National Bank of Serbia

2013

August

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 task of the National Bank of Serbia.

The August *Inflation Report* was considered and adopted by the NBS Executive Board in its meeting of 8 August 2013.

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
CEFTA – Central European Free Trade Agreement
CPI – Consumer Price Index
ECB – European Central Bank
EIB – European Investment Bank
EMBI – Emerging Markets Bond Index
EMU – Economic and Monetary Union of the EU
FDI – foreign direct investment
Fed – Federal Reserve System
FISIM – Financial Intermediation Services Indirectly Measured
GDP – gross domestic product
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
mln – million
NAVA – non-agricultural value added
NBS – National Bank of Serbia
NPLs – non-performing loans
OFI – other financial organisations
OPEC – Organisation of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
QE – quantitative easing
q-o-q – quarter-on-quarter
s-a – seasonally-adjusted
SDR – Special Drawing Rights
SORS – Statistical Office of the Republic of Serbia
WTO – World Trade Organisation

y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I. Overview

As shown by the average monthly inflation rate of around 0.3%, inflationary pressures have subsided significantly over the past eight months.

The fall in year-on-year inflation continued. It started in Q1 and was only briefly interrupted in April by a seasonal rise in fruit and vegetable prices. As set out in the May *Report*, y-o-y inflation returned to single digits in Q2 and measured 9.8% in June. The still relatively high year-on-year inflation rate is for its major part attributable to the price increases in the period July-October 2012 (7.1 pp) and much less to those in the past eight months (2.5 pp).

Inflation expectations are relatively stable.

Since the last *Report* inflation expectations of households have declined and those of the financial and corporate sectors exhibited relative stability. Looking ahead, inflation expectations are expected to decline, mirroring the fall in inflation rates.

The economic recovery of the euro area is expected to begin in H2 2013 and to take firm hold in 2014.

The euro area economy is estimated to have recorded another quarterly decline in Q2. Its gradual recovery, starting in H2, is expected to gain ground in 2014. Growth projection for the euro area has again been revised down – the Consensus Forecast and the IMF now project a fall of 0.6% in 2013. Recessionary trends, against the backdrop of receding inflationary pressures, led the ECB lower its main refinancing rate by 0.25 pp in May, to the historical low of 0.5%, and announce an extended period of low rates. The Fed, by contrast, suggested that it might reduce the quantitative easing programme through end-2013 and wind it down altogether by mid-2014 if the economic growth becomes firm enough.

Depreciation pressures in late May and June were not specific to Serbia only.

Such hint from the Fed sent ripple effects on the international financial markets and gave rise to investors' risk aversion. The risk premiums took off and depreciation pressures emerged in nearly all countries of the region. In the case of Serbia, the IMF's statement on the necessity of additional fiscal consolidation measures also played a role in stirring up depreciation pressures.

The government adopted a revised budget and a set of new structural adjustment measures.

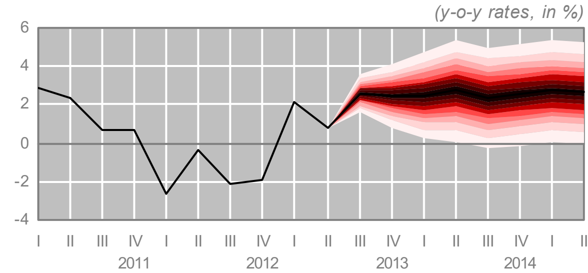
With underperforming revenue, the revised 2013 budget was adopted already around mid-year in order to ensure the necessary fiscal adjustment. The government also adopted a set of new structural adjustment measures aimed at curbing the deficit, stabilising public finance and improving the general business environment. The revised budget envisages a central government deficit of 4.7%, which should result in a consolidated general government deficit of 5.2% of GDP.

The reduction of external imbalances this year is going faster than expected.

The expected improvement in the current account of the balance of payments this year will be attributable primarily to the improvement in the trade balance. This expectation is supported by the fact that the current account deficit in H1 2013 fell by 53.5% year-on-year, thanks to a much higher rise in exports relative to imports (20.2% vs. 1.9% year-on-year). According to our projection, the activation of investments in the automobile and oil industries and the implementation of fiscal consolidation measures should help bring the current account deficit in 2013 down to below 7.0% of GDP, and thus closer to a sustainable level.

In 2013 and 2014, GDP growth should be led by net exports.

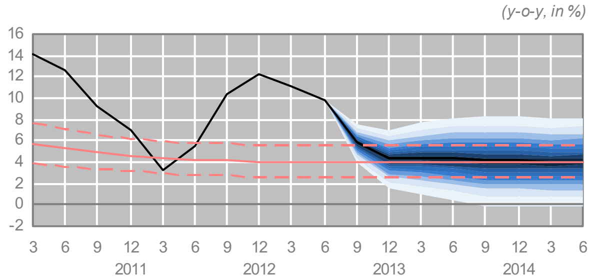
GDP growth projection
(y-o-y rates, in %)



The economic recovery that started in Q4 2012 appears sustainable. Led by net exports on the expenditure side, year-on-year GDP growth amounted to 2.1% in Q1 and 0.7% in Q2. Based on our projection, GDP will grow around 2.0% in 2013 and around 2.5% in 2014. Despite deteriorated prospects for the recovery of Serbia's main foreign trade partners, net exports will provide the key contribution to economic growth this year, while headwinds will be coming from private and government consumption due to low real income and fiscal consolidation, respectively. GDP growth in 2014 will be propelled mainly by net exports, and to a lesser degree, by investments. The risks to GDP growth projection are balanced and relate primarily to the pace of recovery of Serbia's main foreign trade partners and the effects of the agricultural season.

Year-on-year inflation is expected to fall back within the target tolerance band by October and stay within it thereafter.

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



According to our estimates, year-on-year inflation will continue down at a faster pace in Q3 and will fall back within the target tolerance band by October. After that, in Q4 and 2014, it should move within the target (4±1.5 pp). The key disinflationary factor in the short term will be the lowering of costs in food production expected on account of a further fall in prices of primary agricultural commodities. In the medium term, the key disinflationary factor continues to be low domestic demand. The process of disinflation this year will also be aided by the past monetary policy measures and the high last-year's base, i.e. high monthly inflation rates in H2 2012.

Looking ahead, the character of monetary policy will be determined mainly by movements in agricultural commodity prices, developments in the international environment and conduct of fiscal policy at home.

Assuming agricultural commodity prices decline further, no external shocks occur and fiscal consolidation is implemented as planned, the Executive Board will consider the possibility of further monetary policy easing in the coming period.

II. Monetary policy since the May *Report*

The monetary policy easing, which started in May, continued in June at a cautious pace. In July and August, the key policy rate was kept on hold.

Having assessed that inflationary pressures were on a decline and that inflation would return within the target tolerance band by October (4±1.5%), the NBS Executive Board **decided in its meeting in June to trim the key policy rate by 25 bp, to 11.0%.** The May inflation projection was lower over the entire projection horizon than the one produced in February, owing above all to the expected sharper drop in primary agricultural commodity prices. This additionally highlighted that the expected drop in food prices would be the key disinflationary factor in the near term, whereas in the medium term, this role would be played by the low aggregate demand. The Executive Board assessed that restrictive monetary policy measures taken since mid-2012 would produce their full effect on inflation in the course of this year, and that the fall in y-o-y inflation would also be supported by the taking out from calculation of the high monthly inflation rates in the same period last year and by the recent stabilisation of the dinar.

Depreciation pressures that emerged in late May and June were not specific to Serbia only. Unfavourable developments in the international financial market dampened investors' risk appetite, triggering a rise in risk premiums and, consequently, depreciation pressures in nearly all countries of the region. Although the foreign trade and current account deficits narrowed down significantly, depreciation pressures in Serbia were also sustained by the absence of an arrangement with the IMF and unfavourable assessments of the current state of its public finance. Similar to other central banks in the region, the NBS responded by intervening in the foreign exchange market in order to ease excessive daily volatility of the exchange rate. In late May and in June, the NBS sold EUR 305.0 mln in the foreign exchange market. Besides, to absorb excess liquidity the NBS increased the volume of securities sold in repo auctions, which kept the average repo rate at the May level.

While deciding to keep the key policy rate on hold in July, the Executive Board noted that though still above the upper bound of the target tolerance band, y-o-y inflation was on the decline. Its decline would continue over the coming period and from October onwards inflation would be moving within the target tolerance band. The process of disinflation was driven primarily by monetary policy measures and stabilisation in the food market. Good agricultural season and positive developments in the international market of agricultural commodities were expected to weigh down the prices of food in the domestic market. Decelerating lending activity and lower growth in wages and pensions confirmed that weak aggregate demand would remain the key disinflationary factor in the foreseeable future.

While deciding to keep the key policy rate on hold again in August, the Executive Board noted that the weakening of inflationary pressures indicated that the trend would accelerate in the coming period and that inflation would return within the target tolerance band (4±1.5 %) by October.

The economic recovery that had started in late 2012 continued in 2013. The Executive Board estimated that the Serbian economy would grow 2.0% this year, led by rising exports. The sustainability of economic recovery was indicated by the easing of external imbalances and the current account deficit of 5.7% of GDP in the first half of the year.

