceleration in economic activity. Terms of borrowing were more favourable for corporates in Q1, due to lower margins and associated costs, while requirements with regard to collateral and maximum loan amount were tightened. On the other hand, corporate demand for loans continued rising, guided by the need to finance current assets and restructure debts. The same factors, but also the financing of investments, are expected to drive demand in Q2.

Household loans continued up in Q1. They gained 1.6% or RSD 11.3 bln, excluding the exchange rate effect. Households mostly borrowed in dinars. Though the volume of new loans in Q1 (RSD 73.3 bln) was slightly lower than in the preceding months, it was RSD 20.4 bln higher than in the same period in 2015. Banks mostly approved cash loans, which made up 57% of new loans and were almost entirely in dinars (99%); of this, two-thirds were with repayment periods of over five years. Trends in the housing loans segment improved somewhat – the value of new housing loans was similar to that in prior months, instead of declining as usual at the start of the year. Within costlier loan categories, use of current account overdrafts increased, while borrowing under credit cards slightly decreased.

According to the results of the April Bank Lending Survey, banks continued to ease credit standards for households in Q1. Standards were eased for dinar loans, due to cheaper sources of funding, interbank competition,

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

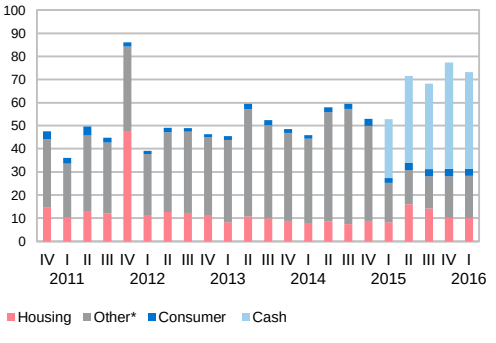


Source: NBS.

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

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

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

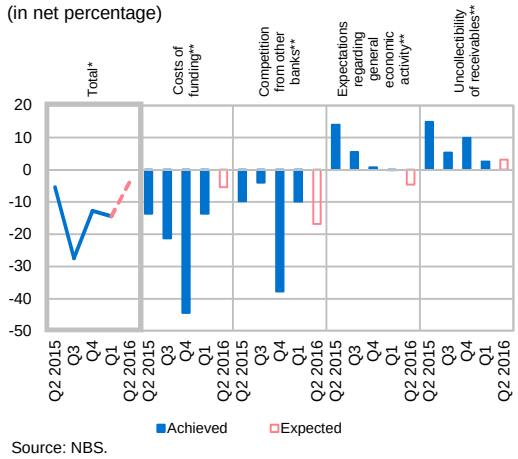


Source: NBS.

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

[10] The NBS has conducted the survey since early 2014. Participation is voluntary and the response rate almost 100%.

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

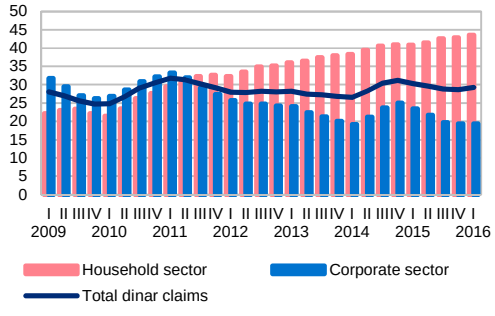


Source: NBS.

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

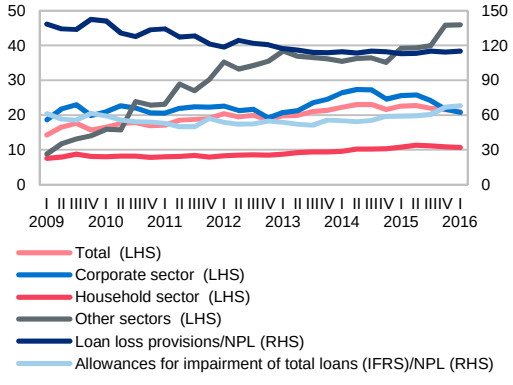
** Positive values indicate the contribution of individual factors to tightening, and negative values indicate the contribution to easing of credit standards.

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



Source: NBS.

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



Source: NBS.

and lower risk aversion. Interest rate margins were reduced further, and households were offered longer terms of repayment. Consistent with the expectations stated in the prior Survey, household demand continued rising. Although cash and refinancing loans continued to be most sought, the demand for housing loans also went up. Demand is expected to increase further in the period ahead, driven by the need to refinance current obligations and by real estate purchases.

At end-March, 29.2% of bank loans to corporates and households were in dinars, which is 0.6 pp more than at end-2015. This rise was mostly due to households which continued to borrow mostly in dinars – on average, 73% of new loans to households in Q1 were in dinars. The dinarisation of household lending in Q1 increased by 0.7 pp to 43.5% in March. By contrast, the degree of dinarisation of corporate lending (19.3%) remained unchanged from end-2015. New corporate borrowing in dinars has however risen over the past two quarters – the share of dinar loans in new corporate loans averaged at 22% or 7 pp above the average in the first nine months of 2015.

In Q1, the share of NPLs in total loans, on a gross basis, declined by 0.7 pp to 20.9% in March. The share of NPLs decreased by 0.9 pp to 20.8% in the corporate and by 0.2 pp to 10.7% in the household sector[11]. The share of corporate NPLs declined as a result of collection, restructuring, write-off and sale of a part of NPLs, while the share of household NPLs went down as a result of a rise in new loans.

Despite the relatively high share of NPLs in total loans, the capital adequacy ratio of around 21% indicates that the domestic banking sector is stable. In March, total allowances for loan impairment came at 68.1% of NPLs (8.8 pp more than a year earlier), while loan loss provisions,[12] at 115.0% in March, continued to fully cover the amount of gross NPLs.

3. Real estate market

Lower rates on housing loans and improved legislation on real estate trading have led to a gradual recovery of demand and supply in the real estate market. The

[11] With entrepreneurs and private households included, the share fell by 0.2 pp to 11.5%.

[12] Loan loss provisions are not an accounting category, meaning they are not recorded in the income statement but only serve for the calculation of bank capital. They are calculated on a group basis by asset classes that provisioning levels are defined for (0%, 2%, 15%, 30% and 100% for receivables classified in A, B, C, D and E categories, respectively).

increased demand also drove average real estate prices up, while the drop in turnover, usual for Q1, was much milder than in previous years.

Driven by the rise of real estate prices in Belgrade, Serbia's average real estate prices, as measured by DOMex,[13] gained 3.5% q-o-q. Real estate prices in Vojvodina and Western Serbia remained almost unchanged in the period under review, while Southern and Eastern Serbia saw a decline in prices. After two and a half years, real estate prices rose in y-o-y terms as well (5.4%), signalling a slight revival of demand in the real estate market.

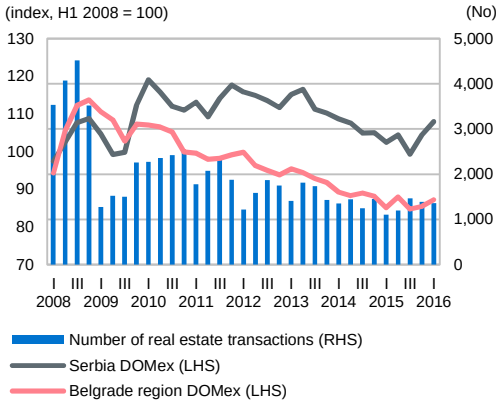
In Q1, the average real estate price in Serbia was EUR 895.3 per square meter. Contrary to the quarter before, regional differences in average prices increased slightly, so the ratio of the average price in the costliest region (Belgrade) relative to the rest of Serbia edged up to 1.75.

A drop in turnover[14] of 1.9%, though typical for the first quarter, was much milder than in previous years. The real estate turnover in Serbia declined across the board, except in Belgrade, so this region's share in the total climbed to 50.2%. In y-o-y terms, the number of real estate sales went up by 23.0%, which may be yet another signal of a gradual recovery of the real estate market.

An additional boost to real estate demand could be expected from more favourable financing conditions, since rates on housing loans continued to decline in Q1. The Bank Lending Survey confirmed increasing demand for this type of loans. Implementation of the Law on Intermediation in Trade and Lease of Real Estate further regulated the real estate market in terms of increasing the security of participants and the transparency of supply.

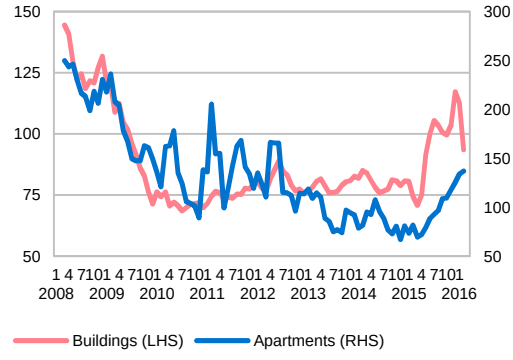
Positive trends in the real estate market in Q1 continued on the supply side as well. Owing to the improvement of pertinent legislation in the area, construction permits are now issued electronically, within up to one month from the application filing. Owing to the simplified procedure, the number of permits issued for construction of buildings rose by 7.5% y-o-y, while the anticipated value of works went up by as much as 105.2%. An even sharper rise was recorded in the number of permits issued for construction

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



Source: National Mortgage Insurance Corporation.

Chart IV.3.2 **Indices of the number of issued construction permits**
(3M averages s-a, 2015 = 100)



Sources: SORS and NBS calculation.

[13] The DOMex is published by the National Mortgage Insurance Corporation and relates only to real estate purchased by insured loans. Though it does not monitor purchase/sale transactions financed by own funds or uninsured loans, the DOMex is judged to mirror trends in the real estate market, considering high unemployment levels, low wages and muted lending activity.

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

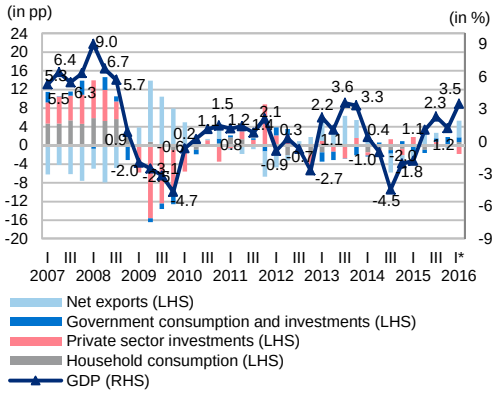
of dwellings (92.1% y-o-y), as well as in their useful floor area (108.0% y-o-y).

4. Aggregate demand

High investment into tradable sectors over the past year, faster growth of economic activity in the euro area and favourable terms of trade gave a strong boost to Serbian exports, making net exports the main driver of GDP growth in Q1. Household consumption also recovered, owing to the growth in wages and employment in the private sector, lower costs of repayment of existing loans and new borrowing. It is estimated that fixed investments remained on an upward path as well.

Based on NBS estimates, GDP growth will accelerate to 2.25–2.5% in 2016, which is an upward revision relative to the previous **Report**. *The main reason for the revision is a considerable improvement in foreign trade since the start of the year, which should lead to a positive contribution of net exports in 2016. Investment is also expected to continue its robust growth, owing to further improvement in investment environment and accelerated effective implementation of infrastructure projects. In addition, trends since the beginning of the year indicate that the contribution of household consumption could prove to be somewhat higher than previously expected.*

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

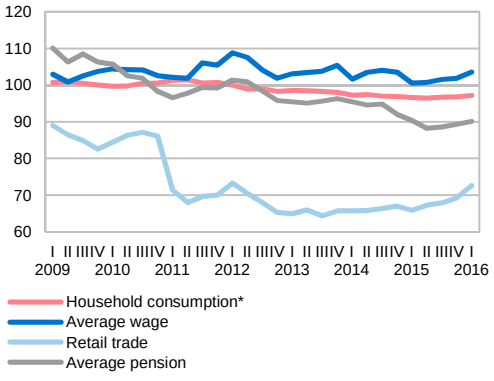


Sources: SORS and NBS calculation.
* NBS estimate.

Domestic demand

According to NBS estimate, growth in **household consumption**, in place since H2 2015, extended into Q1 (0.3% s-a) as well, so this component of demand added 0.3 pp to GDP growth. This is indicated mainly by the retail trade turnover, which continued up for the fourth consecutive quarter, rising by 4.8% s-a in Q1. Accommodation and food service sectors also saw favourable trends. For the first time in two and a half years, household consumption posted also a y-o-y increase (0.9%).

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



Sources: SORS and NBS calculation.
* NBS estimate for Q1 2016.

The bounce-back of household consumption over the last year was driven in part by the growth of economic activity, which reflected favourably on private sector wages and employment, as well as by the lower costs of repayment of existing loans. In addition, Q1 saw a rise in new cash and consumer loans. On the other hand, other sources of consumption (inflow of remittances from abroad and social insurance transfers) shrank in Q1. However, a decline in social insurance transfers in Q1

resulted from their one-off increase in Q4[15], while in y-o-y terms they posted an increase.

Within domestic demand, the greatest positive contribution to GDP came from **private investment** (0.4 pp), which edged up by 2.2% s-a in Q1. Continuation of positive trends in this component of demand is signalled by an increase in domestic production of machinery and equipment (10.7% s-a) and a further rise in imports of equipment (1.0% s-a). Apart from equipment, investment growth is shown also by construction indicators, i.e. real growth in construction works performed (20.2% y-o-y), and a further y-o-y increase in the production of construction material (13.7%) and the number of construction permits issued (11.1% in the first two months of 2016). High investment in the previous year slowed down its y-o-y growth, which measured 0.6% in Q1.

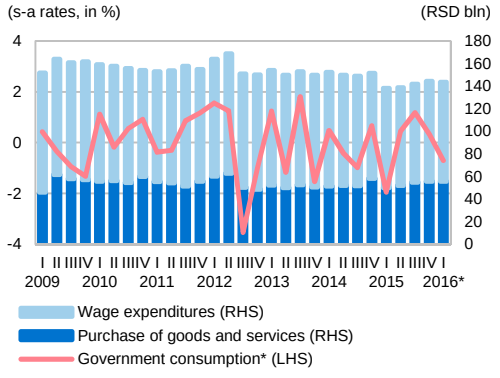
The favourable investment ambience continued to reflect positively on net FDI inflow which in Q1 stood at a level similar to the year before. Apart from FDI, a significant source of investment financing were newly approved bank investment loans, which in Q1 rose by 39.2% y-o-y, prompted, among other, by a further drop in interest rates.

As for negative contributors to GDP within domestic demand, most notable downward pressure came from the **change in inventories** (0.9 pp). This is indicated by a drop of inventories in overall industry, measuring 0.7% s-a. The decline in inventories was particularly pronounced in coal mining and in more than half of the manufacturing branches, with the sharpest declines registered for motor vehicles, petroleum products, rubber and plastic, food and textile products. In addition, higher cereal exports relative to the quarter before are a signal that agricultural inventories have decreased as well.

Apart from the change in inventories, **final government consumption**, with an estimated drop of 0.7% s-a in Q1, also weighed down on GDP (0.1 pp). This component of demand contracted as a result of lower public sector wage expenditures, while outlays for the purchase of goods and services rose mildly. In y-o-y terms, government consumption continued up (1.6%), giving a positive impetus to GDP (0.3 pp).