The Executive Board stated that additional fiscal consolidation measures and the implementation of structural reforms would contribute to the further reduction in inflationary pressures and external imbalances, giving a positive boost to Serbia's investment risk perception.

However, given the higher risk aversion of international investors, prompted by the Fed's hint at downsizing of the QE programme, which spurred a rise in the country risk premium and depreciation pressures in Serbia and nearly all countries in the region, the Executive Board had decided to keep the key policy rate unchanged.

Text box 1: Budget revision and new structural adjustment measures

The revised 2013 budget was adopted already by mid-year as it became quite obvious against the background of underperforming revenue that the execution of the original budget would lead to a considerable overshooting of the planned deficit level. Along with the revised budget, the government adopted a plan for the implementation of a package of structural reforms and a plan of limiting the growth in pensions and public sector wages through 2014.

The revised budget envisages a central government deficit of 4.7% of GDP, which would result in a consolidated general government deficit of 5.2% of GDP. To bring the deficit down to those levels, the government intends to cut expenditure by RSD 38.1 bln, primarily by lowering transfers to the Republic Fund for Pension and Disability Insurance through changed rates of taxation of wages and contributions (RSD 16.4 bln) and by making savings on capital expenditure (RSD 13.2 bln), subsidies (RSD 7.8 bln) and public procurements (RSD 0.6 bln). The initially overestimated revenue of RSD 965.7 bln was revised down by RSD 92.3 bln.

In accordance with the above plan, pensions and public sector wages will rise by 0.5% in October 2013 and April 2014 each and by 1.0% in October 2014.

The structural reform plan envisages a number of measures, the most important being the completion of restructuring of formerly socially-owned enterprises, downsizing of state administration and a reform of public enterprise governance, simplification and streamlining of the construction permit issuing procedure, as well as measures to reduce the shadow economy. Restricting the issue of government guarantees for loans is also an important part of the plan from the aspect of public debt consolidation.

The NBS welcomes the adoption of the plans for downsizing state administration and completion of restructuring of 179 formerly socially-owned enterprises with around 54,000 employees, particularly as the latter clearly sets out the deadlines and the funding needed for the implementation (funding of the social safety net). The part of the plan relating to public enterprises envisages a reduction in the number of employees, wage control and changes in the operations of public enterprises. These measures should also be supported by the labour market reform, notably removal of obstacles to employment and dismissal of employees and improvement of the legal framework to stimulate self-employment. Success in the implementation of the above reforms would increase the unemployment rate in the short run, but should yield positive effects in the long run on both employment and economic activity, and ultimately on the budget, too.

A stronger fiscal position is essential for monetary and financial stability. The NBS therefore holds that additional fiscal consolidation measures and structural reforms are necessary and fully supports the government’s commitment to their implementation, as this will help create the scope for further relaxation of the monetary policy stance.

III. Inflation developments

Inflationary pressures have subsided significantly over the past eight months, as shown by the average monthly inflation rate of around 0.3%. Weaker inflationary pressures are due to past restrictive monetary policy measures, lower food production costs, low demand and stabilisation of the exchange rate. On the other hand, relatively high consumer price growth in April and June was prompted by seasonal factors.

The return of y-o-y inflation within the target tolerance band, which started in February and was interrupted in April, continued through late Q2. According to our estimate, a decline in y-o-y inflation will accelerate in Q3.

Inflation developments in Q2

Q2 consumer price growth was higher than in Q1, mainly due to rising prices of unprocessed food – fruit and vegetables.

Consumer prices rose 1.8% in Q2 or 3.0% since the start of the year, which is much less than in the same period last year. Though relatively high in April (0.8%) and June (1.0%), monthly inflation was determined mainly by fruit and vegetable price hikes. In contrast, inflationary pressures weakened reflecting monetary policy tightening in the past period, as well as reduced food production costs and low demand.

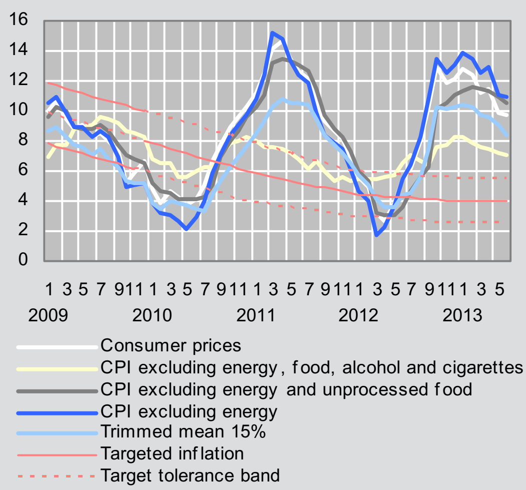
Y-o-y inflation moved in Q2 within the bounds of the short-term inflation projection published in the May *Inflation Report*. It fell from 12.8% in January to 9.8% in June, chiefly on account of food prices as last year's price growth was gradually taken out from calculation. As inflation over the last six months (January–June) moved above the upper bound of the target tolerance band, the

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

	2012			2013	
	II	III	IV	I	II
Consumer prices (CPI)	3.1	4.2	2.3	1.1	1.8
Unprocessed food	14.7	9.1	-7.8	2.2	10.9
Processed food	1.0	4.2	6.3	1.1	-0.4
Industrial products excluding food and energy	1.7	3.6	4.8	1.7	0.9
Energy	0.5	3.5	1.1	-0.2	-0.9
Services	2.4	1.4	3.3	0.6	1.8
Core inflation indicators					
CPI excluding energy	3.7	4.3	2.6	1.4	2.3
CPI excluding energy and unprocessed food	1.6	3.3	5.0	1.2	0.7
CPI excluding energy, food, alcohol and cigarettes	2.2	1.5	3.1	0.7	1.7
Administered prices	0.1	2.9	5.2	2.9	0.7

Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

The return of y-o-y inflation within the target tolerance band continued in Q2.

NBS sent a letter to the Government explaining why inflation moved away from the target tolerance band, describing measures taken that far and specifying those that must be taken to ensure low and stable inflation in the medium run, and setting out the period within which inflation was expected to return within the target tolerance band.[1]

Prices of food and non-alcoholic beverages gained 3.7% in Q2. Unprocessed food prices rose 10.9%, adding 1.4 pp to headline inflation. Growth in these prices was almost fully driven by the 19.3% increase in fruit and vegetable prices. This rise was higher than expected for this time of year and was caused by poor last year's harvest and low vegetable supply right before the new harvest, but also to bad weather conditions in the first half of June. On the other hand, weakening cost-push pressures in food production drove down processed food prices by 0.4%, contributing a negative 0.1 pp to headline inflation.

A significant slowdown in price growth compared to the previous quarter was recorded for **industrial products excluding food and energy** (0.9%). The strongest contribution to the growth in this group of products originates from rising pharmaceutical product prices after medicament prices increased in May and June.

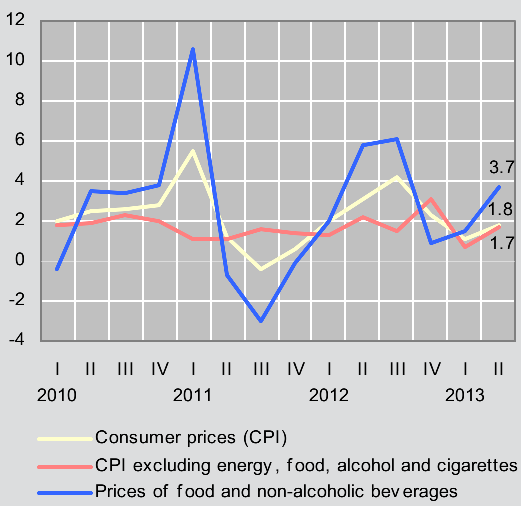
Prices within the group of **energy** fell 0.9%. The main negative contribution came from prices of liquid fuels and lubricants (-0.1 pp). In consequence of falling global

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

	IX 2012 / IX 2011	XII 2012 / XII 2011	III 2013 / III 2012	VI 2013 / VI 2012
Consumer prices	10.3	12.2	11.2	9.8
Domestic industrial producer prices	7.0	6.4	5.4	4.3
Agricultural producer prices	39.0	35.4	17.3	8.3*
Prices of elements and materials incorporated in construction	7.1	5.1	3.3	3.1

* May-on-May.
Sources: SORS and NBS calculation.

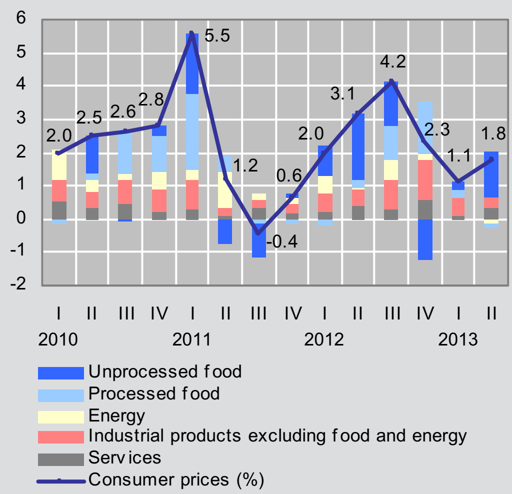
Chart III.0.2 **Price movements**
(quarterly rates, in %)



Sources: SORS and NBS calculation.