Government investment is also estimated to have remained on an upward path (3.0% s-a), adding 0.1 pp to

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



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

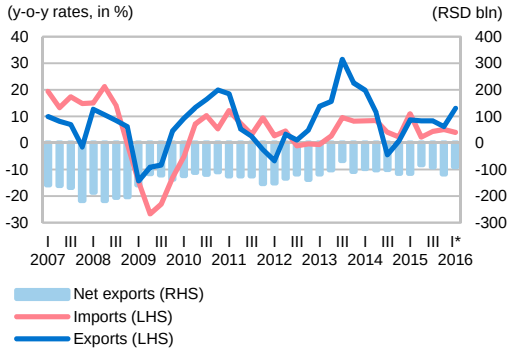
Table IV.4.1 **Investment indicators**

	2015				2016
	I	II	III	IV	I
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Industrial inventories	4.5	-0.3	0.8	-1.9	-0.7
Industrial production of capital goods	4.2	-3.4	-8.3	8.4	1.6
Exports of equipment*	20.6	1.0	4.8	6.4	22.3
Imports of equipment*	4.4	1.1	0.4	-0.2	1.0
Inventories of capital goods	3.2	2.5	-6.0	4.3	5.2
Industrial production of intermediate goods	3.3	3.5	0.8	2.1	4.2
Exports of intermediate goods*	3.0	5.0	3.1	2.4	1.4
Imports of intermediate goods*	3.1	0.8	0.7	4.9	-1.3
Inventories of intermediate goods	0.8	1.0	-1.3	2.2	2.5
Industrial production of construction materials	-5.1	6.2	-1.1	10.3	-0.1
Inventories of construction materials	-3.5	-4.0	-5.8	2.3	9.9
Government investment**	-3.7	19.3	16.0	4.1	3.0

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

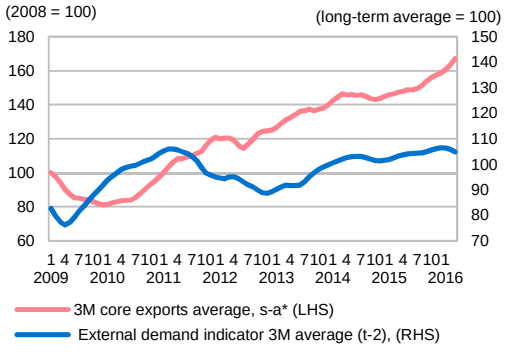
[15] An increase in this component of as much as 7.1% s-a in Q4 2015 resulted largely from the one-off settlement of arrears toward military pensioners.

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



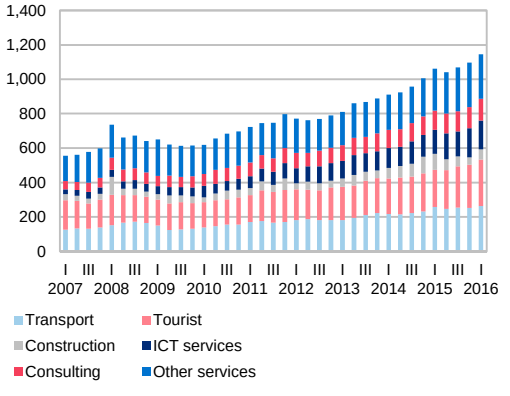
Sources: SORS and NBS calculation.
* NBS estimate.

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



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

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



Sources: SORS and NBS calculation.

GDP growth. Such trends were supported by the continued accelerated implementation of infrastructure projects financed from the budget, as confirmed by the real growth of government consolidated capital expenditure of 67.9% y-o-y.

Net external demand

High investment into tradable sectors over the past year gradually yielded effects in Q1 in terms of a robust real growth of goods and services exports (10.4% s-a). Faster growth in the euro area economy (0.5% s-a) was also conducive to growth in exports, while the indicator of external demand for Serbian exports[16], though slightly lower than in Q4, continued to rise y-o-y. Real imports of goods and services also went up in Q1 (by 4.8% s-a), and its main driver, like in the previous period, were imports of equipment. Since exports of goods and services grew more than imports in real terms, net exports gave a positive contribution to GDP (2.0 pp).

Real exports of goods and services considerably accelerated in y-o-y terms as well (13.0%), while real imports slowed down to 4%. Net exports therefore reversed the trend from the previous quarter, giving a positive contribution to GDP (3.6 pp).

Apart from the growing export demand, favourable trends in foreign trade were supported also by improved terms of trade, owing to export prices falling less than import prices. Price competitiveness was further boosted by the depreciation of the real effective exchange rate of the dinar against the euro and the dollar by 0.4%.

In Q1, euro-denominated commodity exports were marked by a strong growth (12.3% s-a) that was broadly based (18 of 23 branches of manufacturing). The strongest impetus to growth came from exports of motor vehicles (3.7 pp). The fact that Fiat's exports in the first three months were lower by around 15% y-o-y suggests that a large number of smaller manufacturers in the area of automobile industry are increasingly contributing to output and exports.

A high upswing in exports was also recorded in food and tobacco industries, which placed a bulk of their growing output abroad in Q1. Metal and chemical industries, benefiting from the low prices of primary raw materials

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

in the global market, also continued to post good export figures. Similarly, other export-oriented branches of manufacturing (production of electrical equipment, rubber and plastic, pharmaceutical products, textile, clothing and footwear) exported more than in the previous quarter.

On the other hand, euro-denominated commodity exports of petroleum products, still negatively affected by the low oil prices in the world market, continued to decline. Lower export figure was also recorded for base metals, primarily due to lower exports of steel, while exports of non-ferrous metals went up.

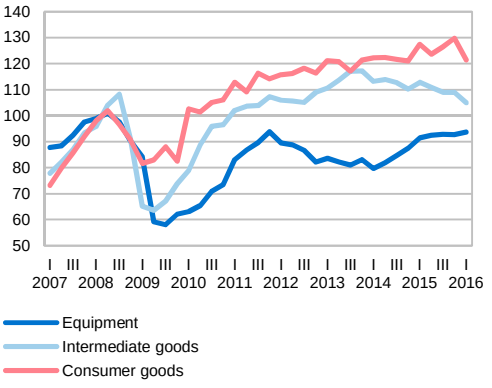
Exports of agricultural products were higher by about one-third than in the previous quarter, chiefly owing to increased exports of cereals. Corn and wheat exports were boosted by the rise in prices of these commodities in the regional commodity exchanges, in place since March, as well as by the need to decrease high inventories before the new agricultural season begins.

Q1 saw the continuation of positive trends in services exports as well, which increased by 3.8% s-a. Sector-wise, exports of tourist services grew most strongly (7.5% s-a), as indicated by tourism indicators early this year. Somewhat lower growth was recorded for exports of transport services (4.3% s-a) and consultancy services (2.6% s-a), while the exports of computer and information services, after vibrant growth in Q4, marched in place. Exports of services grew also in y-o-y terms (7.7%).

In Q1, euro-denominated commodity imports rose by 1.0% s-a, and, similarly to the previous period, were driven mostly by imports of equipment which grew on the back of invigorated investment. Same as in the previous quarter, a sizeable chunk of imports (close to 20%) related to non-classified goods, which probably also include a portion of imported equipment. Hence, after the re-classification, the equipment imports are likely to be even higher. Intermediate goods, on the other hand, posted a lower imports figure, which in part can be explained by the lower prices of industrial raw materials and energy in the global market. Imports of consumer goods also went down. However, these import components may also show a trend reversal after the re-classification.

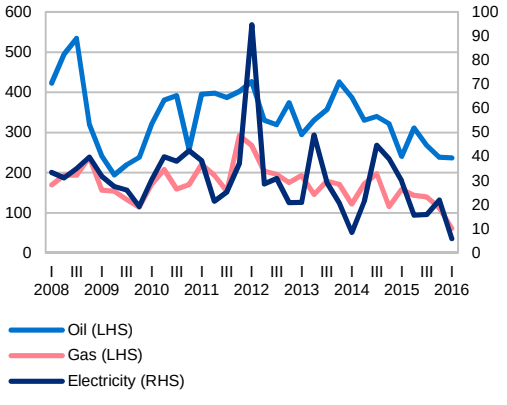
Observed by economic destination of the EU, commodity imports grew on the back of higher imports of capital goods, which may be put down to a rise in imports of automobile industry components. On the other hand, energy imports continued to go down, mostly due to the lower value of imported natural gas reflecting the price

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



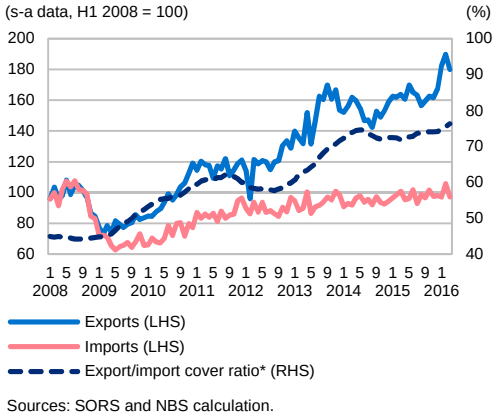
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



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

decline. Imports of petroleum products were at a similar level as in the previous quarter. Apart from energy imports, imports of intermediate and durable and non-durable consumer goods also declined. Some impetus came from higher imports of non-classified goods.

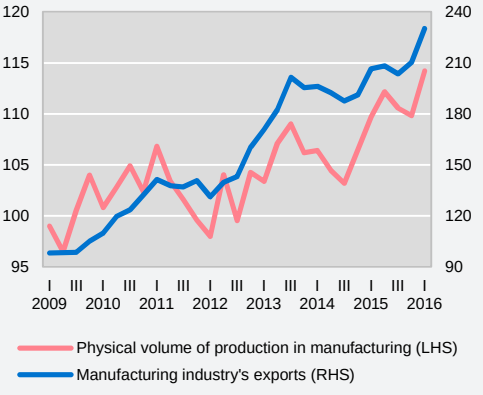
The robust export growth in Q1 reflected favourably on the indicators of Serbia's foreign trade position. Commodity export/import cover ratio edged up by 2.1 pp and reached the record 76.3% in March. Also, commodity exports were by 80.1% higher than pre-crisis,[17] while commodity imports stood 2.8% below the pre-crisis level.

[17] H1 2008.

Text box 2: FDI inflow as a prop-up to growth of commodity exports

Over the past several years, FDI was one of the main factors of growth in Serbia's exports. The favourable trend was mostly influenced by the macroeconomic stability and improved business and investment environment, which resulted from amendments to the laws on labour, construction and investment, and were affirmed by Serbia's improved ranking on the World Bank's Global Competitiveness Index in 2015. Another important factor were government incentives for job creation in production industries which, in addition to improving the structure by sector, also significantly improved the regional structure of production industries and exports. An additional incentive to FDIs came from the launch of EU accession talks, as this requires the alignment of domestic legislation with the acquis, as well as predictability and stability of the business environment to which foreign investors are accustomed.

Chart O.2.1 **Manufacturing production and exports**
(2009 = 100)

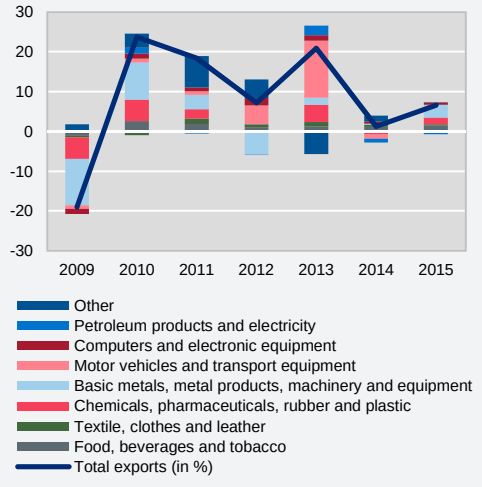


Sources: SORS and NBS calculation.

In real terms, exports of goods and services have continually increased since 2010. Aided inter alia by FDIs received in the previous period, exports peaked in 2013 (21.3%) mainly on the back of surging net exports in two branches of manufacturing (automobile and oil industry). With the launch of the new model at Fiat Automobiles Serbia in July 2012, the motor vehicles export rate soared by 109.5% in 2012 and by as much as 181.7% in 2013. An additional push came from increased exports of petroleum products (51.2% in 2013), following the completion of an investment cycle to modernise and enhance the production capacity at the Pančevo Oil Refinery.

Unlike the first wave of FDIs, which focused on a small number of projects, the second wave, which landed in 2014 (EUR 1.2 bln net) and 2015 (EUR 1.8 bln net), was more diversified in terms of target sectors and included a large number of smaller projects. In both years, the major portion of the total inflow was channelled into manufacturing (around 35%), exerting a significant influence on the sector's growth in exports in 2015 (8.1%) – as many as 20 of the 23 branches of manufacturing registered growth in exports. In addition to basic metals, an important driver of growth in commodity exports were metal products and machinery and equipment, hence mostly companies operating in these branches were included among the 15 largest Serbian exporters. The largest FDI inflows in 2014 and 2015 went to rubber and plastic production, which gave a strong impetus to export growth. The tobacco industry also posted high export growth in 2015 (84.4%), owing to the decision of Philip Morris to relocate some of its export-oriented production to Serbia, because of its more favourable business climate. Likewise, the growth trend continued in the food industry, the manufacture of electrical equipment, paper, textile, clothes, footwear, furniture and construction materials. The chemical industry bounced back owing to the fall in the price of natural gas – its main raw material.

Chart O.2.2 **Rates and structure of growth in commodity exports by industrial sector**
(in pp)



Sources: SORS and NBS calculation.

By contrast, a slight drop in commodity exports in 2015 was recorded in the production of motor vehicles (3.5%). Fiat remained the largest single exporter, accounting for EUR 1.2 bln of total exports, down by 13.6% from 2014. Nevertheless, this sector also recorded a positive trend – a growing contribution of other

companies which, over the previous years, opened facilities for the production of mostly export-oriented goods and whose export figures rose from around EUR 500 mln in 2014 to approximately EUR 620 mln in 2015. In the period ahead, this branch can expect yet new investments which will, in all likelihood, offset Fiat's gradual decrease in exports, ensuring that motor vehicle production remains one of the pillars of export growth in the future. A decline in commodity exports in 2015 was also recorded for petroleum products and was entirely triggered by the fall in their prices considering that in terms of quantity, the export of these products remained almost unchanged relative to 2014. This serves to show that even amid low prices, Serbia retained its market position in countries of the region which constitute its main export markets, and that if the global price of crude oil and petroleum products increases in the future, the contribution of this branch to growth in commodity exports could be positive once again.

Positive movements in exports continued at the onset of 2016, with commodity exports accelerating significantly to 12.3% s-a in Q1, compared to Q4 2015. Although Fiat downsized its exports, motor vehicles posted rather high export figures (26.1% s-a), as confirmed by the above assertion about the growing contribution of smaller manufacturers to export growth in this branch. In addition to motor vehicles, another 17 manufacturing industries boasted growth figures, thus continuing the trend of broadly dispersed growth.

The rise in exports in 2015 and early 2016 was still conducive to reducing the Serbian economy's external imbalances. The current account deficit, which declined to 4.8% of GDP in 2015 and was fully covered by FDI net inflow, continued to decrease in Q1 2016, and was more than halved relative to the same period a year earlier. Confirmations of positive macroeconomic movements have also come from the IMF under three successful revisions of the current arrangement, and from international credit rating agencies, which upgraded Serbia's credit rating outlook. The continuation of structural reforms and further steps towards succession to EU membership should additionally increase Serbia's appeal in terms of attracting FDIs, as they are expected to remain the key driver of export-based growth in the future.

5. Economic activity

Positive trends in industrial production recorded in the past year extended into 2016 as well, reflecting 2015 investment into tradable sectors and higher external demand. Together with the continued growth in construction, these trends were the main drivers of GDP growth acceleration to 1.7% s-a in Q1. According to the preliminary estimate of the Serbian Statistical Office, strong GDP growth was recorded also in y-o-y terms (3.5%), owing to continuation of positive trends in industrial production and construction.

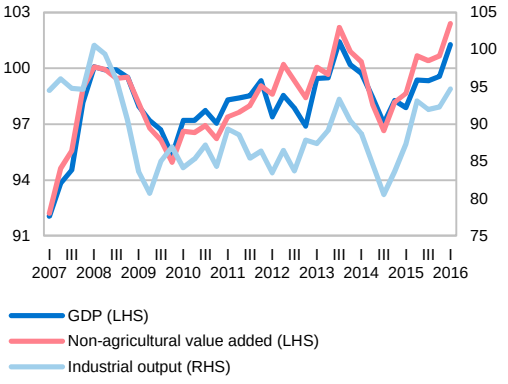
GDP growth projection for 2016 has been revised up since the last Inflation Report, from 1.8% to 2.25–2.5%, reflecting mainly more favourable movements in manufacturing, construction and some service sectors. Further positive impetus is expected from the recovery in agricultural production.

Increased external demand and high investment in the previous year reflected positively on industrial growth, while the improved investment ambience and continued implementation of infrastructure projects supported growth in the construction sector. These two sectors were the main drivers of GDP growth, which in Q1 reached 1.7% s-a. Economic activity expanded also in the majority of service sectors. According to NBS estimate, economic activity, measured by NAVA, edged up by 1.7% s-a, to stand at 2.4% above its pre-crisis level at end-Q1[18].

Preliminary estimates of the Serbian Statistical Office show that GDP growth accelerated considerably in Q1, to 3.5% y-o-y. The NBS associates this growth primarily with the faster expansion of industrial production (1.8 pp) and construction (0.5 pp), while some contribution, albeit lower, came from trade, transport and catering (0.4 pp).

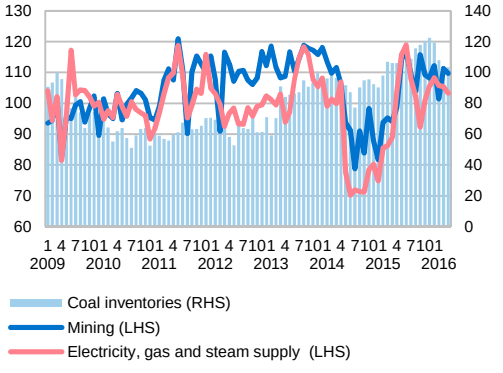
Positive trends in industrial production, which prevailed for the most part of 2015, continued early this year. In Q1, the physical volume of overall industrial production expanded by 2.6% s-a, fully driven by the 4.0% s-a growth in manufacturing. Physical volume of output shrunk in mining (2.2% s-a) due to lower exploitation of coal, while the exploitation of metal ores bounced back after the Q4 fall. Lower coal production was compensated for by a decrease in coal inventories. The physical volume of output in electricity, gas and steam supply stagnated in Q1.

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



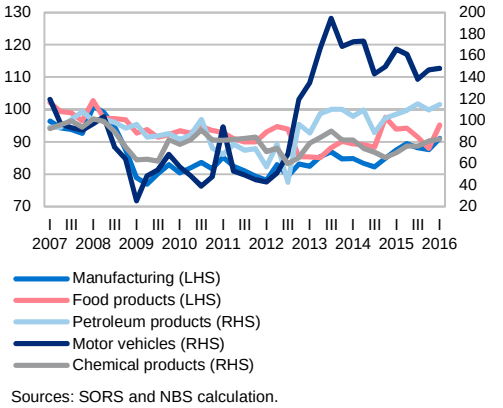
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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

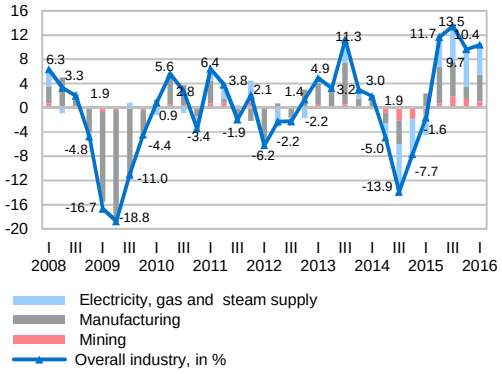


Sources: SORS and NBS calculation.

[18] H1 2008.

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

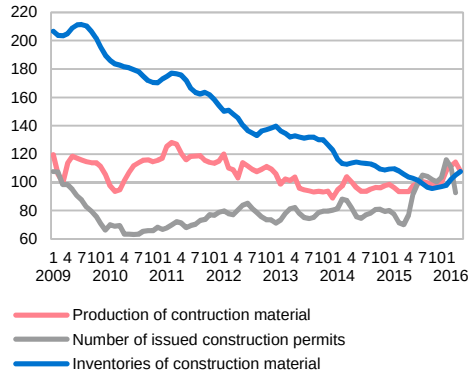
(in pp)



Sources: SORS and NBS calculation.

Chart IV.5.5. **Construction activity indicators**

(3M averages s-a, 2015 = 100)



Sources: SORS and NBS calculation.

Table IV.5.1 **Contributions to quarterly s-a GDP growth** (in p.p.)

	2015				2016
	Q1	Q2	Q3	Q4	Q1*
GDP (s-a, in %)	**-0.4**	**1.5**	**0.0**	**0.2**	**1.7**
Agriculture	-0.7	0.0	0.1	0.0	0.1
Industry	0.7	1.2	-0.4	0.2	0.9
Construction	0.0	0.3	0.1	0.0	0.2
Services	-0.4	0.3	0.1	0.0	0.5
Net taxes	0.0	-0.1	0.1	0.0	0.0

Sources: SORS and NBS calculation.

* NBS estimate.

In Q1, s-a growth of the physical volume of output was recorded in more than three-quarters of branches of manufacturing. The greatest boost came from food industry, which in Q1 recovered from its H2 2015 fall, while tobacco industry also posted high growth. Given that output increased across a large number of export-oriented branches (electrical equipment, rubber and plastic, petroleum products, machinery and equipment), external demand and past investment into export-oriented sectors may be identified as key underlying factors. Automobile industry posted modest growth in Q1 (0.8% s-a), but the fact that it came about despite lower production of Fiat Automobiles Serbia indicates that the contribution of smaller manufacturers in the sector is increasing, which may offset the negative effects of Fiat's downsized production in the coming period.

The sharpest drop in the physical volume of output was registered in base metals, mainly due to the lower price of steel in the global market. However, privatisation of the Smederevo steel plant and announced investments in manufacturing of higher value added products should ensure a positive contribution of this sector to industrial production and GDP in the coming period.

Observed y-o-y, overall industrial production in Q1 accelerated its growth to 10.5%, with strong contributions from electricity, gas and steam supply (4.9 pp) and manufacturing (4.5 pp), and somewhat lower from mining (1.0 pp). It should be noted that Q1 2016 was the last quarter in which the base effect persisted in mining and electricity sectors, given that pre-flood output levels were reached during Q2 2015.

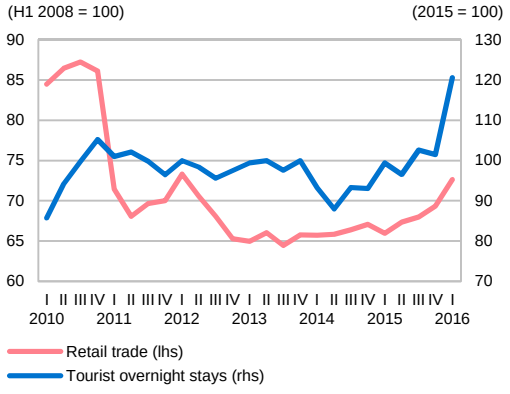
Apart from industrial production, Q1 saw the continuation of positive trends in construction as well, as indicated by the real growth in the value of works performed (by 20.2%), an increase in the number of construction permits issued (by 11.1% y-o-y in the first two months of 2016) and higher production of construction material (by 13.7% y-o-y).

It is estimated that service sectors, on the whole, positively contributed to GDP growth in Q1. Judging by available indicators, higher activity was recorded in trade turnover and accommodation and food service sectors. In Q1, retail trade rose in real terms by 4.8% s-a, and by as much as 10.2% from the same period last year. Also, the number of tourist overnight stays rose by 20.6% y-o-y in Q1, and the estimated real turnover of catering services gained 2.0% y-o-y during the first two months of the year. Activity also heightened in the financial sector, as lower interest rates and higher demand stimulated a significant y-o-y increase in new corporate and household loans in Q1.

Given that agricultural season is only beginning, it is difficult to estimate the sector's growth in 2016. Our estimate is therefore based on ten-year average yields of the main field crops, which indicate agricultural growth of around 3%, implying 0.2 pp contribution to GDP. Judging by the current situation, this estimate seems realistic, given that the condition of winter crops is satisfactory, and spring sowing was mostly in line with the schedule. Also, the rains from late April and early May were conducive to all crops and compensated in part for the lack of precipitation during winter.

GDP growth projection for 2016 has been revised up relative to the last *Inflation Report*, to 2.25–2.5%. The main underlying reason is higher than expected expansion of manufacturing, which should benefit from last year's investment and continuation of economic growth in the euro area, our main trade partner. Also, somewhat higher growth is expected in construction, owing to improved legislation and accelerated implementation of infrastructure works, as confirmed by the sharp increase in consolidated capital expenditure in Q1. In addition, low base reflecting the last year's underperforming season will also have a bearing on the positive contribution of agriculture to GDP.

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



Sources: SORS and NBS calculation.

6. Labour market developments

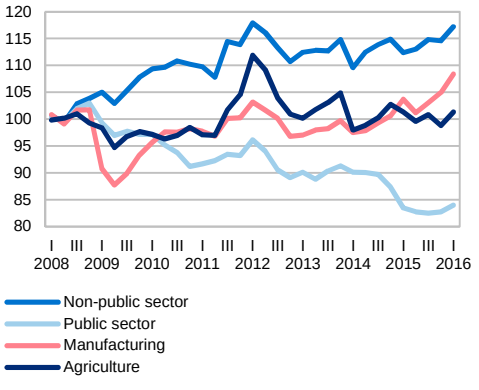
In Q1 real net wages increased further in s-a terms and reversed the downward y-o-y trend. Growth in gross real wages outstripped productivity gains, partly reflecting a contraction in employment. This led to mild deterioration in cost competitiveness, measured by unit labour costs.

Wages and labour productivity

As Q1 growth in nominal wages (2.0% s-a) outstripped moderate quarterly price growth, **real net wages** turned higher (1.6% s-a) than in the quarter before – notably on account of higher non-public sector wages and to a lesser extent thanks to an increase in public sector wages. In late Q1, average wages were 5.4% lower in the non-public than the public sector, which signals further narrowing of the gap.

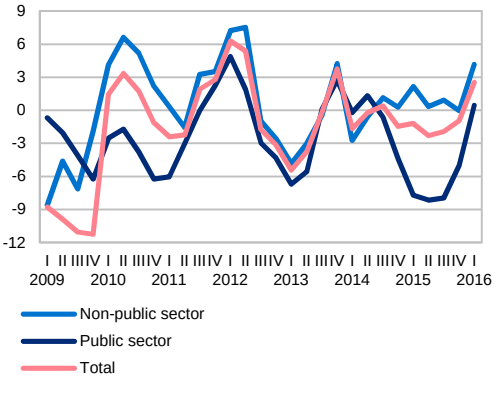
The strongest wage growth was recorded in some service sectors, and to a lesser extent in all industry sectors, agriculture and construction. The sectors that witnessed solid s-a growth in Q4 (transport, information and communications) saw a drop in real wages in Q1. A decline in real net wages was also observed in some sectors with the dominant share of state enterprises and institutions.

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



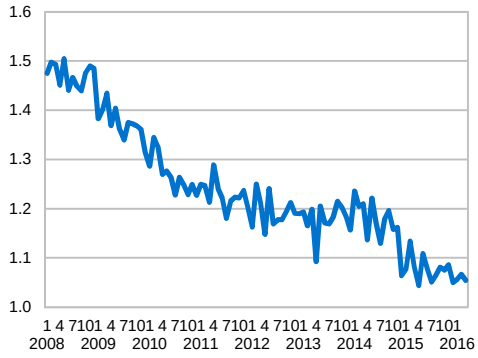
Sources: SORS and NBS calculation.

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



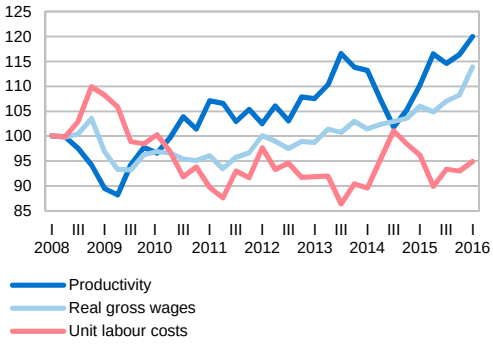
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

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

	2015			2016
	Q2	Q3	Q4	Q1
Total number of formally employed	0.4	0.9	-1.0	0.0
Employed with legal persons	0.2	0.8	-1.2	0.1
Entrepreneurs and their employees	2.0	2.0	0.6	-0.5
Individual farmers	-1.0	-1.2	-1.0	-0.6
Unemployed persons	-2.7	-1.3	-1.6	3.4
First-time job seekers	-2.7	-1.1	-1.7	1.6
Used to be employed	-2.7	-1.5	-1.6	4.4

Sources: SORS and National Employment Service.

Following five consecutive quarters of decline, real net wages picked up in y-o-y terms, partly reflecting the drop-out of the base effect of public sector wage cuts. Non-public sector real net wages continued up, most notably in catering, the financial sector, mining and manufacturing. After six quarters, real net public sector wages increased y-o-y.

S-a growth in the real net wage bill continued in Q1 and was more evident – as in the previous period, in the non-public than the public sector.

The average nominal net pay was RSD 43,596 in Q1, down by 6.4% q-o-q and up by 4.5% y-o-y.

Q1 productivity growth, partly driven by a contraction in employment, was lower than gross wage growth. As a result, **unit labour costs** went up (2.1% s-a) and cost competitiveness of the domestic economy deteriorated mildly. Unit labour costs in manufacturing increased to a somewhat lesser extent (0.5% s-a).

Employment

In absence of Labour Force Survey data for Q1, the labour market was analysed based on administrative sources published by the Serbian Statistical Office and the National Employment Service. In early 2016, labour market trends were somewhat more unfavourable compared to 2015 when employment increased and unemployment contracted.

According to data of the **Serbian Statistical Office** obtained from the central registry of compulsory social insurance, in March total formal employment stayed broadly unchanged from end-2015. This was supported by an increase in employment with legal persons (0.1%), which accounts for the major part of formal employment. A decline was seen in the number of private entrepreneurs and their employees (0.5%) and individual farmers (0.6%). By sector, employment picked up in the majority of service sectors and construction, and declined in industry, trade and agriculture.