We estimate that seasonal factors had the strongest impact on higher price growth in Q2 compared to Q1.

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



Sources: SORS and NBS calculation.

The strongest contribution to consumer price growth in Q2 came from unprocessed food.

[1] See Appendix 1, p. 52.

oil prices, petroleum product prices fell in an approximately equal measure as in the quarter before (2.7%), giving a 0.1 pp negative contribution to headline inflation.

Prices of **services** rose more than in Q1 (1.8%), on the back of the seasonal rise in travel arrangements of around 34% (adding 0.2 pp to headline inflation) and housing-utility services (0.1 pp).

Core inflation (measured by CPI excluding prices of energy, food, alcohol and cigarettes) was higher in Q2 (1.7%) than in the previous quarter (0.7%), while it continued to slow in y-o-y terms – 7.1% in June. Broken down by category, the main positive contribution was provided by rising prices of products and services indexed to the exchange rate (travel arrangements, medicaments, cars and rent).

Administered prices grew 0.7% in Q2. They have recorded a relatively small rise since early 2013 (3.6%), partly on account of the postponement of electricity price adjustment for August. Within this group, the strongest contribution to Q2 growth came from prices of medicaments and housing-utility services.

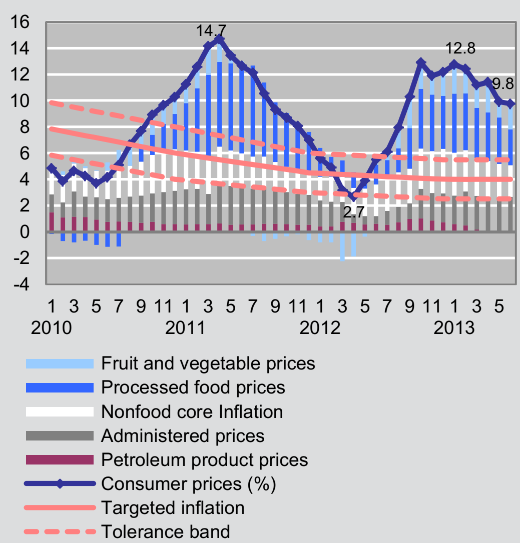
Domestic industrial producer prices fell 0.2% in Q2. Y-o-y, the downward tendency continued – 4.3% in June. In terms of purpose, a rise was recorded only for prices of consumer non-durable producer products. The sharpest drop was observed in the field of crude oil and natural gas exploitation, production of petroleum and tobacco products, which impacted on a 1.3% decline in cigarette prices. Weakening cost-push pressures in food production drove further down the prices of food industry producers.

Agricultural producer prices[2] fell 5.3% in May relative to Q1. In y-o-y terms, their growth slowed considerably – from 17.3% in March to 8.3% in May. Prices declined in Q2 also in the categories of cereals, industrial plants, fruit and animal products (milk and eggs). However, prices of potatoes, other vegetables and livestock increased significantly.

Prices of elements and materials incorporated in construction rose somewhat in Q2 (0.9%), but their y-o-y growth continued to decelerate, reaching 3.1% in June.

A decline in **dinar-denominated import prices**[3] (0.5%)[4] was smaller in Q2 relative to Q1, as a consequence of dinar's depreciation in late May and during June. A y-o-y

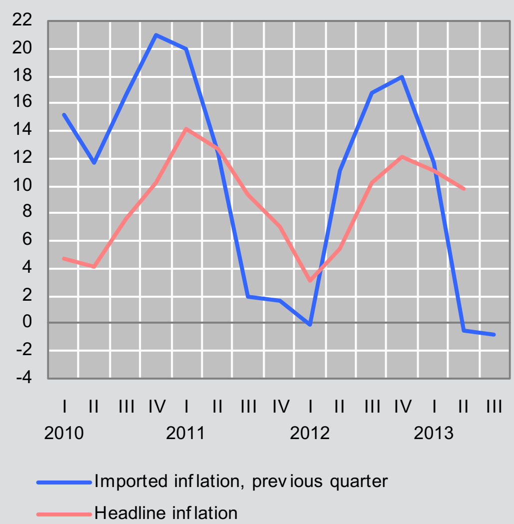
Chart III.0.4 **Contribution to y-o-y consumer price growth**
(in pp)



Sources: SORS and NBS calculation.

With the gradual depletion of effects of the last year's agricultural shock, the contribution of food to y-o-y inflation declined.

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



Sources: NBS and Eurostat.

Y-o-y import prices continued down in Q2.

[2] Producer prices in agricultural and fishing sectors.

[3] As an indicator of import prices, we used the weighted average indices of global oil and food prices, export and consumer prices of Germany as our most important foreign trade partner.

[4] The ratio of averages for two consecutive quarters.

decline in these prices, initiated in Q1, continued to 0.9% in June. As in the previous quarter, these prices dropped on account of falling prices of intermediate goods. Global crude oil prices were also lower in Q2. Unlike the previous quarter, global food prices produced somewhat stronger inflationary effects and a rise in import prices of consumer goods continued.

Short-term inflation projection

We estimate consumer price growth to be much lower in Q3 than in the previous two quarters. The expected increase in electricity prices will be the main determinant of consumer price growth.

Under our estimate, a decline in y-o-y inflation will intensify in Q3, mainly reflecting the cheapening of food because of the expectedly more favourable agricultural season compared to the previous one, both in the country and abroad. Disinflation will also be aided by past monetary policy measures, low aggregate demand and high last year's base, i.e. high monthly inflation rates in 2012. In quarterly terms, consumer price growth in Q3 will be determined mainly by the announced increase in electricity prices.

A negative contribution to inflation will come from food prices, mainly in regard to the expected seasonal decline in fruit and vegetable prices. Owing to weakened cost-push pressures in food production, a negative contribution to inflation is likely also from processed food. A seasonal price increase is expected only in case of fresh meat.

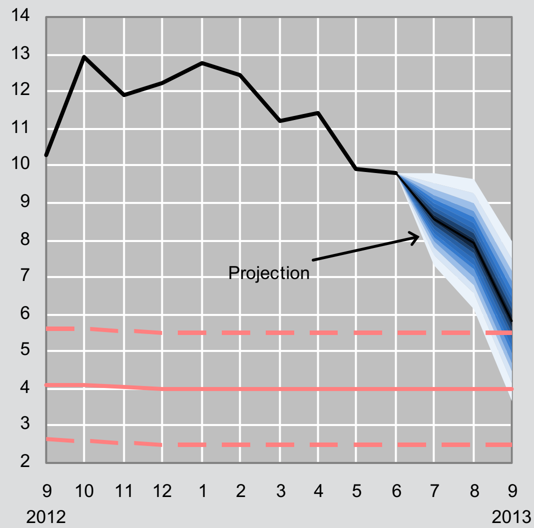
We estimate that prices of industrial products excluding food and energy will rise somewhat more than in Q2, primarily as a result of an increase in cigarette prices in July and August.

The highest increase and individually the strongest contribution to headline inflation are anticipated in the group of energy. Given the 5.1% share of electricity in CPI and the announced increase in electricity prices in August of 10.9%, direct contribution to inflation from this source will amount to 0.55 pp. We also expect a moderate price increase for petroleum products because of rising global oil prices over the last month.

Prices of services are expected to increase more or less equally as in the quarter before mainly due to rising prices of housing-utility services.

The greatest uncertainty surrounding the Q3 projection relates to prices of fruit and vegetables, as well as prices of primary agricultural commodities at home and abroad, and their impact on food prices in the domestic market.

Chart III.0.6 **Short-term inflation projection**
(y-o-y rates, in %)



Source: NBS.

A fall in y-o-y inflation will intensify in Q3.

Inflation expectations

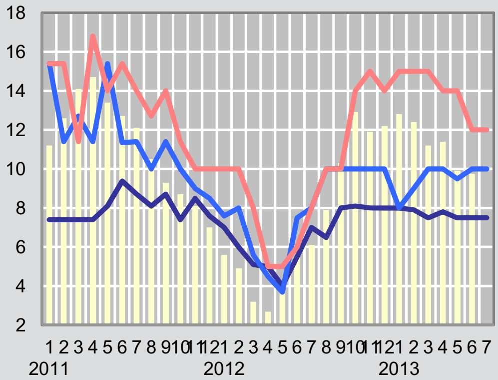
Inflation expectations of households are declining, while those of other sectors are relatively stable. As inflation continues down, a further decline in inflation expectations is likely over the period to come.

Declining inflation expectations of households and relatively stable expectations of the financial and corporate sectors have marked the period since the last *Inflation Report*. Along with a further decline in inflation, inflation expectations are expected to follow down over the period to come.

According to the **Bloomberg** survey, one-year ahead **financial sector** expectations are relatively stable. Having fell 0.3 pp to 7.0% in May, expectations levelled off in June, only to drop to 6.9% in July.