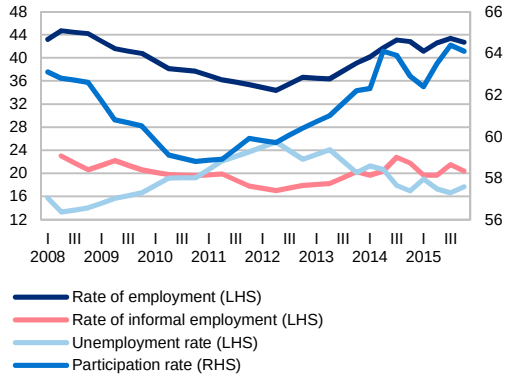
Based on data of the **National Employment Service**, the total unemployed rose by 24,842 persons in Q1. Much stronger growth in unemployment was seen among persons who were already employed, which may be associated with the completion of privatisation of socially-owned enterprises and the liquidation and bankruptcy of most of them. This is confirmed also by a rise in the number of persons receiving unemployment

benefits – for the first time after a longer period this figure increased at the quarterly level (by 1,682) to 46,844 at end-Q1.

Under the latest available data from the **Labour Force Survey** for Q4 2015, labour market trends were more unfavourable relative to the rest of the year. The employment rate (42.7%) declined slightly (0.7 pp) from Q3, but was broadly flat y-o-y. The unemployment rate rose slightly to 17.7% both relative to Q3 (1.1 pp) and Q4 2014 (0.7 pp). A reduction was observed for informal employment as well – it fell by 1.1 pp from Q3 to 20.4%. Though somewhat weaker than in Q3, the activity rate exceeded the end-2014 level.

Service sectors and agriculture experienced the sharpest drop in Q4 employment. Industry and construction displayed positive trends – the employment figure increased, consistent with economic activity trends in these sectors. In terms of labour status, the number of persons under full-time and part-time contracts went up, while the number of seasonal workers and those at temporary jobs declined significantly. This may be correlated with a reduction in informal labour, resulting from changed labour legislation and enhanced inspection supervision.

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



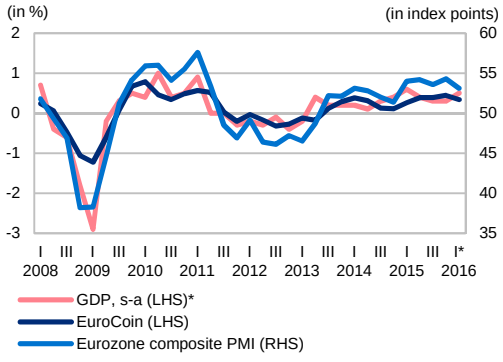
Source: SORS.

7. International environment

Under the latest IMF estimate, global growth was revised further down, chiefly in order to accommodate the negative effects of China's economic rebalancing and low commodity prices on global trade and financial flows. Economic activity in Europe and the USA continued rising in Q4, led dominantly by domestic demand, as was the case in 2015 as a whole. GDP growth in some Central and East European countries was also helped by the recovering external demand.

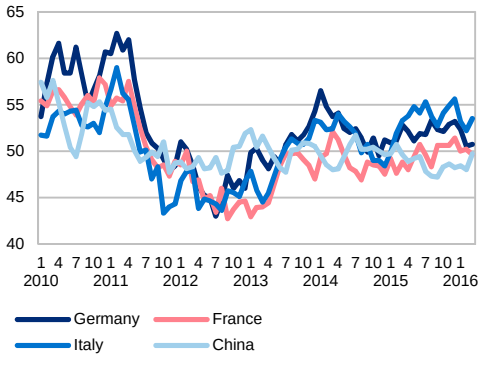
Relatively sluggish global growth and low prices of primary commodities pushed the already low inflation further down since the beginning of the year, prompting a response from central banks. The ECB adopted a set of measures increasing its monetary accommodation, while the Fed announced a slower than expected dynamics of the federal funds rate hike. Such decisions brightened the market sentiment and alleviated uncertainty in the international financial market, which should produce positive effects on Serbia as well.

Chart IV.7.1 **Movements in GDP and economic activity indicators of the euro area**
(quarterly rates)



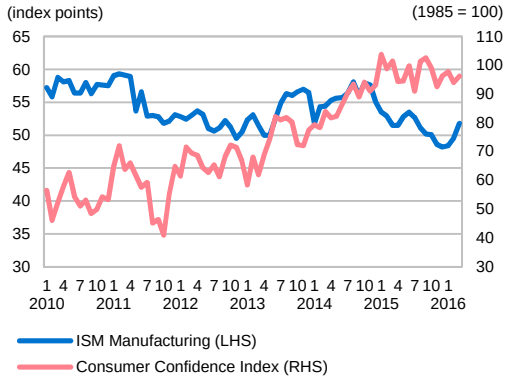
Sources: Eurostat, Markit Group and Banca d'Italia.
* Eurostat's preliminary flash estimate.

Chart IV.7.2 **PMI Manufacturing for selected countries**
(index points)



Source: Markit Group.

Chart IV.7.3 **Leading economic indicators in the USA**



Source: Institute for Supply Management, Conference Board.

Economic activity

Euro area's GDP kept the same pace in Q4 (0.3% s-a), with positive contributions coming from household consumption and investment and negative – from net exports. Household consumption continued up on the back of positive trends in the labour market, low oil prices and improved financial position of the household sector. Yet, its contribution came weaker compared to the rest of the year, partly due to security issues in some EU member states. On the other hand, investment sped up in most member states, which can be explained with better capacity utilisation in industry, higher profitability of companies, more favourable financing conditions and greater demand in the real estate market. Net exports remained a drag on GDP, as the BRICS countries, which are a significant exports market, faced a slowdown. Still, these negative effects were partly remedied by higher trade among EU member states.

Observed by country, GDP growth maintained its Q3 pace in Germany and Spain in the final quarter (0.3% and 0.8%, respectively), while losing some steam in France and Italy (coming at 0.3% and 0.1% s-a, respectively). Germany's GDP rose on tailwinds of household consumption and investment, but also government spending boosted as a result of accepting a large number of refugees. At the same time, net exports acted as a headwind due to a slowdown in emerging economies. Italy's economic activity dampened somewhat in Q4 amid a reduction in inventories, while the upward push came again from household consumption and investment.

The Eurostat's preliminary flash estimate shows that the euro area's GDP rose 0.5% s-a in Q1, climbing 1.5% y-o-y. As in the previous period, positive contribution is anticipated from household consumption, which benefits from further contraction in unemployment (by 0.2 pp during Q1 to 10.2% in March), and trends of the Economic Sentiment Indicator, which although lower than a quarter before, was still above the long-term average. Moreover, favourable borrowing conditions and higher corporate profit should reflect on higher investment, despite the expected slowing of the growth of new orders, as indicated by the drop in PMI Composite, whose Q1 average came below its Q4 figure.

According to the ECB estimate, economic activity in the euro area is expected to rise 1.4% in 2016, 0.3 pp less compared to the previous projection, while somewhat stronger growth is cited by the IMF and Consensus

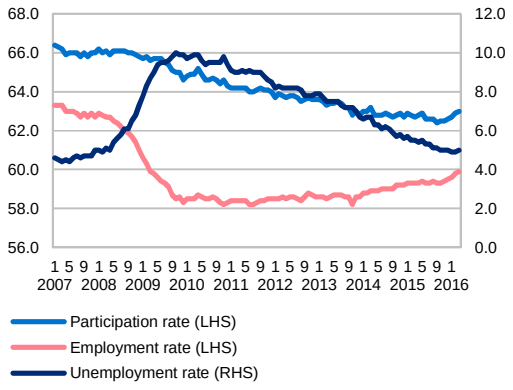
Forecast (1.5%). The downward revision is a consequence of a sharper than expected drop in external demand, appreciation of the real effective exchange rate of the euro since the start of the year and heightened uncertainty in the financial market.

Though at a more moderate pace (0.4% s-a), **GDP growth** continued in the USA in Q4, with the strongest impetus coming from household consumption, as well as from investment in construction industry and federal government spending, whose contribution, albeit weaker than in Q3, was positive. According to preliminary estimates, Q1 saw a further weakening of GDP growth (0.1% s-a), due to a softer private consumption growth and persistent negative contribution from total investment and net exports. Still, movements of the key indicators in Q1 suggest that negative trends are beginning to wane, as in March, both the ISM Manufacturing and the Consumer Confidence Index reached their highest values of the quarter. Positive trends in the labour market lasted throughout January and February, with the unemployment rate falling to its lowest level since the outbreak of the crisis (4.9%) and nonfarm payroll employment gains averaging over 200,000. Compared to end-2015, the unemployment rate rose mildly in March (5.0%) and kept the same level in April.

The US economy is expected to grow further in 2016 (2.4% according to the IMF estimate), buoyed by the recovery in the real estate market, still positive contribution of household consumption stemming from a rise in disposable income in the previous period, and looser fiscal policy. By contrast, net exports are likely to continue to send headwinds to GDP growth in 2016 due to sluggish growth in key foreign trade partners and the dollar's appreciation. A drag can also be expected from investment in the energy sector, affected by low prices of oil and gas and difficulties in financing current financial liabilities.

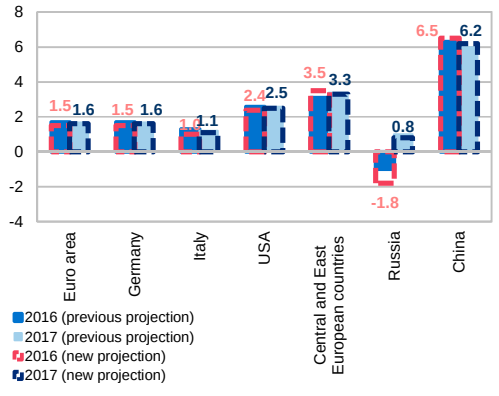
Domestic demand stayed the key catalyst to **GDP growth** in Q4 across most **Central and East Europe** (3.5% in 2015, according to the IMF estimate), neutralising the adverse effects of lower external demand in an environment of weaker global growth. Central European countries still posted relatively high growth rates (over 3% y-o-y), boosted by private consumption that was helped by sound labour market trends and low inflation, and by investment which benefited from the monetary easing of the ECB and most central banks in the region. Positive trends were detected in most of the Southeast Europe, where economic growth is picking up on the back of salutary effects of low oil prices onto

Chart IV.7.4 **US labour market**
(monthly rates, in %)



Source: Bureau of Labor Statistics.

Chart IV.7.5 **Revisions of real GDP growth forecasts for 2016 and 2017 by the IMF**
(in %)



Sources: IMF WEO Update (January 2016) and IMF WEO (April 2016).

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

	Consensus Forecast April 2016		IMF April 2016	
	2016	2017	2016	2017
Poland	3.6	3.4	3.6	3.6
Czech Republic	2.4	2.7	2.5	2.4
Hungary	2.4	2.6	2.3	2.5
Albania	3.3	3.7	3.4	3.8
Bulgaria	2.7	2.8	2.3	2.3
Bosnia and Herzegovina	2.9	3.0	3.0	3.2
Macedonia	3.7	3.6	3.6	3.6
Montenegro	-	-	4.7	2.5
Romania	4.1	3.4	4.2	3.6
Slovenia	2.1	2.3	1.9	2.0
Croatia	1.5	1.8	1.9	2.1

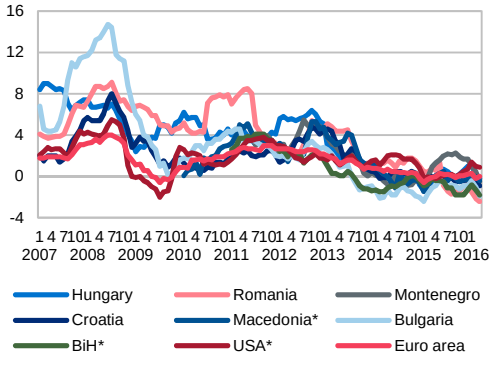
Sources: Consensus Forecast and IMF.

domestic demand and on the back of growth in the euro area as a source of external demand. In 2015, Russia's GDP fell by 3.7%, while recession is also expected in 2016 (1.8%, as estimated by the IMF) due to low oil prices and limited access to funding.

China's GDP slowed further down to 6.7% y-o-y in Q1, but readings since the start of the year are more favourable than previously expected. Namely, owing to stimulus measures taken by the Chinese authorities, industrial production, retail trade turnover, fixed investment and new loans rose more than expected in Q1, indicating a possibility of a gradual pick-up in economic growth. This is partly confirmed by the IMF, which in its latest projection revised China's GDP growth up by 0.2 pp to 6.5% in 2016.

Inflation movements

Chart IV.7.6 **HICP across selected countries**
(y-o-y rates, in %)



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

Despite a mild recovery of economic activity, the QE programme in the **euro area** fell short of expectations regarding inflation. In Q1, inflation still moved around zero (0.3% in January, 0.2% in February and 0% in March, y-o-y). Such trends were caused chiefly by a drop in energy prices; if these are excluded, inflation moved around 1.0% in Q1. Based on the April oil futures prices, the ECB expects headline inflation to enter the negative zone again in the coming months, and to rise gradually in H2, mostly on account of the base effect for energy prices. Inflation is expected to rise both in 2017 and 2018 owing to monetary policy measures and anticipated economic recovery. Yet, according to the latest ECB projection from March, inflation will undershoot the target in 2018 as well. Inflation projections were revised down from December, to only 0.1% for 2016, instead of 1.0%, and more moderately downwards, to 1.3% for 2017, instead of 1.6%, which is also the 2018 projection level. The April ECB Survey of Professional Forecasters cited somewhat higher inflation rates, although they were also revised downwards from January, primarily due to trends in oil prices. Long-term market inflation expectations also went down, moving even further away from the inflation target – in April, five-year ahead inflation the market expects in the euro area five years from now (in the year 2021 for the year 2026) was 1.4%[19].

Deflationary pressures and low inflation were felt in most **Central and East European countries**. Negative

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

inflation rates were most pronounced in Romania, partly due to a decrease in the VAT rate since the start of the year, and also in Bosnia and Herzegovina, Bulgaria and Croatia. In March, inflation also slid into the negative zone in Hungary, Macedonia and Montenegro. On the other hand, currency depreciation caused relatively high inflation rates in Turkey and Russia.

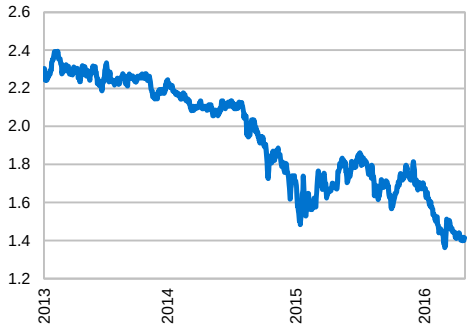
Supported by economic growth, inflation in the **USA** was significantly higher in Q1 than in the period before. Yet, it dropped from the January 1.4% to 0.9% in March, chiefly due to the fall in oil and gas prices, so it remains to be seen whether higher inflation rates are sustainable. Caution is also suggested by the March data on the lowest monthly rise in core inflation (excluding energy and food prices) since last August. Also, survey-based inflation expectations are near their all-time low, and market-based measures of inflation compensation came low as well. The Fed, however, expects inflation to rise gradually as the effects of the drop in energy prices and the dollar's appreciation dissipate in the period ahead and as the labour market recovers further. Return to the target is expected in the next two to three years.

Monetary policy

In March, the ECB supplemented the fan of its conventional and unconventional monetary policy measures, implemented since June 2014, with new ones – the key interest rate was cut by 5 bp to 0.0%, the rate on the marginal lending facility by 5 bp to 0.25%, and the deposit facility rate by 10 bp to -0.4%. The monthly volume of asset purchases was increased from EUR 60 bln to EUR 80 bln. The purchase programme was expanded to include bonds issued by non-bank corporations, in addition to government bonds. To further incentivise bank lending to the real economy, a new TLTRO II programme was launched, with a four-year maturity, to be implemented as of June 2016. The ECB expects this package to further ease funding conditions, stimulate credit creation and so encourage economic growth and inflation's return to the target.

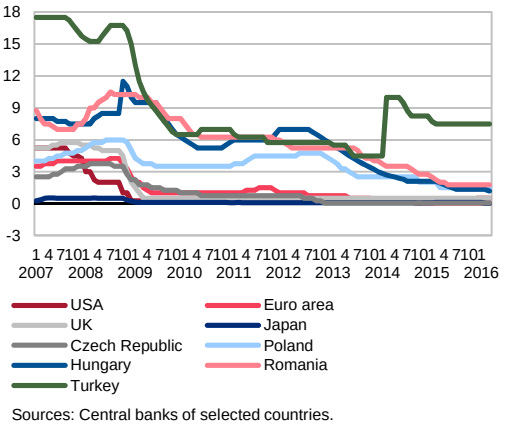
Looking at **Central and East Europe**, in addition to Serbia, Hungary also eased its monetary policy stance further. Due to disinflationary pressures and below-target inflation, Hungary's central bank cut the key rate by 15 bp in both March and April to 1.05%. In March, the Hungarian National Bank also introduced a negative rate on deposit facility, trimming it to -0.05%. Central banks of other countries did not change their policy rates.

Chart IV.7.7 **Long-term inflation expectations in the euro area**
(in %)



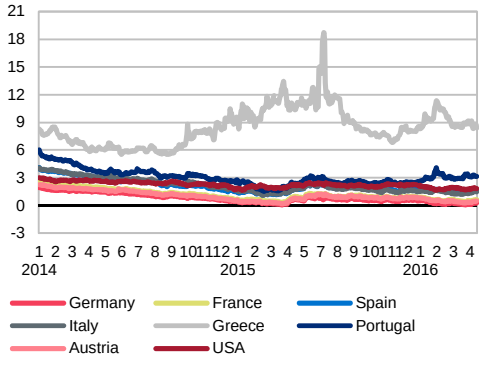
Source: Thomson Reuters.

Chart IV.7.8 **Policy rates across selected countries**
(annual level, in %)



Sources: Central banks of selected countries.

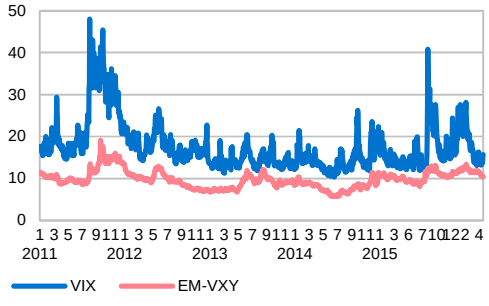
Chart IV.7.9 **Yield on 10-year bonds of selected countries**
(daily data, in %)



Source: Bloomberg.

Having increased the federal funds rate in December, the **Fed** did not change its policy stance since the turn of the year, as was expected. Yet, market participants' attention was indeed fixed on the Fed's meetings and its assessment of current economic trends so as to anticipate the likely trajectory of the federal funds rate in the rest of the year. Given the unfavourable circumstances in the financial market, China's slowdown and uncertainty regarding inflation growth prospects, the Fed cited the necessity of caution when further increasing the policy rate. What is significant is that the expected pace of the policy rate hike in 2016 was ratcheted down from four (in December) to two. The average value of the Fed's projection for the federal funds rate is 0.875% for December 2016, 1.875% for 2017 and 3.0% for 2018.

Chart IV.7.10 **Implied volatility of the global financial market***
(in %)



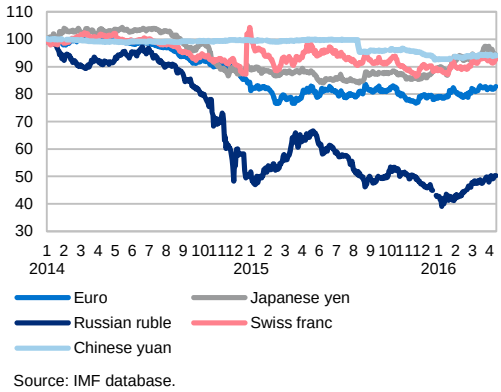
Source: Bloomberg.

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

Financial and commodity markets

Financial market volatility increased sharply in the first half of the quarter, reflecting investors' withdrawal from riskier assets due to weaker prospects for global growth, but also the start of the Fed's policy normalisation. The volatility subsided somewhat once the market sentiment improved on the back of new accommodative measures of the ECB and the central bank of Japan and expectations of a more gradual policy normalisation of the Fed. This is also indicated by VIX, tracking the S&P 500 index options, which reached 28% in February and dropped to 13% in April. Also, the increase in the price of gold in the first half of the quarter and its subsequent stabilisation support the assumption of a mild reduction in uncertainty, also indicated by yields on five- and ten-year US government bonds, which started rising since mid-February. However, these yields were still lower than in the several previous quarters.

Chart IV.7.11 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



Source: IMF database.

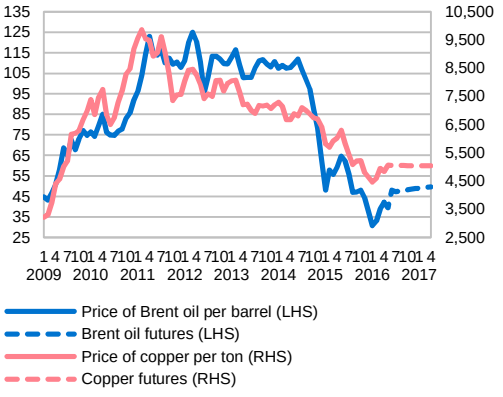
* Growth indicates appreciation.

After a significant increase in the previous period, the **dollar's** value vis-à-vis other world currencies fell from the start of the year owing largely to the markets' adjustment to a more gradual pace of the Fed's policy normalisation. Consequently, the dollar's depreciation in February and March was its sharpest two-month depreciation since 2011. On the other hand, despite new accommodative policy measures of the ECB, the **euro** stayed resilient, gaining 3.6% against the dollar since the turn of the year until end-April. The euro was supported by the ECB officials' March statement that further reduction in the policy rate would probably not be necessary. The future trends of the two currencies will be affected by diverging monetary policies of the ECB and the Fed.

The dollar's depreciation, along with the agreement between Saudi Arabia, Russia, Venezuela and Qatar on freezing oil output at the January level and chances that this agreement will serve as the basis to reach an agreement among major oil producers in April, and data on a decline in inventories and lower oil production from oil shale in the USA served as the key impetus to a rise in global **oil** prices, after they fell to USD 26.4 per barrel in mid-January. In Q1, global oil prices rose by 8.3%, and by 19.7% in April alone. Brent crude oil price exceeded USD 45 per barrel in April. This growth is still not steady and oil prices are likely to remain volatile in the coming period. Oil production from oil shale is expected to decline further, yet it could be neutered by an increase in Iran's output. Oil futures indicate a gradual recovery of oil prices by end-2016 and in 2017. Market data suggest that Brent crude oil price could reach USD 49 per barrel in December 2016 and USD 52 per barrel in December 2017.

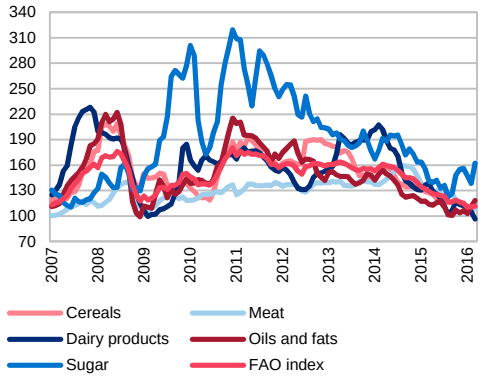
In Q1, **world food prices, measured by FAO index**, declined 3.0% in real terms, due to declining prices of dairy products which more than offset the increase in prices of edible oil and sugar. Dairy product prices plunged by 14.1% in only three months, coming at their lowest since June 2009, due to oversupply in key exporters. Compared to March last year, dairy product prices slumped by 30.5%. At the same time, edible oil prices jutted up by 11.3%, reaching their highest in the last year and a half. Sugar prices continued the rise they started in the previous quarter, primarily as a result of softer prospects for this year's production dampened by heavy rains in Brazil, the world's largest sugar manufacturer. Other food prices did not change markedly in the course of Q1.

Chart IV.7.12 **Oil and copper price movements**
(average monthly prices, in USD)



Source: Bloomberg.

Chart IV.7.13 **World food price index**
(in real terms, 2002–2004 = 100)



Sources: FAO, UN.

Text box 3: Impact of base effects from food and energy prices on y-o-y inflation in the period ahead

After rising to 2.4% in January and approaching the lower bound of the target tolerance band, y-o-y inflation declined again in February, returning to the level from December 2015 (1.5%), only to fall further down in March (0.6%) and April (0.4%). The one-off rise in January was largely due to the so-called base effect. Although the base effect is always present in y-o-y inflation calculations, it is also important from the point of view of economic performance and especially so when y-o-y inflation in a particular month (or period) changes significantly due to an uncommonly high or low inflation rate in the corresponding month (period) a year earlier. In other words, the base effect is pronounced when the change in prices in a particular month of the previous year deviates considerably from the usual change in prices for that month. This may be due to an increase in excise or VAT rates, or a somewhat higher rise or fall in the prices of certain products (e.g. food and energy) which are not related to seasonal changes etc.

To better understand the base effect, it may be helpful to recall how y-o-y inflation is calculated. Y-o-y inflation (π_t) is formulated as the percentage change in CPI for the observed month relative to the CPI in the corresponding month of the previous year:

$$\pi_t = \left(\frac{P_t - P_{t-12}}{P_{t-12}}\right) \times 100$$

where P_t is the level of CPI in the observed month, and P_{t-12} the level of CPI in the same month of the previous year.

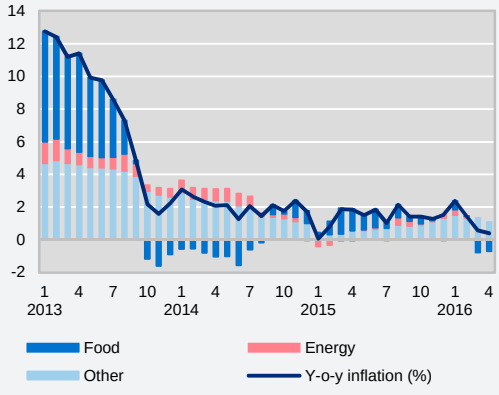
It follows that the change in y-o-y inflation in the current month relative to a month earlier is the difference between the monthly inflation rate in the current month (p_t) and monthly inflation rate in the same month of the previous year (p_{t-12}):

$$\pi_t - \pi_{t-1} \approx p_t - p_{t-12}$$

In the case of Serbia, the base for January 2015 was low – monthly inflation equalled -0.2%, whereas in January 2016 it was +0.6%, which resulted in y-o-y inflation rising from 1.5% in December 2015 to 2.4% in January 2016. Since we can approximate y-o-y inflation by summing monthly inflation rates through the past 12 months, we can say that the January rise of y-o-y inflation was also due to dropping the January 2015 price fall out of the calculation and adding of the January 2016 price rise.

In the next 12 months, the food and energy base effects should be particularly pronounced, given that the global prices of primary commodities in the previous period were declining. Hence, the price of oil is by around 65% lower today than two years ago, and the prices of primary agricultural commodities by around 30%. Owing to the significant and prolonged depression in these prices, a number of countries, including Serbia (Chart O.3.1), face strong disinflationary pressures from food and energy prices and inflation running below the target. At the same time, this means that the base for calculating y-o-y inflation is low and that it will speed up inflation's return to the target, once these prices start to rise. We attempted to estimate the base effect in the case of Serbia, based on the prices of food and energy.

Chart O.3.1 **Contributions of CPI components to y-o-y inflation in Serbia**
(in pp)

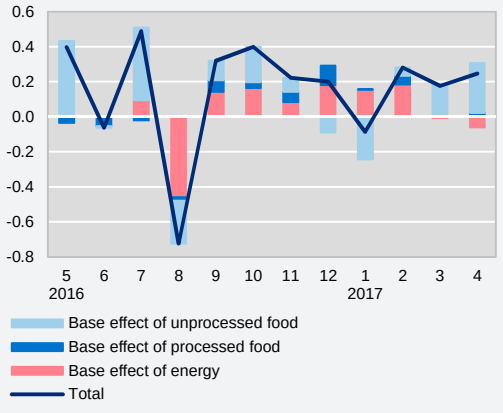


Sources: SORS and NBS calculation.

The base effect was estimated by deducting the actual monthly rate of change in food and energy prices over the past 12 months from the average monthly rate at which these prices rose in the past

five years[1] increased by the seasonality effect. The base effect will be positive if the prices of food (energy) in a particular month of the preceding year fell or rose less than they did in the corresponding month across the past five years, and vice versa – the base effect will be negative if the rise in the prices of food (energy) in a particular month of the previous year was higher than the average across the preceding five years. A positive base effect will have an upward, and a negative one a downward effect on y-o-y inflation.

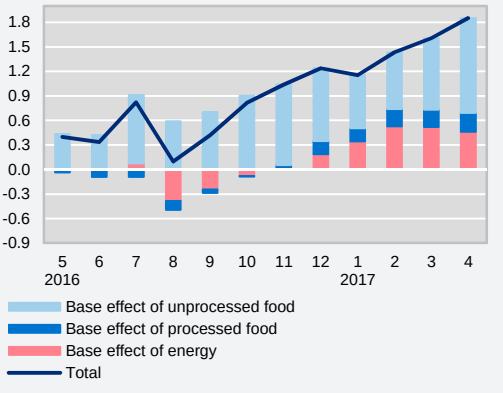
Chart O.3.2 **Contribution of the base effect of food and energy prices to monthly changes of y-o-y inflation in the year ahead**
(in pp)



Sources: SORS and NBS calculation.

Chart O.3.2 illustrates how changes in food and energy prices in the previous year can affect the trajectory of y-o-y inflation in the period May 2016–April 2017. As we can see, past changes in energy prices are likely to have a positive contribution to the change in y-o-y inflation for most months. The higher negative contribution in August is a consequence of the 12.2% increase in the price of energy in August 2015. Considering that the base effect takes into account the price change in the base month only, and not in the current one, when calculating its contribution, we left out the expected increase in electricity prices in 2016, which is included in the medium term inflation projection. Bearing in mind the movements in the prices of primary agricultural commodities and food in general, during the previous period, the base effect of food prices should also be positive for most months during the next 12 months. Also, it is evident that the base effect is much more pronounced in unprocessed rather than in processed food prices. Further, the base effect of the prices of unprocessed food should be the highest in May and July due to the significant drop in vegetable prices recorded in these months of 2015, whereas the prices of processed food should start driving y-o-y inflation up as of September. Total base effect of food and energy prices should increase y-o-y inflation in all of the months across the May 2016–April 2017 period, except in August 2016 and January 2017.