The **Ipsos** survey also points to relatively stable one-year ahead inflation expectations of the **financial sector**. They remained unchanged in June and July after dropping from 7.8% in April to 7.5% in May. The

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

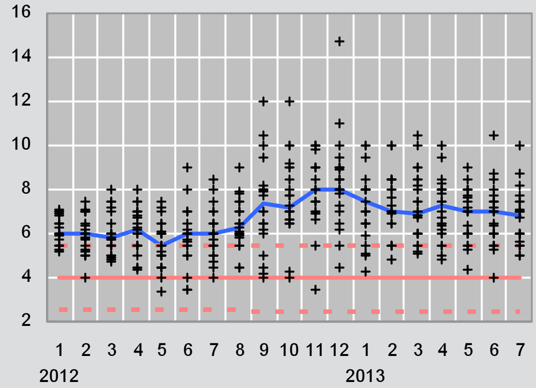


Sources: Gallup, Ipsos and NBS.

* Ipsos from November 2011 and Gallup in the earlier period.

Inflation expectations of households declined in Q2, while remaining almost flat in other sectors.

Chart III.0.8 **One-year ahead expected and targeted inflation – financial sector**
(y-o-y rates, in %)



Sources: Bloomberg and NBS.

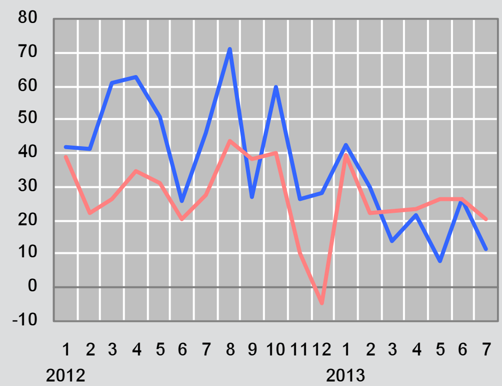
The disagreement among respondents regarding expected inflation declined in Q2 compared to the previous quarter.

corporate sector reduced its expectations to 9.5% in May, but raised them in June to the April level of 10.0% where they stayed in July. **Household** expectations equalled 14.0% in April and May, but fell to 12.0% in June and remained there in July.

The dispersion of responses in the financial sector shows a downward tendency in both surveys, though the disagreement among financial sector respondents is still smaller under the Bloomberg than Ipsos survey. Among corporate sector respondents, the dispersion declined after the February peak, but remained strong. Though declining after the April peak, the greatest disagreement about trends in future inflation is recorded for households.

Results of the Ipsos survey suggest a relatively stable net percentage of enterprises[5] which expected an increase in their product prices over the next three months. In terms of input prices, expectations were more unstable, partly as a consequence of announcements of the electricity price increase and oil price movements. July saw a drop in the number of enterprises expecting higher input prices and those expecting a rise in their product prices.

Chart III.0.9 **Expectations of enterprises regarding a change in prices of their inputs, products and services**
(net percentage, "+" = increase, "-" = decrease)



Sources: Ipsos and NBS.

The net percentage of enterprises expecting an increase in their product prices was relatively stable in Q2. Expectations regarding input prices were much more unstable.

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

IV. Inflation determinants

1. Money and capital market trends and bank lending

Interest rates

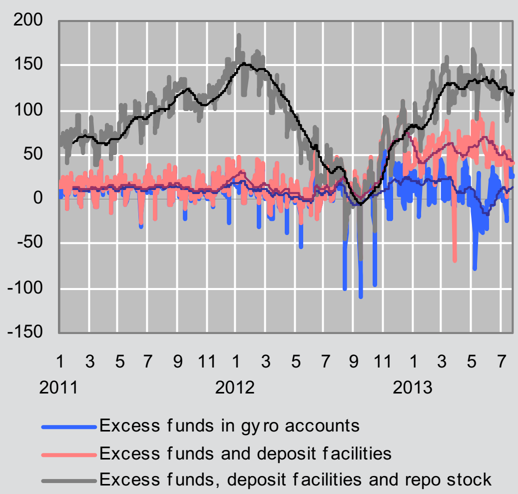
A decline in money market interest rates, in place since September last year, was halted in June mainly because of increased risk aversion of foreign investors.

In April and May, the weighted average repo rate was almost equalised to the deposit facilities rate. During June, with NBS interventions in the IFEM and greater liquidity withdrawals at repo auctions, banking sector liquidity declined somewhat. As a result, the deviation of the weighted average repo from the key policy rate declined and slightly moved away from the deposit facilities rate. By end-Q2, the weighted average repo rate of 8.75% was lower by 2.25 pp than the key policy rate and higher by 0.25 pp than the deposit facilities rate.

Trading in the overnight money market contracted further in Q2. Average daily trading volumes reached only RSD 0.6 bln, down by RSD 0.6 bln on Q1, while the number of non-trading days went up. BEONIA edged down to 8.9% on average in June, down by 0.5 pp on March. Its decline was smaller than for the weighted average repo rate in the same period.

Interbank money market rates of all maturities declined in Q2, more notably for longer maturities. Average monthly BELIBOR rates lost 0.5 pp for the shortest maturity in June relative to March, and 1.5 pp for the longest maturity. Average BELIBOR rates of all

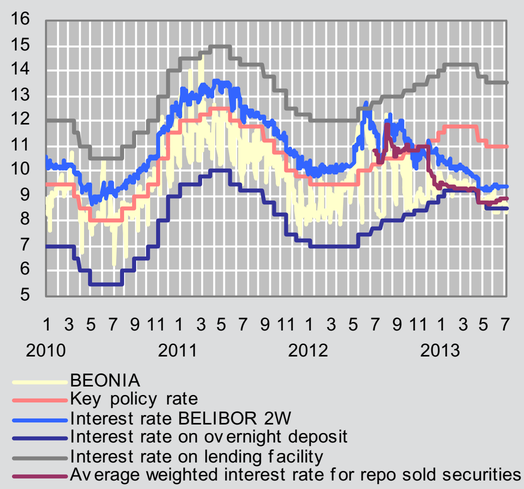
Chart IV.1.1. **Dinar liquidity**
(daily stock and moving averages, in RSD bln)



Source: NBS.

Though lower than in Q1, banking sector liquidity remained high in Q2.

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



Sources: Thomson Reuters and NBS.

Owing to high banking sector liquidity, money market interest rates continued down through the major part of Q2.

maturities were one-digit in June, ranging between 9.1% and 9.9%.

In July, a decline in interbank money market rates was stopped. Though higher compared to June, trading volumes in the overnight interbank market remained low.

Rates in the primary market of government securities continued down in Q2 and the weighted average rate fell 0.9 pp to 9.5%. Depending on maturity, rates declined from 0.3 pp to 0.9 pp mainly in the course of the first two months, reflecting considerable interest of investors, particularly foreign ones. Rates moved from 9.1% for six-month to 12.25% for seven-year maturity. The Fed's hint at downsizing the quantitative easing programme led to lower investor interest in Serbia and countries of the region. Weaker foreign investor interest in dinar securities was also due to IMF's assessment of Serbia's public finance. In late May and during June, demand declined in the primary market of government securities, leading to lower performance levels (30.9% in June) and affecting interest rate movements. In this period, though facing low demand, the government decided to accept only low interest rate bids as it had already secured funds in the international market by borrowing under more favourable conditions. Securities worth nominal RSD 67.8 bln were sold in Q2 (of total RSD 89.0 bln issued), while RSD 64.1 bln came due. As a result, the stock of debt under sold dinar securities increased by mere RSD 3.8 bln, to RSD 380.3 bln.

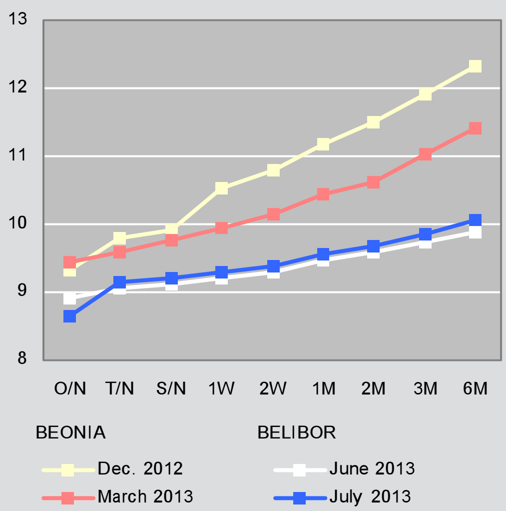
Q2 saw four auctions of euro-denominated securities and the sale of nominal EUR 157.3 mln of total EUR 225.0 mln, at rates lower than in Q1 and ranging from 3.15% for one-year to 5.0% for five-year maturity. No earlier issued securities matured in Q2, and the stock of debt rose to EUR 1.1 bln.

Though total trading in the secondary market contracted from RSD 71.7 bln in Q1 to RSD 64.1 bln in Q2, trading volumes, excluding trading up to two business days from the primary settlement date, rose by RSD 22.3 bln to RSD 36.5 bln. Such movements coincided with lower non-resident participation in the primary market of government securities in late May and during June. In this period, rates of return in the secondary market rose slightly, and moved by end-June from 9.0% for the remaining one-month maturity to 11.3% for 28-month maturity. However, quarterly rates of return declined, consistently with falling rates in the primary market.

In the course of July, rates went up in the primary and secondary markets of government securities.