Chart O.3.3 **Cumulative impact of the base effect of food and energy prices on y-o-y inflation in the year ahead**
(in pp)



Sources: SORS and NBS calculation.

To conclude, past changes in food and energy prices should push y-o-y inflation up in the coming period and help its return within the target tolerance band. If we add up the above contributions in the coming 12 months (Chart O.3.3), we can see that y-o-y inflation in April 2017 could be around 1.8 pp higher than today on account of the food and energy base effects alone. However, the trends and the actual rate of inflation will depend not only on the past but also on future movements of food and energy prices and changes in other prices. Hence, when drafting inflation projection, we must take into account both the base effect and the factors relevant for inflation movements in the coming period, including demand, cost pressures, import prices, etc.

[1] Contribution of the base effect to changes in y-o-y inflation can vary depending on the period for which the average monthly change in prices is observed. For the purposes of this analysis, we opted for the last five years given that the average monthly inflation in this period, when annualised, was close to the inflation target.

V. Inflation projection

After moving below the lower bound of the target tolerance band for an extended period of time, y-o-y inflation is projected to rise from May and make its way back within the target tolerance band early next year, stabilising thereafter at a level slightly higher than 3.0%. Such inflation movements will reflect the low base effect from prices of petroleum products and fruit and vegetables, the expected further recovery of international prices of primary commodities, the strengthening of aggregate demand at home, as well as a gradual rise in inflation abroad. The risks to the projected inflation path are symmetric and relate primarily to future developments in the international commodity and financial markets, and to a certain degree, to the outcome of the domestic agricultural season and administered price growth this year.

Owing to a significant improvement in the export performance of the Serbian economy since the start of the year, which is likely to continue, GDP growth projection has been revised up for both this and the next year. Namely, GDP is now expected to grow 2.25–2.5% in 2016 and around 3.0% in 2017.

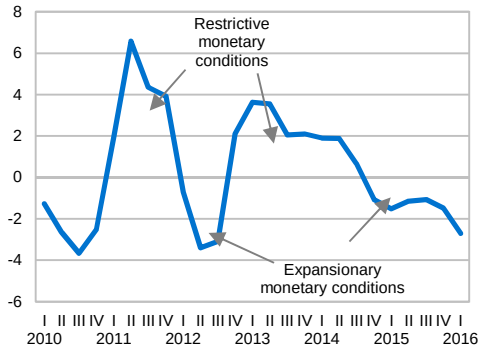
The medium-term inflation projection aims to show the expected inflation movements (CPI), the main factors behind such movements and the underlying risks. It is expressed both as a range for the CPI and as a central projection rate. The projection assumes an active monetary policy which seeks to keep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

Initial conditions

Consistent with the expectations stated in the February *Report*, y-o-y inflation continued below the lower bound of the target tolerance band (4.0±1.5%) in the first four months of 2016, amounting to 0.4% in April. Like in the previous period, inflationary pressures remained subdued under the impact of the majority of domestic factors, as well as of the low international prices of primary commodities and generally low inflation abroad. Core inflation (CPI excluding food, energy, alcohol and cigarettes), which has been running below the target tolerance band since August 2014, equalled 1.7% y-o-y in April.

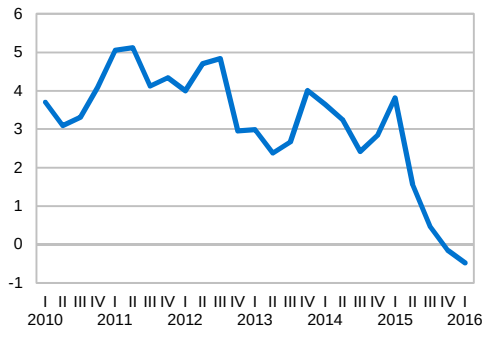
Q-o-q, consumer prices inched up by 0.4% in Q1. The strongest impetus to consumer prices came from food prices, more specifically the seasonally-induced increase in prices of unprocessed food (0.6 pp contribution), while the biggest drag originated from energy prices (-0.2 pp contribution).

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



Source: NBS.

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



Source: NBS.

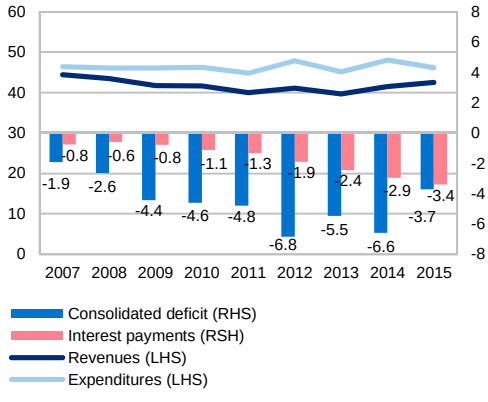
* Real interest rate was obtained as a difference between one-week BELIBOR and one-year ahead inflation expectations of the financial sector under the Bloomberg survey.

Inflation expectations are low and well-anchored thanks to the extended period of low inflation and anticipated weak inflationary pressures going forward. In fact, both one- and two-year ahead inflation expectations of the financial sector and businesses remain below the target (4.0%).

Depreciation pressures on the dinar continued in Q1, as a result of heightened uncertainty in the international financial market and seasonally higher FX demand, particularly that of energy importers. These pressures were compounded by the settlement of residents' foreign credit liabilities, while favourable balance of payments developments (lower foreign trade deficit, inflow of remittances and FDI) and the improvement in Serbia's credit rating outlook (from stable to positive, by Moody's) worked in the opposite direction.

Based on the Monetary Conditions Index, the monetary policy stance has been expansionary for a year and a half now, which is appropriate given the ongoing disinflationary pressures and open negative output gap. Increased expansiveness of the monetary conditions in Q1 is suggested both by the widening of the depreciation gap of the real exchange rate (due to the nominal depreciation of the dinar against the euro) and by the real interest rate[20] which fell further down under the neutral level and deeper into the negative territory.

Chart V.0.3 **Fiscal trends**
(in % of GDP)



Source: Ministry of Finance.

Fiscal adjustment proceeded in Q1. Consolidated budget deficit amounted to RSD 16.0 bln (around 1.7% of GDP) in Q1, i.e. nearly one-quarter less than in the same period last year and significantly below the ceiling envisaged by the agreement with the IMF (RSD 53.9 bln). The narrowing of the deficit reflects primarily higher receipts from excise and VAT taxation. Given favourable fiscal developments since the beginning of the year, consolidated budget deficit is judged likely to be lower in 2016 than in 2015.

Based on NBS estimates, Serbia's GDP recorded notable growth in Q1 (1.7% s-a) amid increased net exports, i.e. stronger external demand. The recovery of household consumption continued, as did the growth in private and government investment. On the production side, GDP growth in Q1 was led by industrial production and activity in the sectors of services and construction. The

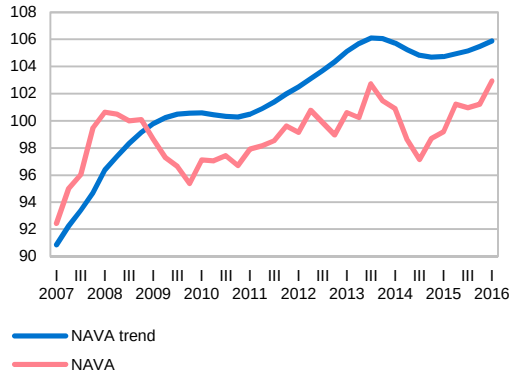
[20] Real interest rate is derived as the difference between one-week BELIBOR and one-year ahead inflation expectations of the financial sector measured by Bloomberg.

fact that activity stepped further up in more than three-quarters of manufacturing industries is a positive signal.

Solid economic growth in Q1 has led to a considerable narrowing of the negative output gap[21], which means that the intensity of disinflationary pressures from aggregate demand subsided relative to the previous quarter.

After 0.3% s-a growth in Q4, the euro area's GDP growth accelerated to 0.5% s-a in Q1 2016 (Eurostat's flash estimate). The recovery of the euro area economy is supported by low oil prices and the accommodative monetary policy stance of the ECB. In March, the ECB decided to cut to zero its main interest rate, to further reduce the rates on deposit and lending facilities, to increase its monthly asset purchases (from EUR 60.0 bln to EUR 80.0 bln) and to start a new round of targeted longer-term refinancing operations from June 2016 (TLTRO II). The Fed, on the other hand, started the cycle of rate increases late last year. However, no further increases were made this year and the Fed announced that the pace of rate hikes could be slower than anticipated earlier, given the international financial market volatility, China's slowdown and downside risks to US inflation.

Chart V.0.4 **Output gap**
(Q3 2008 = 100)



Sources: SORS and NBS calculation.

Inflation projection assumptions

External assumptions

The assumption for the euro area's GDP growth in 2016 and 2017 has been trimmed down slightly relative to the February projection. The bloc's GDP is now forecast to grow 1.5% this and 1.6% next year.[22] Domestic demand in the euro area will continue to benefit from monetary policy measures and the consequent improvement in financial conditions which is conducive to investment growth, as well as from the persistently low oil prices – which positively affect real disposable income of households and private consumption. On the other hand, downside risks to the above projections come from the weaker growth prospects for emerging markets, as well as from the fact that the euro area has for some time been faced with the tepid pace of structural reforms and the need for balance sheet adjustment across a number of sectors, which could slow down its recovery in the medium term.

Table V.0.1 **Projection assumptions**
(changes relative to the previous projection are given in brackets)

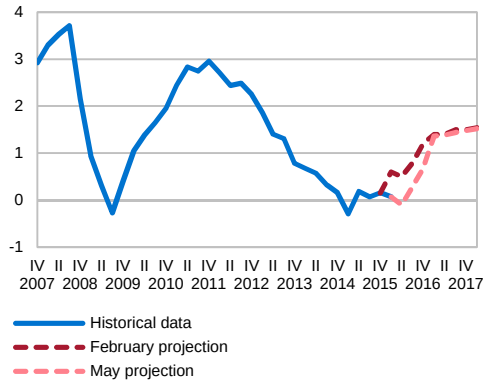
	2016		2017	
External assumptions				
EU inflation	0.2%	(-0.6)	1.4%	(-0.1)
ECB policy rate (year-end)	0.00%	(-0.05)	0.00%	(-0.05)
Euro area GDP growth	1.5%	(-0.2)	1.6%	(-0.1)
International prices of primary agricult. commodities (Q4 to Q4)*	7.3%	(+4.3)	4.0%	(+1.0)
Brent oil price per barrel (year-end, USD)	49	(+9.0)	52.0	(+8.0)
Internal assumptions				
Administered prices (Dec to Dec)	3.8%	(-0.1)	4.0%	(-)
Trends				
Appreciation trend of the real exchange rate (average)	0.7%	(-)	0.9%	(-)
Real interest rate trend (average)	2.0%	(+0.2)	1.4%	(-)

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

[21] Output gap is calculated based on NAVA (GDP less agricultural production and net taxes). NAVA trend estimated by the Kalman filter is used as an approximation of potential output.

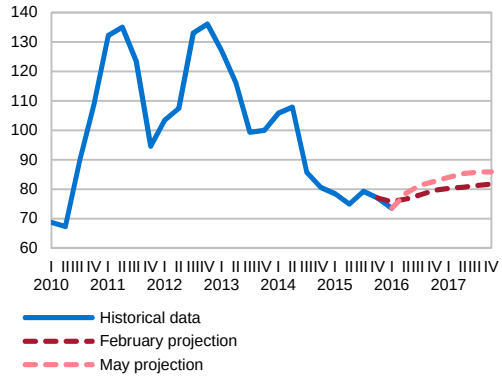
[22] The assumption for the euro area's GDP growth in 2016 and 2017 is consistent with the April Consensus Forecast.

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



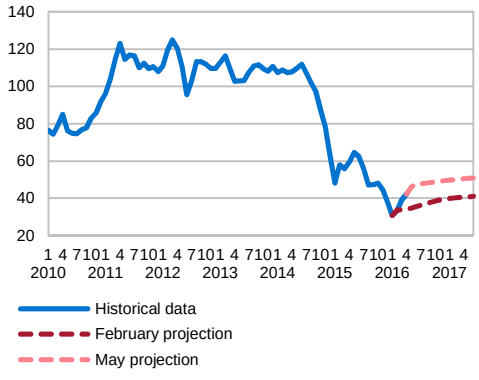
Sources: Consensus Forecast and NBS estimate.

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



Sources: BSE, CBOT and NBS.

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



Sources: Bloomberg and NBS.

Depressed by the falling energy prices, y-o-y inflation stayed close to zero in Q1. While deflation remains a possibility in the coming months, inflation is expected to rise in H2 and beyond – into 2017. The assumption for euro area inflation in 2016 has therefore been revised down from 0.8% to 0.2%, while that for 2017 has been trimmed only marginally (to 1.4%). The expected growth in euro area inflation will be supported by the ECB's measures and further economic recovery. Consistent with the announcements of ECB officials and the measures taken in March, the markets expect that the ECB's main refinancing rate will be kept on hold (0.0%) over the next twelve months (Consensus Forecast).

International prices of primary agricultural commodities (corn, wheat, soybean)[23] recorded a decline in Q1, but managed to regain some ground in April. Based on commodity futures, these prices are likely to show a mild upward trend in the period ahead. As a result, the assumption for international prices of primary agricultural commodities has been revised slightly up from the February projection.

Oil prices[24] plummeted by around 75% from mid-2014 to January 2016. Over the last three months, however, they made a modest recovery, rising from their 13-year nadir of USD 27 per barrel in mid-January to around USD 45 per barrel in April. Consistent with this, our assumption for oil prices has been revised up relative to the February projection. Based on oil futures, we expect the rise in oil prices to continue, though at a slower pace, to USD 49 per barrel at end-2016 and USD 52 per barrel at end-2017.

Internal assumptions

In view of the outlook for international prices of primary agricultural commodities and the influence they have on their counterparts in Serbia, we have assumed that domestic primary agricultural commodity prices will record moderate growth both this and the next year.

The assumption for administered price growth in 2016 has been slightly lowered relative to the February projection. The current projection envisages that this year's administered price growth will equal close to 4.0%. Around half of that growth should come from the assumed increase in electricity prices (7%, 0.4 pp contribution to inflation). Even though at this point we

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

[24] Brent.

do not know whether electricity prices will actually be increased, to be on the safe side, we have assumed this increase in our projection. In addition, a somewhat smaller contribution to inflation in 2016 should come from cigarette prices (0.2 pp). In 2017, administered prices are expected to grow at a similar rate (by around 4.0%).

In accordance with the *Fiscal Strategy for 2016 with Projections for 2017 and 2018*, we have envisaged further consistent implementation of fiscal consolidation that will ensure public finance sustainability and put public debt on a downward path from 2017 onwards. In line with this, the country risk premium should also remain relatively stable. Continued narrowing of the current account deficit in 2016 and FDI inflow above the deficit financing needs are expected to further support the stability of the foreign exchange market.

The projection operates on the assumption of an appreciation trend of the real exchange rate, which is typical for transition economies and caused by the removal of price disparities, notably in terms of administered prices, and by the Balassa-Samuelson effect[25].

Projection

Inflation projection

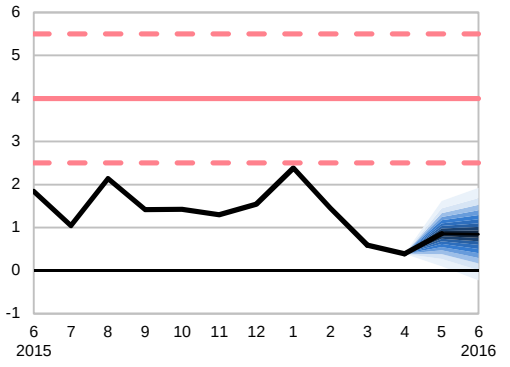
Under our central projection, y-o-y inflation will start rising in May, make its way back within the target band early next year, and stabilise thereafter at slightly over 3.0%.

Short-term inflation projection

Under the short-term inflation projection, y-o-y inflation will continue to move below the lower bound of the target tolerance band in Q2 and probably amount to around 1.0% at end-June.

At the quarterly level, consumer prices will record a rise in Q2, as a result of higher prices of non-food products and services, petroleum products and fruit and vegetables. The contribution of food (excluding fruit and vegetables) and administered prices will be neutral.

Chart V.0.8 **Short-term inflation projection**
(y-o-y rates, in %)



Source: NBS.

[25] In transition economies, the process of convergence towards income levels in advanced economies is accompanied by the relatively faster growth in prices (price convergence).

Core inflation (CPI excluding food, energy, alcohol and cigarettes) should also continue to move below the lower bound of the target tolerance band in Q2. At the quarterly level, core inflation will go up, driven by the increase in prices of services (notably travel packages) and industrial products.

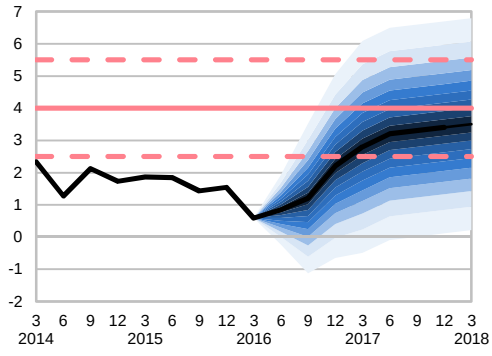
Medium-term inflation projection

Y-o-y inflation is projected to start rising from May and make its way back within the target band early next year, stabilising thereafter slightly above 3.0%. Such inflation path will reflect the low base effect (i.e. drop-out of last year's price cuts[26] from the annual comparison) from prices of petroleum products and fruit and vegetables, the expected further recovery of international primary commodity prices, the strengthening of aggregate demand at home, as well as a gradual rise in inflation abroad – more specifically, in the euro area. It should be noted that the low base effect will be felt more this year and the effect of other factors – next year.

Domestic petroleum product prices have declined over the past several months, following the downward trend in global oil prices. To be more precise, from August 2015 to February 2016, domestic petroleum product prices fell by 14%, knocking around 0.8 pp off the headline inflation rate. The recovery of global oil prices that started in mid-January is expected to continue. This, coupled with the above mentioned low base effect, should lead to the gradual waning of the disinflationary effect of petroleum product prices. Still, our estimates indicate that the y-o-y growth in these prices will not switch to positive before early 2017.

Fruit and vegetable prices also declined last year, as the season was very good for most fruits and vegetables. In the period May–December 2015, these prices fell by almost 15%, dragging inflation down by 1.1 pp. As a result, fruit and vegetable prices are still below their "neutral" level (i.e. long-term trend) and, assuming an average season this year, they may reasonably be expected to go up. As with petroleum product prices, the disinflationary effect of fruit and vegetable prices is likely to weaken from mid-year, but their contribution to inflation could become positive even before the year ends.

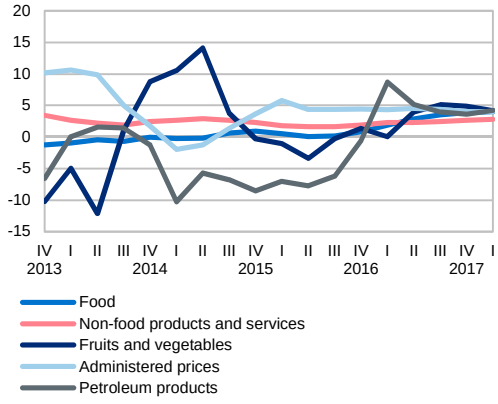
Chart V.0.9 **Inflation projection**
(y-o-y, in %)



Source: NBS.

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

Chart V.0.10 **Projection of inflation components**
(average y-o-y rate, in %)

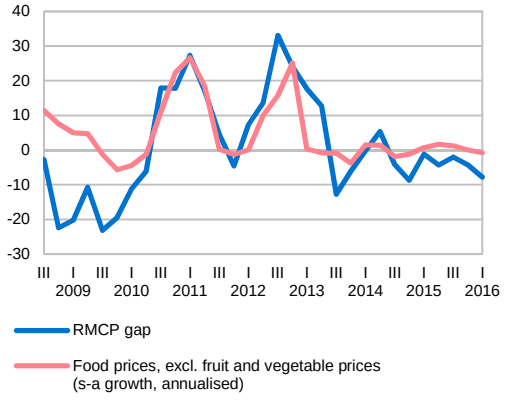


Source: NBS.

[26] For more information on the base effect, see Text box 3 on p. 46.

Food inflation has been lingering around zero for more than two and a half years now, as a result of low prices of primary agricultural commodities in the international and domestic markets, i.e. low food production input costs (negative RMCP gap[27]). The prices of primary agricultural commodities increased in April, pushing the food production costs slightly up. Yet, these costs remain low since primary agricultural commodity prices are still lower than at end-2015. Having in mind the most recent commodity futures which indicate that the recovery of primary agricultural commodity prices will continue at a somewhat brisker pace than anticipated earlier, y-o-y food inflation could start rising sooner than expected, i.e. late this rather than early next year. At the end of the forecast period, it could reach close to 4.0%, while in the previous Report we envisaged it would stay under 3.0%.

Chart V.0.11 **Impact of RMCP on food prices**
(in %)



Source: NBS.

Owing to muted inflationary pressures in the international environment, but also to depressed aggregate demand, the y-o-y growth in prices of non-food products and services has been low for quite some time, particularly over the last four months when it averaged mere 1.8%. In view of the downward revision of euro area inflation for 2016, non-food inflation is likely to remain below 2% this year, whereas in 2017 it is expected to climb back to its average level during the last two and a half years (2.5%), as a result of the open depreciation gap of the real exchange rate and the expected rise in euro area inflation and recovery of aggregate demand.

This year is likely to see a stronger recovery of aggregate demand, and consequently, weaker disinflationary pressures on account of the negative output gap. The gap opened back in 2008 following the spill-over of the global financial crisis to Serbia, but has been narrowing down for more than a year. The narrowing was particularly sharp in Q1 2016 because of strong GDP growth. We expect this trend to continue, given the past monetary policy easing by the NBS and the ECB, which should serve as a catalyst to the recovery of economic activity in Serbia and the euro area, respectively. The monetary policy stance of the ECB contributes to Serbia's economic growth not only through stronger demand for our exports, but also through interest rates on euro-indexed loans, given that low interest rates encourage credit activity. Also, we expect that household consumption will start healing this year.

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

The projection envisages that administered price growth in 2016 will amount to slightly less than 4%, led mainly by the assumed increase in electricity and cigarette prices. Consistent with this assumption, their contribution to y-o-y inflation at end-2016 would be 0.7 pp, down by 0.4 pp relative to March. The contribution of administered prices to y-o-y inflation over the entire forecast period should not exceed 1.0 pp.

Table V.0.2 **Projections of key macroeconomic indicators for Serbia**

	2016		2017	
	Previous	New	Previous	New
Inflation (annual average, in %)				
IMF	2.8	1.7	3.9	3.1
European Commission	2.4	1.6	3.6	2.8
Consensus Forecast	2.6	2.0	3.5	3.4
Bloomberg	2.9	2.1	3.7	3.0
GDP (%)				
IMF	1.8	1.8	2.2	2.3
European Commission	1.6	2.0	2.5	2.5
Consensus Forecast	1.7	1.8	2.4	2.4
Bloomberg	1.7	1.8	2.2	2.3
Current account deficit (% of GDP)				
IMF	4.6	4.4	4.3	4.3
European Commission	4.9	4.3	4.9	4.3
Consensus Forecast*	4.8	4.3	4.2	4.1
Bloomberg	4.6	4.6	4.4	4.6
Fiscal deficit (% of GDP)				
IMF	4	-	2.6	-
European Commission	3.7	3.1	3.5	2.9
Consensus Forecast	-	-	-	-
Bloomberg	4.0	4.0	3.1	3.0

Sources: IMF (Republic of Serbia: Third Review under the Stand-By Arrangement, Country Report No. 15/34 and World Economic Outlook, April 2016), European Commission (Winter Forecast and Spring Forecast 2016), Consensus Forecast (January and April 2016) and Bloomberg Quarterly Survey (January and April 2016).

* Based on NBS projection of dollar GDP from January and May 2016.

Based on the latest available data, selected institutions have scaled down their expectations regarding inflation in Serbia, while raising their expectations regarding our economic performance. Overall, these institutions expect inflation of up to 2% this year and around 3% next year. In terms of economic performance, they expect Serbia's GDP to grow up to 2% this year and up to 2.5% next year[28]. Also, they expect the current account deficit to stand at 4–5% of GDP both this and next year and the budget deficit to amount to 3–4% in 2016 and to around 3% in 2017.

The risks to the projected inflation path are associated primarily with future developments in the international commodity and financial markets, and to a certain degree, with the outcome of the agricultural season (fruit and vegetable prices) and administered price growth at home.

Based on the latest available data from the futures markets, we have assumed that the prices of primary commodities (oil and primary agricultural commodities) will record a mild rise over the forecast period. However, as primary commodity prices are generally volatile and sensitive to numerous factors, the likelihood that they will deviate from the assumed path is not at all negligible. At this point, our estimate is that oil prices could deviate equally in both directions. There is general consensus, for instance, that oversupply in the oil market will persist for some time, implying downward pressure on oil prices, while upward pressure could come from a potential strengthening of geopolitical tensions, producers' agreement to limit their output, and the similar. It should be noted that, in the short term, neither oil production nor consumption are overly price-sensitive, which is why even small changes in oil demand or supply can significantly affect oil price. The growth in primary agricultural commodity prices (corn, wheat, soybean) could also be higher or lower than assumed, depending on the weather conditions and agricultural

[28] These projections were made before data on Serbia's GDP growth of 3.5% in Q1 were released.

performance at global level. On balance, the risks to the assumed trajectory of primary commodity prices are judged to be symmetric.

The risks surrounding the assumption for domestic fruit and vegetable prices are also symmetric. These prices are generally rather volatile and in case this year's agricultural season turns out better (weaker) than average, their increase, and hence impact on inflation, could be smaller (stronger) than assumed. However, as at this moment there are no signs that agricultural performance will be other than average (and the projection operates on the assumption of an average season), we estimate that this risk is not significant.

The risks associated with developments in the international financial market, on the other hand, are asymmetric to the upside. In fact, this market experienced significant volatility early in the year, triggered by investors' exiting from riskier assets amid weaker prospects for global economic growth and the start of the Fed's monetary policy normalisation. Though this volatility has subsided, owing chiefly to the ECB's further monetary accommodation and the expectations of slower increases in the Fed's rate, the possibility of renewed growth in global risk aversion cannot be excluded. Were this actually to happen, we would probably see stronger volatility of capital flows to emerging market economies, Serbia included. A potentially smaller capital inflow would trigger depreciation, leading to upward pressure on domestic prices.

At the same time, administered prices could work in the opposite direction, by moderating y-o-y inflation growth this year even more than we estimated. Namely, although this is not certain yet, to be on the safe side, we have envisaged a 7% increase in electricity prices this year. If the increase fails to take place, y-o-y inflation will be around 0.4 pp lower than projected.

As inflationary pressures are likely to stay relatively low in the period ahead, the monetary policy stance of the NBS should remain expansionary. Further monetary policy easing will depend primarily on the Executive Board's assessment of the intensity of the inflationary and disinflationary impact of inflation factors, notably the impact of developments in the international commodity and financial markets.

GDP projection

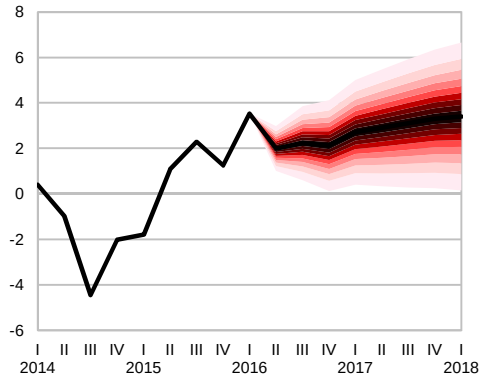
Given high investment in the prior period and a significant improvement in the export performance of the Serbian economy since the start of the year, which is likely to continue, GDP growth projection has been revised up for both this and the next year. GDP is now expected to grow 2.25–2.5% in 2016 (vs. 1.8% projected in the previous Report) and around 3.0% in 2017 (vs. 2.2%)

Similar to last year, in 2016, growth will be led by investment. A further increase in investment activity should come as a result of several factors – past and future structural reforms, relatively low oil prices which reduce operating costs for businesses, more favourable terms of borrowing, increase in government capital expenditure, expected further recovery of the euro area, and FDI inflow. However, while in February we envisaged that the contribution of net exports would be neutral because investment-driven increase in imports was estimated to counterbalance growth in exports, data from the beginning of the year suggest that export growth is actually much stronger than expected. This can be associated with FDIs received in earlier years which included a large number of smaller projects and were widely dispersed across manufacturing industries that are now making both production and export gains. For this reason, we estimate that net exports will be the second main driver of GDP growth this year.

In contrast to 2015, when household consumption acted as a drag on GDP growth due to fiscal consolidation, we expect it to become a positive contributor this year. Furthermore, its contribution to GDP growth should be somewhat higher than projected in February. Stronger household consumption will reflect investment and export movements, which should support the incipient real growth in private sector wages, as well as lower cost of repayment of existing loans and new borrowing, and the relatively low oil prices which have a positive effect on the disposable income of households.

On the production side, higher investment should have a positive impact on manufacturing and construction, while higher consumption should have a positive impact on services. Positive contributions to GDP growth will also come from energy and mining that will have recorded high y-o-y growth rates until May thanks to the low last year's base. A positive, though smaller contribution to growth is expected from agricultural production as well, where average performance is assumed this year after last year's below-average season.

Chart V.0.12 **GDP growth projection**
(y-o-y rates, in %)



Source: NBS.

Favourable trends in 2016 should continue in 2017, i.e. economic growth should continue to be driven by investment and net exports, with an increasing contribution of household consumption.