The weighted average rate on new dinar loans fell by 2.0 pp in Q2 to 17.5%. A decline was noted for both corporate

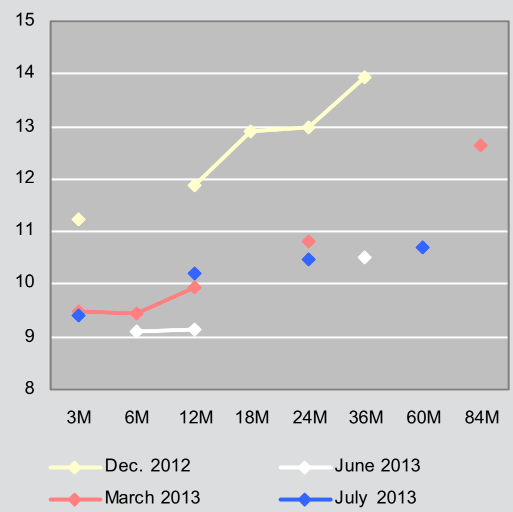
Chart IV.1.3 **Yield curve in the interbank money market**
(average values, p.a., in %)



Sources: Thomson Reuters and NBS.

A decline in interest rates was recorded in Q2 and was halted in July.

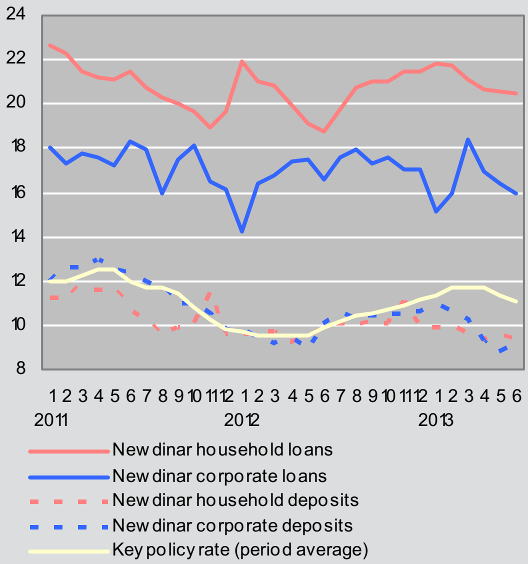
Chart IV.1.4 **Interest rates in the primary market of government securities**
(p.a., in %)



Source: Ministry of Finance and Economy.

Following a Q2 drop, interest rates went up in July.

Chart IV.1.5 **Interest rates on new dinar loans and new corporate and household deposits***
(weighted average values, p.a., in %)

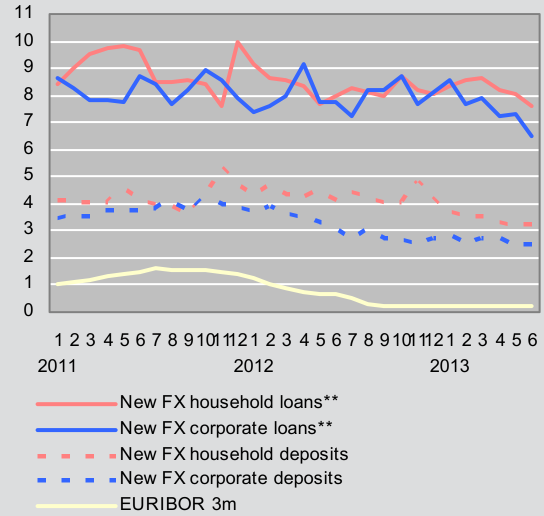


Source: NBS.

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

In Q2, dinar lending and deposit rates declined.

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



Sources: NBS and European Banking Federation.

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

** Euro and euro-indexed.

The interest margin on FX sources narrowed in Q2.

loan rates (by 2.5 pp to 15.9%) and household rates (0.6 pp to 20.4%).

Rates on most dinar corporate loans declined, most notably for the most common, current assets loans, while it was only the price of investment loans that went up. A decline in interest rates on dinar household loans was due mainly to rates on cash loans which fell 0.6 pp to 20.4% in June. Consumer loan rates also declined, by 0.4 pp to 21.3%.

Interest rates on new euro- and euro-indexed loans fell in Q2 by 1.3 pp to 6.7% in June. Rates on corporate loans lost 1.4 pp and reached 6.5% in June. A decline was observed for all types of loans: current assets, investment, export, import and other loans. Household loan rates also declined – by 1.1 pp to 7.6%, mirroring a drop in rates on consumer and other loans. At the same time, the price of housing loans remained broadly flat.

Weighted average rates on new dinar household deposits slid by 0.3 pp to 9.3% in June. They also declined in the corporate sector – by 1.0 pp to 9.3%, which together with a heftier fall in dinar loan rates, drove down interest margins on dinar sources by 1.0 pp.

Rates on euro-denominated household savings continued down in Q2 – by 0.2 pp to 3.3% in June. Rates on euro-denominated corporate deposits also declined by 0.2 pp – to 2.5% by end-Q2. The interest margin on FX sources was down by 1.1 pp.

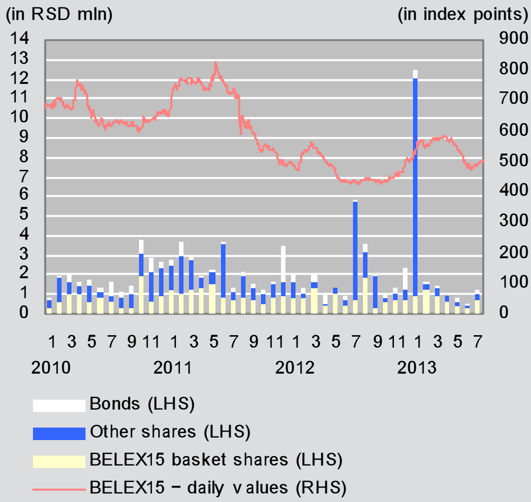
Stock exchange trends

Belgrade Stock Exchange indices and trading volumes contracted in Q2. Indices fell on most regional stock exchanges.

Unlike Q1 when the Belgrade Stock Exchange (BSE) experienced an upward trend, which was among the highest in the region, Q2 saw a decline in share prices. BELEX15, the index of the most liquid shares, fell by 16.8% in Q2 and touched 480.1 points in late June. The general BELEXline index dipped 11.9% to 956.0 points at end-June.

Positive investor expectations about macroeconomic developments in 2013, which determined the rise in share prices in Q1, abated in Q2. Share prices went down partly on account of investor reaction to the possible downsizing of the Fed's quantitative easing programme. While indices on some stock exchanges in the region, after the initial shock, began to rise in June, share prices on the BSE started to recover in July.

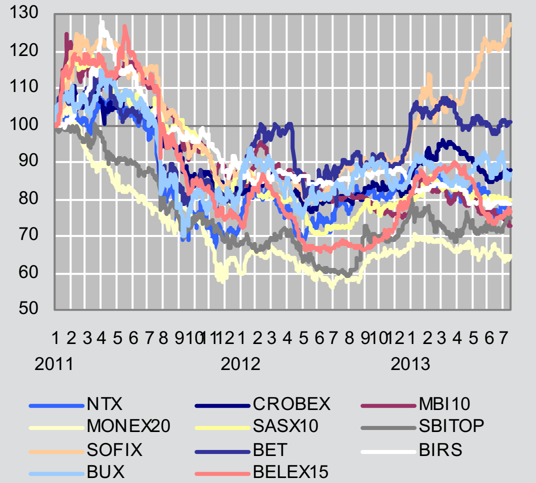
Chart IV.1.7 **BELEX15 and Belgrade Stock Exchange turnover**



Source: Belgrade Stock Exchange.

Following a decline in indices in Q2, moderate recovery of share prices began in July.

Chart IV.1.8 **Stock exchange indices across the region**
(in index points, normalised, 31. 12. 2010 = 100)



Sources: BSE and regional stock exchanges.

Q2 experienced a decline in indices on most stock exchanges in the region.

Total trading in shares amounted to RSD 1.9 bln in Q2. Of this amount, trading in shares covered by BELEX15 accounted for RSD 1.4 bln, down by 55.9% on Q1.

Foreign investors traded more actively on the purchase than on sale side (RSD 0.2 bln), but less so than in Q1.

Trading in frozen FX savings bonds was RSD 0.4 bln in Q2, up by RSD 0.1 bln on Q1. Most traded were 2014-series bonds. Yield to maturity rates fell from end-March and ranged between 3.9% for A2014 series to 4.2% for A2016 series.

No trading in corporate bonds was recorded on the BSE in Q2.

As share prices fell in Q2, BSE market capitalisation declined to RSD 755.5 bln, less by RSD 57.6 bln on end-March. The share of market capitalisation in estimated GDP[6] contracted by 2.2 pp to 21.2% in June. Broken down by segment, regulated market capitalisation fell by RSD 70.9 bln to RSD 420.4 bln. MTP[7] capitalisation was up RSD 13.4 bln to RSD 335.2 bln.

Apart from the BSE, indices fell on most regional stock exchanges in Q2. The sharpest decline was recorded for Zagreb indices (10.1%), and a smaller decline for Bucharest, Banjaluka, Sarajevo and Skopje indices (between 6.7% and 2.6%). Indices on the Sofia stock exchange registered the highest increase (15.5%).