The risks to GDP projection relate mainly to the speed of economic recovery of the euro area as our key trade partner and further pace of structural reforms at home. Though to a lesser degree, risks are also associated with global oil prices, this year's agricultural season and possibly higher output of the Smederevo steel plant.

Based on preliminary estimates, the euro area recorded stronger growth in Q1 than expected (0.5% s-a vs. 0.3% s-a). The sustained low level of oil prices and unconventional ECB measures could help accelerate this growth going forward, resulting in stronger demand for our exports and higher investment, and thus, higher than projected growth of our economy. On the other hand, the recovery of the euro area could be slowed down by the slackening growth of emerging markets, notably China, as the reduction in their import demand is bound to weigh down on euro area exports. Headwinds to the recovery of the euro area could also come from the ongoing geopolitical tensions. The euro area being our main trade partner, if those risks materialised, Serbia would probably see a slowdown in investment and exports, and consequently, lower than expected GDP growth.

Initiated structural reforms and the improvement in investment and business environment contribute to Serbia's medium-term growth prospects. However, the pace of further implementation of structural reforms will determine whether growth will be faster or slower than projected.

Similarly, the risks associated with global oil prices and this year's agricultural season are also symmetric, which means they may deviate equally in either direction from the assumed path, resulting in either faster or slower GDP growth. An upside risk to GDP projection is embodied in the possibility that the Smederevo steel plant will increase output after finding a strategic partner.

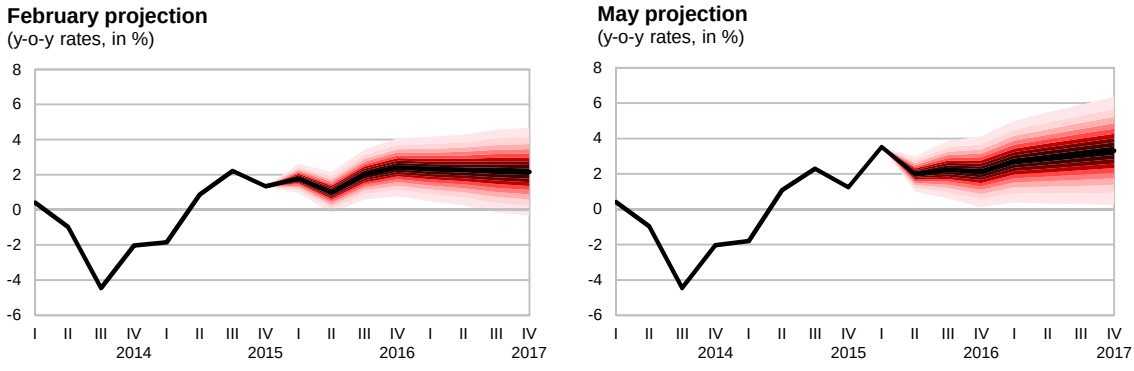
On balance, the risks to GDP projection are judged to be symmetric.

Comparison and outcome of inflation projections

Relative to the projection published in the February *Report*, our new inflation projection is slightly lower for 2016 and slightly higher for 2017. The projection range stayed symmetric.

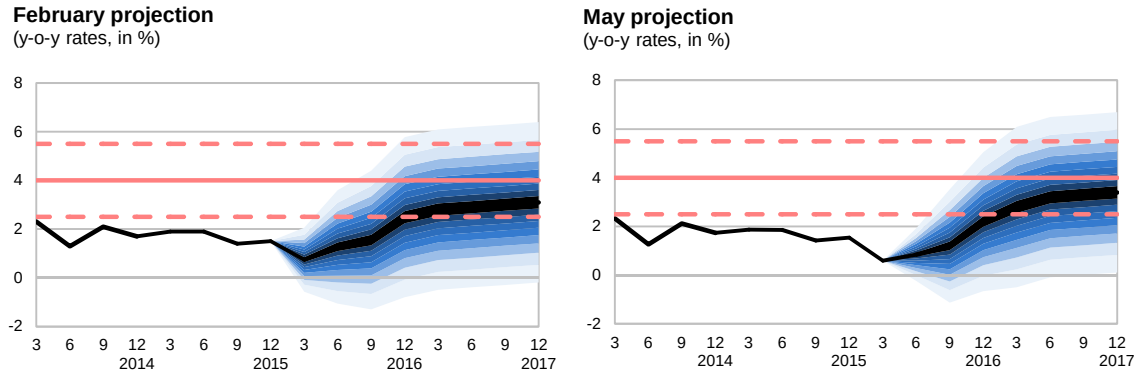
The projected lower inflation this year is attributable primarily to the downward revision of the euro area inflation for 2016 (which moderates pressure on import prices, i.e. prices of non-food products and services), as well as to the renewed fall in global primary agricultural commodity prices in Q1 2016 and a slower rise in fruit and vegetable prices since the beginning of the year. Global primary agricultural commodity prices have been on the rise since April, but they remain considerably below the levels recorded a year earlier, which means that food production costs are also relatively low. Though we expect

Chart V.0.13 **Current vs. previous GDP growth projection**



Source: NBS.

Chart V.0.14 **Current vs. previous inflation projection**

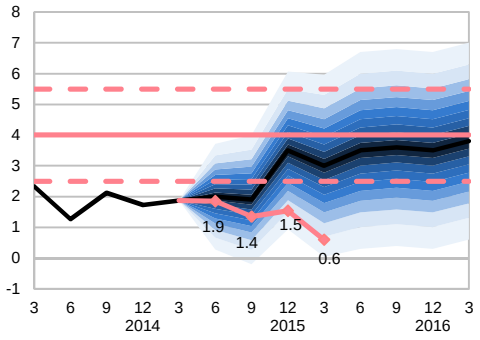


Source: NBS.

corn, wheat and soybean prices to make further recovery in the period ahead, due to the time lag in food production, this recovery will affect primarily inflation in 2017. The similar goes for oil prices, whose expected level has been raised, based on oil futures, from USD 40 to 49 per barrel at end-2016 and from USD 44 to 52 per barrel at end-2017. In addition, the reason for a slight upward revision of inflation projection for 2017 is the faster than expected GDP growth, which entails speedier closing of the negative output gap and the weakening of disinflationary pressures on that account.

During the last year, y-o-y inflation was moving within the projection range published in the May 2015 *Inflation Report*, albeit below the central projection rate – especially in the last two quarters. Inflation deviated south of the central projection rate mainly because of the continued decline in global primary commodity prices. While futures indicated that oil prices would climb higher and reach USD 70 per barrel at end-2015, they started falling again in June, ending the year at USD 35 per barrel. Primary agricultural commodity prices also recorded a decline in 2015 and were expected to record growth. To a lesser degree, inflation's shortfall of the central projection rate can be also put down to lower than expected euro area inflation outturn in 2015.

Chart V.0.15 **Achievement of May 2015 inflation projection**
(y-o-y rates, in %)



Source: NBS.

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Q1 2016
EXTERNAL LIQUIDITY INDICATORS (in %)												
FX reserves/imports of goods and services (in months)	6.1	9.0	7.5	5.4	9.7	8.4	8.8	7.7	7.6	6.6	6.6	6.0
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.8	239.8	268.9	306.6	303.9	
FX reserves /GDP	23.3	36.9	32.7	24.2	34.6	33.6	36.1	34.5	32.7	29.7	31.5	28.6
Debt repayment/GDP	5.0	10.3	10.3	10.7	12.8	12.0	12.4	13.0	13.3	14.2	11.8	
Debt repayment/exports of goods and services	19.8	36.2	37.5	37.5	48.8	37.5	37.3	36.0	32.6	32.7	24.9	
EXTERNAL SOLVENCY INDICATORS (in %)												
External debt/GDP	59.3	58.5	59.0	62.3	72.7	79.0	72.2	80.9	74.8	77.1	80.1	
Short-term debt/GDP	13.2	13.9	13.1	14.9	15.7	17.6	12.0	14.4	12.1	9.7	10.4	
External debt/exports of goods and services	234.9	205.7	214.3	218.9	276.9	247.1	216.5	223.6	184.0	177.7	168.6	
FINANCIAL RISK EXPOSURE INDICATORS (in %)												
FX reserves/M1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	330.4	278.1	250.2	238.5
FX reserves/reserve money	169.8	179.5	173.8	140.7	190.5	196.4	207.6	197.9	199.9	196.6	193.7	208.7
OPENNESS OF ECONOMY (EXPORTS +IMPORTS)/GDP	70.8	77.4	80.1	82.6	69.0	79.8	82.7	89.8	92.6	97.7	101.9	112.4
MEMORANDUM: (in EUR million)												
GDP [1]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	32,908	7,522 [2]
External debt	12,520	14,291	17,382	20,982	22,272	23,509	24,123	25,645	25,644	25,679	26,358	
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,547	4,724	3,895	
Central bank foreign exchange reserves	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	9,501
Short-term debt [3]	951	968	1,044	1,832	1,852	1,758	612	455	196	98	299	
Current account balance	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,577	-249 [2]

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

Methodological notes:

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

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

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

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

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

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

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

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

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

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

[1] According to ESA 2010.

[2] NBS estimate.

[3] At original maturity.

Notes:

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

2. Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM 6. Data for 2005 and 2006 are shown according to BPM 5.

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

4. In September 2010, the methodology of external debt statistics was changed – public sector external debt now includes liabilities under SDR allocation (EUR 492.7 mln) used in December 2009. Private sector external debt excludes loans concluded before 20 December 2000 in respect of which no payments are made (EUR 1,000.1 mln, of which EUR 433.2 mln relates to domestic banks and EUR 566.9 mln to domestic enterprises).

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

Table B
Key macroeconomic indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Q1 2016
Real GDP growth (in %)[1]	5.5	4.9	5.9	5.4	-3.1	0.6	1.4	-1.0	2.6	-1.8	0.7	3.5
Consumer prices (in %, relative to the same month a year earlier)[2]	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	2.2	1.7	1.5	0.6
NBS foreign exchange reserves (in EUR million)	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	9,501
Exports (in EUR million)[3]	5,329	6,948	8,110	9,583	8,043	9,515	11,145	11,469	13,937	14,451	15,618	3,942[6]
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.1	11.7
Imports (in EUR million)[3]	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,899	4,513[6]
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	4.4	1.7
Current account balance[3]												
(in EUR million)	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1577	-249[6]
as % of GDP	-8.4	-9.6	-18.6	-21.1	-6.6	-6.8	-10.9	-11.6	-6.1	-6.0	-4.8	-3.3
Unemployment according to the Survey (in %)	20.8	20.9	18.1	13.6	16.1	19.2	23.0	23.9	22.1	19,2[7]	17.7	
Wages (average for the period, in EUR)	209.7	260.0	347.1	400.5	337.4	330.1	372.5	364.5	388.6	379.3	368.0	353.7
RS budget deficit/surplus (in % of GDP)[4]	0.5	-1.7	-1.6	-1.7	-3.2	-3.4	-4.0	-5.9	-5.2	-6.3	-2.9	-1.0
Consolidated fiscal result (in % of GDP)[4]	1.2	-1.5	-1.9	-2.6	-4.4	-4.6	-4.8	-6.8	-5.5	-6.6	-3.8	-1.7
RS public debt, (central government, in % of GDP)	50.2	35.9	29.9	28.3	32.8	41.8	45.4	56.2	59.6	70.4	75.9	74.8
RSD/USD exchange rate (period average)	66.87	67.03	58.39	55.76	67.47	77.91	73.34	88.12	85.17	88.54	108.85	111.37
RSD/USD exchange rate (end of period)	72.22	59.98	53.73	62.90	66.73	79.28	80.87	86.18	83.13	99.46	111.25	108.60
RSD/EUR exchange rate (period average)	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	113.14	117.31	120.73	122.87
RSD/EUR exchange rate (end of period)	85.50	79.00	79.24	88.60	95.89	105.50	104.64	113.72	114.64	120.96	121.63	122.92
MEMORANDUM:												
GDP (in EUR million)[5]	21,103	24,435	29,452	33,705	30,655	29,766	33,424	31,683	34,263	33,319	32,908	7,522[6]

[1] At constant prices of the previous year.

[2] Retail prices until 2006.

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

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

[5] According to ESA 2010.

[6] NBS estimate.

[7] Revised data for 2014 according to the new methodology of the Labour Force Survey.

Notes:

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

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Executive Board meetings and changes in the key policy rate

2015

Date	Key policy rate (p.a, in %)	Change (in basis points)
15 January	8.00	0
12 February	8.00	0
12 March	7.50	-50
9 April	7.00	-50
11 May	6.50	-50
11 June	6.00	-50
9 July	6.00	0
13 August	5.50	-50
10 September	5.00	-50
15 October	4.50	-50
12 November	4.50	0
10 December	4.50	0

2016

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

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 17 March 2016

At its meeting today, the NBS Executive Board decided to keep the key policy rate at 4.25%.

The NBS maintains a cautious monetary policy stance since it was assessed that the current level of monetary policy expansiveness provides for a moderate rise in inflation from mid-year and its return within the target tolerance band late this or early next year.

Developments in the international environment are characterised by unfavourable prospects for global growth, and hence for the pace of recovery of the euro area, Serbia's key foreign trade partner. Uncertainties are also associated with future movements in international prices of oil and other primary commodities, ongoing geopolitical risks and diverging monetary policies of the world's leading central banks. The slowdown in the global economy coupled with the Fed's monetary policy normalisation could lead to a rise in investor risk aversion, which could dampen capital flows to emerging economies, including to Serbia. On the other hand, further monetary policy easing by the ECB in March this year should contribute to the mitigation of external risks.

Given the above, the NBS Executive Board decided to keep the key policy rate unchanged at 4.25%.

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

Press release from Executive Board meeting held on 7 April 2016

The NBS Executive Board decided today to keep the key policy rate unchanged at 4.25%.

The Executive Board assessed that inflationary pressures are low. However, the current degree of monetary expansion provides for a low and stable inflation in the medium term and a gradual recovery in economic activity. Inflation is expected to rise moderately in the second half of the year and return within the target band late this or early next year.

Monetary policy should remain cautious, primarily because of developments in the international environment. Uncertainties are particularly pronounced in respect of movements in prices of oil and other primary commodities in the world market, geopolitical risks and divergent monetary policies of the leading central banks. Investors' risk appetite and cash flows towards emerging economies, including Serbia, could be negatively affected by the slowdown in the global economy and normalisation of the Fed's monetary policy. On the other hand, the impact of external risks should be moderated by the ECB's monetary accommodation and domestic factors, notably the narrowing of internal and external imbalances.

The next rate-setting meeting will be held on 17 May.

Press release from Executive Board meeting held on 17 May 2016

At its meeting today, the NBS Executive Board decided to keep the key policy rate unchanged at 4.25%.

Though inflationary pressures are low and macroeconomic fundamentals continue to improve, the Board assessed that persistent uncertainties in the international commodity and financial markets warrant caution in running monetary policy. The potential adverse effect of these external risks is moderated by domestic factors, notably by the narrowed internal and external imbalances, and to a degree, also by the ECB's accommodative monetary policy stance.

Year-on-year inflation measured 0.4% in April. Inflation is likely to start rising gradually as of May and make its way back within the target tolerance band early next year.

At its meeting today, the NBS Executive Board adopted the May Inflation Report, which will be presented to the public on Tuesday, 24 May. On that occasion, monetary policy decisions and the underlying macroeconomic developments will be explained in detail.

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

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