Regional stock exchanges experiences divergent movements in the course of July. BSE indices increased the most – BELEX15 was up 4.2% and BELEXline 3.0%, while total trading volumes doubled from June.

Monetary aggregates

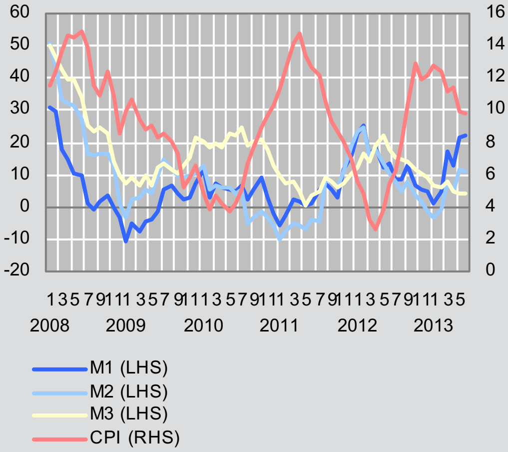
Money supply, and chiefly its dinar component, went up in Q2.

In Q2, total reserve money rose by 2.21% in nominal and 0.4% in real terms, on account of rising dinar reserve money. Dinar reserve money went up (4.4% in nominal and 2.5% in real terms) as a result of more intensive government spending, and was being withdrawn through IFEM interventions.

[6] Estimated GDP over the last four quarters.

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

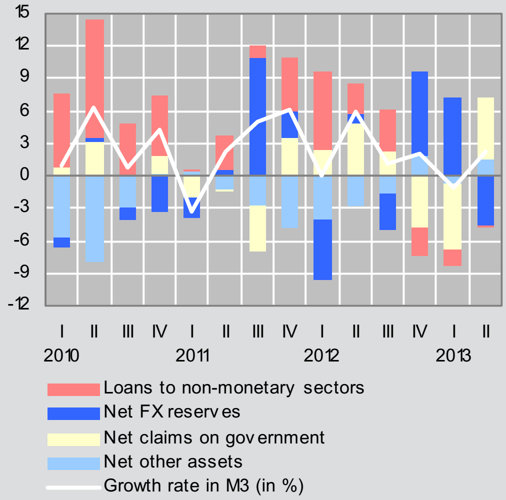
Chart IV.1.9 **Monetary aggregates and CPI**
(y-o-y rates, in %)



Sources: SORS and NBS.

Owing to growth in the most liquid money supply components, the dinar component of money supply increased in real terms in Q2, while a real y-o-y drop in M3 continued.

Chart IV.1.10 **Contribution to M3 3-month growth rate**
(in percentage points)



Source: NBS.

Spending of government's FX deposits had the strongest impact on M3 growth.

Mainly in April and somewhat less in May, the government converted into dinars and spent a portion of its FX deposits, which together with other NBS FX transactions provided the main impetus to a rise in reserve money. Most of the liquidity created was withdrawn in June through NBS interventions in the IFEM (RSD 34.7 bln).

In the structure of dinar reserve money, cash in circulation rose by RSD 6.9 bln in Q2 and excess dinar bank reserves[8] by RSD 3.3 bln. In June, banks held smaller amounts in the overnight deposits account with the NBS compared to April and May, mainly due to NBS interventions in the IFEM. Required reserves allocated in dinars were up RSD 3.1 bln, while dinar deposits of the local government stayed unchanged from end-Q1.

Quarterly money supply rose in real terms. The rise was the sharpest for M1 (3.4%) mainly because of rising corporate transaction deposits. Despite a decline in savings and term deposits, money supply M2 rose by 1.0% in real terms, while the broadest monetary aggregate M3 recorded a 0.5% rise. Spending of government FX deposits lent the main boost to M3 in Q2. In contrast, tighter lending to the private sector, notably companies, produced the strongest negative effect on M3.

Table IV.1.1 **Monetary aggregates**
(real y-o-y rates, in %)

	2012		2013		Share in M3 June 2013 (%)
	Sep.	Dec.	March	June	
M3	3.2	-2.5	-2.7	-4.8	100.0
FX deposits	5.7	2.2	-2.5	-7.1	70.3
M2	-2.3	-12.2	-3.2	0.9	29.7
Time and savings dinar deposits	-9.4	-21.1	-15.8	-14.7	9.9
M1	2.6	-6.3	5.2	11.0	19.8
Demand deposit	0.1	-1.6	18.1	21.9	13.2
Currency in circulation	6.9	-13.7	-14.1	-5.8	6.6

Source: NBS.

In terms of M3 components, in addition to cash in circulation, a rise was recorded for demand deposits (RSD 9.6 bln), mainly corporate. Balances in savings and

[8] Including balances in bank gyro accounts, vault cash and overnight deposits with the NBS.

term deposits contracted by RSD 2.8 bln. FX deposits expressed in dinars went up by RSD 23.5 bln, while rising negligibly in euro terms (EUR 7.9 mln). At the same time, balances in accounts of the corporate sector and other financial organisations[9] increased only slightly, while household FX savings declined although a series of frozen FX savings bonds fell due. Reduced availability of other sources of household consumption, as well as lower interest rates on FX deposits, may be attributed to the absence of growth in household FX savings. Unlike FX, dinar household saving rose 10.6% (RSD 2.0 bln), mainly for up to six-month maturity, which is indicative of gradual strengthening of confidence in the domestic currency.

The commitment of economic entities to keep higher balances in the most liquid form impacted on a real y-o-y increase in M1 and M2 by 11.0% and 0.9% in June respectively. A y-o-y decline in M3 continued in Q2 – in June, this aggregate was lower by 4.8% in real, y-o-y terms.

Monetary multiplier was almost unchanged from Q1 (it stood at 1.0 and 1.6 for M1 and M2 respectively). As transaction deposits increased, the velocity of circulation of M1 declined, but kept its pace in case of broader monetary aggregates.

Spending of government FX deposits gave the strongest impulse to M3 growth in July as well.

Bank lending

Bank lending declined for the second consecutive quarter and slackened further in y-o-y terms. In contrast to corporate, household lending picked up.

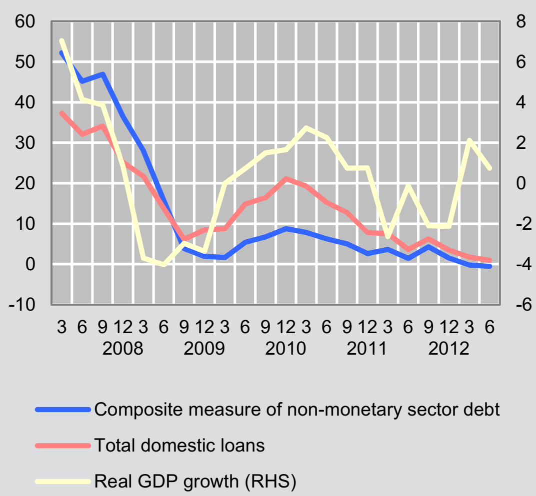
Excluding the exchange rate effect[10], y-o-y growth in domestic loans came at mere 1.0% in June, indicating a further slowdown in lending activity, primarily on account of H1 contraction in bank lending. The delicensing of two banks, in October 2012 and April 2013, also dampened y-o-y lending activity in Q2.[11]

At the quarterly level and excluding the exchange rate effect, domestic lending slowed by 1.3% in Q2, reflecting mainly a decline in corporate loans. As loan receivables went down, their share in estimated GDP[12] fell by 1.3 pp to 52.4% at end-Q2.

The key source of financing bank lending in Q2 were rising dinar corporate and household deposits, and to a lesser extent a rise in FX deposits. On the other hand, banks continued to favour non-risk investment in repo securities and to keep relatively high balances in deposit facilities accounts, though less than in Q1. Besides, they transferred a part of their funds to accounts abroad. Also, bank receivables in respect of non-resident loans increased, and their external loan liabilities declined.

Excluding the exchange rate effect, corporate lending fell 3.6% in quarterly, or RSD 36.7 bln in absolute terms. Contraction in corporate lending is reflected in a higher amount of repaid than newly extended loans, which accounted for the reduction in bank receivables in this regard. Termination of the subsidised corporate lending programme led to the further reduction in the amount of newly extended loans. Q2 witnessed less new corporate loans both q-o-q and y-o-y. A decline in total loan receivables was also caused by the delicensing of the Development Bank of Vojvodina. The major part of this bank's loan receivables was transferred to the Deposit Insurance Agency and thereby excluded from banking

Chart IV.1.11 **Lending activity and GDP**
(y-o-y rates, in %)



Sources: NBS and SORS.

Deceleration in y-o-y growth in lending activity continued in Q2.

[9] Include insurance companies, voluntary pension funds, leasing companies, investment funds, broker-dealer companies etc.

[10] Calculated at the RSD/EUR exchange rate on 31 August 2008, assuming that all FX and FX-indexed loans were extended in euros.

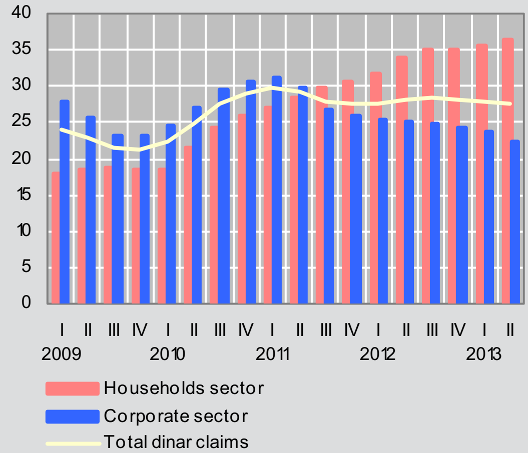
[11] If receivables of Agrobanka, i.e. Nova Agrobanka, and the Development Bank of Vojvodina are excluded from domestic bank loan receivables, y-o-y lending activity would post higher growth rates.

sector balance sheets. Lending activity diminished in respect of all types of loans, with current assets loans constituting the bulk of new loans. The subsidised corporate lending programme was terminated in March after budgetary allocations for that purpose were exhausted. In light of the taken fiscal consolidation measures, subsidised corporate lending is not likely to resume this year.

In contrast to the corporate sector, lending to households stepped up in Q2. Excluding the exchange rate effect, growth in household lending was RSD 11.7 bln or 2.0%. Cash and housing loans were prevalent among new loans. In addition, the volume of consumer loans increased from Q1. The most expensive form of borrowing – credit cards and current account overdrafts, retained its volume from Q1, while revolving loans declined slightly. In Q2, banks extended subsidised housing loans worth RSD 3.1 bln.

The share of dinar in total corporate and household lending fell by 0.8 pp relative to March and equalled 27.4% in June. The share of dinar loans rose by 0.5 pp (to 36.4%) in the household and declined by 1.7 pp (to

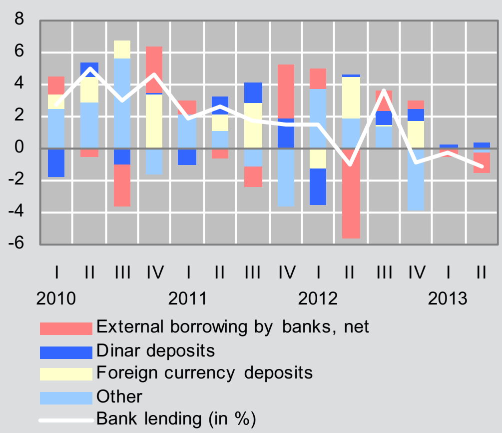
Chart IV.1.13 **Share of dinar in total bank receivables on corporate and household sectors***
(%)



Source: NBS.
* Excluding the exchange rate effect.

The share of dinar receivables increased in the household and declined in the corporate sector in Q2.

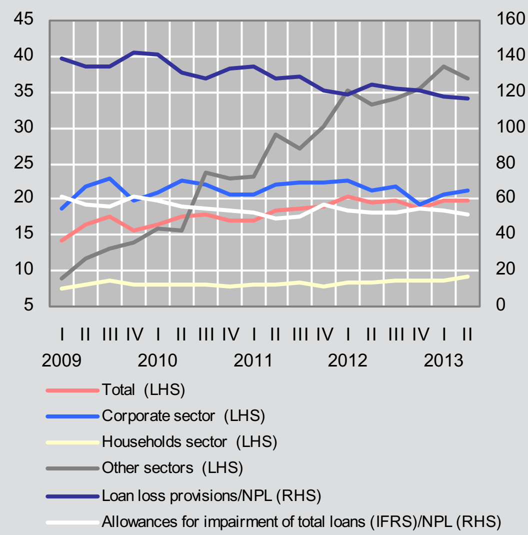
Chart IV.1.12 **Contributions to quarterly rate of lending growth***
(in pp)



Source: NBS.
* Loans to non-monetary sectors excluding the exchange rate effect.

A rise in net external receivables of banks had a negative impact on lending activity in Q2.

Chart IV.1.14 **NPLs share in total loans, gross principle**
(%)



Source: NBS.

The share of NPLs in total loans was unchanged in Q2.

[12] Estimated GDP for the last four quarters.

22.3%) in the corporate sector. Excluding the exchange rate effect[13], the share of dinar in total lending was down 0.4 pp to 27.5% in June.

The share of NPLs in total loans was unchanged from March and stood at 19.9% in June (gross principle). The share of corporate and household NPLs rose relative to March (0.5 pp in each sector), equalling in June 21.3% and 9.2%[14] for corporates and households respectively. Growth in corporate NPLs was smaller than in Q1 partly due to the delicensing of the Development Bank of Vojvodina and the exclusion of the major part of its receivables from total bank receivables.

Despite the high share of NPLs in total loans, the capital adequacy ratio of 20.2% in June indicates unimpaired stability of the domestic banking sector. Allowances for impairment were 52.0% of NPLs in June. At 115.9% in June, loan loss provisions fully covered the level of gross NPLs.

We expect a reduction in household NPLs as banks have accepted the NBS's recommendation to enable users of CHF-indexed housing loans to repay their loans in lower than the originally agreed instalments over a determined period.

[13] Calculated at the RSD/EUR exchange rate on 31 December 2012.

[14] Including entrepreneurs, loan arrears also rose 0.5 pp, to 10.5%.

Text box 2: Causes of a slowdown in lending activity

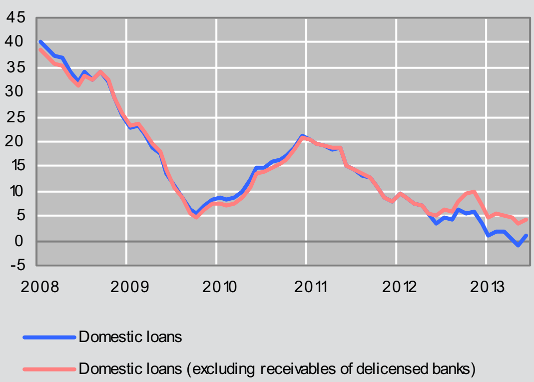
Though positive, y-o-y growth rates of lending activity have been declining continuously for the last two and a half years. In June 2013, y-o-y growth in domestic loans totalled only 1.0%[1], and the lending activity came close to the stagnation zone. Reasons can be found on the side of both loan demand and supply. On the demand side, factors which limit lending growth are sluggish economic recovery, high unemployment and relatively high interest rates. On the supply side, these factors include deteriorated creditworthiness of the private sector and tighter lending standards, consistently with greater risk aversion, and in some cases limited sources of funding bank lending activity (net external debt repayment and limited domestic sources of funding).

Because of the limiting factors on both the supply and demand sides, the extension of new loans, as the key factor of economic recovery, has slowed down. In H1 2013, new lending fell by around 8% compared to the same period of 2012 and 2011. At the same time, lending to the corporate sector contracted by around 15%. Though fresh lending to households has stepped up by around 20%, given the higher prevalence of corporate loans, total new lending has been on a downturn.

Ever since measures aimed at mitigating adverse effects of the global economic crisis were adopted in early 2009, subsidised lending became an important determining factor of lending activity. Though contrary to the principles of market economy, subsidised lending is justified in periods of economic crises. The impact of these loans on acceleration in lending was particularly visible in 2010 when subsidised lending reached around EUR 1.9 bln, as well as in late 2012 when subsidised loans worth EUR 1.1 bln were extended within only three months. The termination of 'large' subsidised lending programmes, such as the most recent one, against the backdrop of reduced commercial lending[2], is manifest in lower lending growth rates.

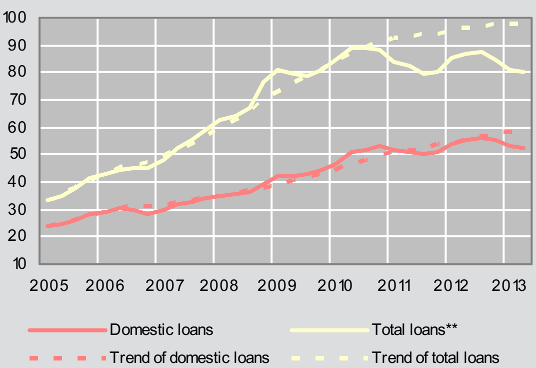
The delicensing of two banks in October 2012 and April 2013 brought about a reduction in y-o-y lending growth as the majority of loan receivables of these banks were excluded from banking sector balance sheets and transferred to the Deposit Insurance Agency. If receivables of these two banks are excluded from the series, lending activity would post higher growth rates, but the trend of its sluggish growth would remain.

Chart O.2.1 **Growth in lending**
(y-o-y rates, in %)



Source: NBS.

Chart O.2.2 **Credit-to-GDP gap***
(in % of GD)



* Excluding receivables of delicensed banks.
** Domestic loans and cross-border borrowing.

Source: NBS.

[1] At the RSD/EUR exchange rate on 31 August 2008, assuming that all FX and FX-indexed loans are extended in euros.

[2] In terms of new loans, H1 2013 saw 18% less new loans under market conditions than in the same period of 2012.

The deterioration in the lending market is also evidenced in the domestic credit-to-GDP gap, i.e. the deviation of this ratio from the trend[3]. The gap has been in the negative zone since Q2 2011 and has been deepening from late 2012. The deepening of the negative gap is due primarily to the termination of the subsidised lending programme and sluggish economic recovery. Owing to enterprise external debt repayment, the gap is even more pronounced in terms of the share of total loans in GDP.

Similar movements in the lending market are present in other countries as well. Given the severity of the crisis which hit the banking sector, recovery of lending activity is estimated to be gradual and to take place after the emergence of clear signals that economic activity is on an upward path.

[3] One-sided HP filter (λ = 400.000).

2. Movements in the foreign exchange market and the dinar exchange rate

The strengthening of the dinar continued into April. In late May, however, depreciation pressures developed as a result of the interplay between global and local factors.

Having appreciated in April, the exchange rate of the dinar was stable for the major part of May. In late May, however, it headed down and depreciated through June. Thus, relative to end-March the dinar weakened against the euro by 1.9%, while its depreciation at quarterly level averaged 0.4%. The exchange rate ranged from 110.5 to 114.5 dinars per euro.

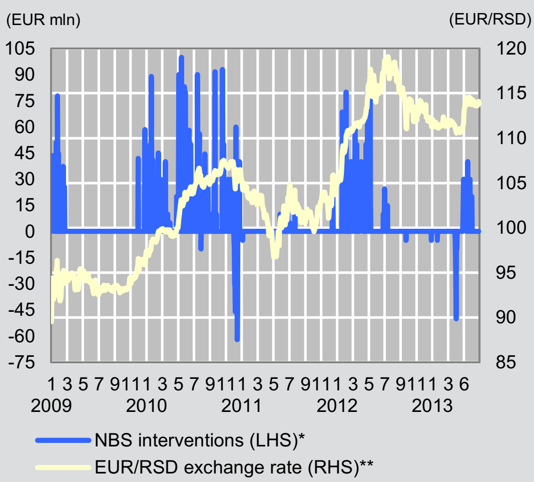
The dinar's slide against the euro, parallel with the euro's fall against the dollar, led to an average 1.5% loss of the dinar against the dollar in Q2. End-of-period, the value of the dinar vis-à-vis the dollar remained unchanged because of the dollar's weakening against the euro.

Consistent with these trends, the nominal effective exchange rate of the dinar[15] depreciated on average by 0.6% in Q2, ending the period 1.6% weaker than in Q1. As the nominal depreciation of the exchange rate exceeded the difference between domestic and foreign inflation, the real effective exchange rate of the dinar depreciated on average by 0.2% (while staying unchanged against the euro in real terms relative to Q1, it depreciated by 0.8% against the dollar).

Continued strengthening of the dinar in April can be put down to increased supply of foreign exchange stemming from non-residents' investment into government securities, as well as to a larger volume of foreign cash purchased from exchange offices. Appreciation pressures gathered pace by the end of April when the European Commission recommended the opening of membership talks with Serbia.

The weakening of the dinar in the second half of Q2 was brought about by both global and Serbia-specific factors. Namely, Fed's hint at a gradual reduction of the quantitative easing programme (QE) increased investors' risk aversion in the international financial market. Institutional investors scaled down their exposure to relatively riskier markets, including the markets of Central and East European countries. This pushed the risk premiums of these countries up and exerted a downward

Chart IV.2.1 **Movements in EUR/RSD exchange rate and NBS FX interventions**

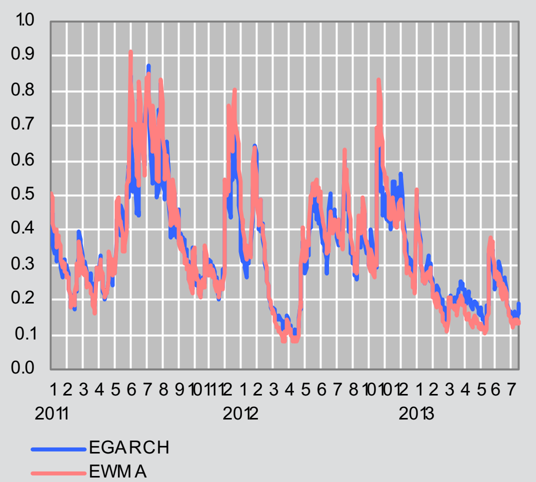


Source: NBS.

* + sale; - purchase.
** 1 EUR in RSD.

In Q2, the NBS intervened in the IFEM mainly by selling FX.

Chart IV.2.2 **Short-term volatility of the RSD/EUR exchange rate**
(in %)



Source: NBS.

After low values in April and May, oscillations of the dinar exchange rate against the euro increased in June.

[15] Calculated as a geometric average of nominal exchange rates EUR/RSD and USD/RSD, applying weights 0.8 and 0.2, i.e. the formula (EUR/RSD^0.8)*(USD/RSD^0.2).

pressure on their currencies. In the case of Serbia, in addition to global factors, negative assessments of the state of public finance also played a role.

Domestic corporate demand for foreign exchange increased on the quarter before (purchase of foreign exchange rose by 22.0%), but remained lower than in the same period a year earlier.

Q2 witnessed a rather low current account deficit and a concurrent capital outflow. On the other hand, foreign cash supply by exchange offices and natural persons rose significantly, exceeding the quarterly levels recorded in the previous four years. This was in part due to a higher inflow of remittances and most likely also to households' spending of foreign exchange savings against reduced access to other sources of consumption.

Daily trading volumes in the IFEM averaged EUR 43.2 mln, similar to those recorded in Q1 and nearly one third lower than in the same period a year earlier. Throughout April and most of May trading volumes were relatively low. They rebounded by the end of May when non-residents started buying larger amounts of foreign exchange and were sustained relatively high until the end of June. Exchange rate volatility, measured by *EWMA*[16] and *EGARCH*[17] methods, mirrored the movements in trading volumes – running low in April and May and rising in June. Overall, at quarterly level, exchange rate volatility was lower than in Q1.

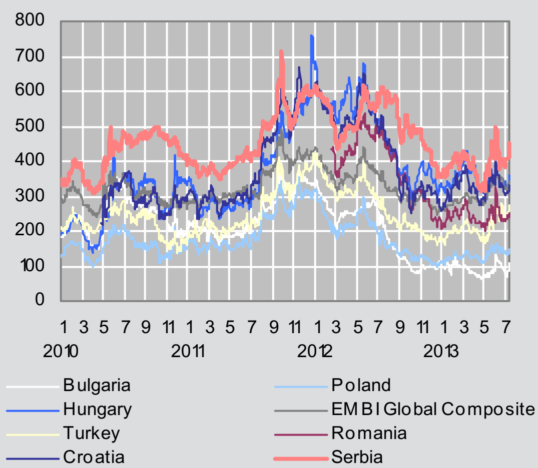
To ease excessive daily volatility of the dinar exchange rate, the NBS bought from banks in the IFEM a total of EUR 80.0 mln in April and early May. From end-May and in the course of June, the NBS intervened by selling foreign exchange in the total amount of EUR 305.0 mln.

The NBS continued organising regular three-month and two-week FX swap auctions. In three-month auctions, the NBS swap bought and sold EUR 4.0 mln, while in two-week auctions, it swap bought and sold EUR 41.0 mln.

In July, depreciation pressures lost traction and the dinar edged up against the euro by 0.3%. The NBS intervened in the IFEM twice, by selling EUR 30.0 mln in total.

The risk premiums of countries in the region, measured by EMBI, were on a slightly downward path throughout

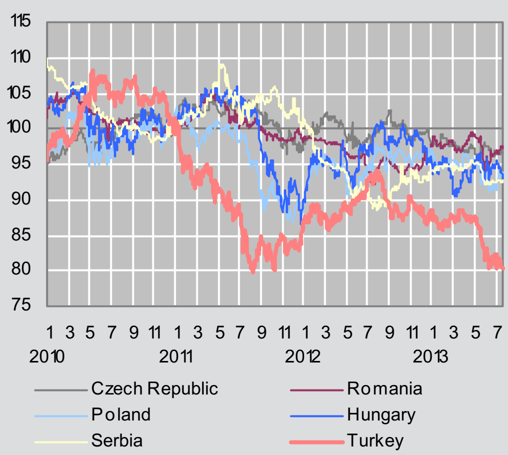
Chart IV.2.3 **Risk premium indicator – EMBI by country**
(daily data, in bp)



Source: JP Morgan.

A rise in the risk premium was particularly pronounced in June, after the Fed hinted at downsizing of the quantitative easing programme.

Chart IV.2.4 **Movements in exchange rates of national currencies against the euro***
(daily data, December 31, 2010 = 100)



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

In late May, most currencies in the region depreciated because of global factors.

[16] EWMA (Exponentially Weighted Moving Average) – method of weighted moving averages which assigns different weights to daily percentage changes in the exchange rate at different moments in time, with the exponential lowering of weights as one moves away from the present moment.

[17] EGARCH (Exponential General Autoregressive Conditional Heteroskedastic) – a method for estimating conditional variance which captures the asymmetric effect of positive and negative shocks on the estimate of conditional variance.

April and most of May, but the trend reversed in late May when the Fed suggested a gradual reduction of its QE programme. Regional country risk premiums continued to rise in June, receiving additional impetus from the unveiling of possible deadlines of the QE reduction and wind-down. The market response moderated by the end of June. Relative to Q1, the largest increase in country risk premium was registered for Turkey (26 bp) and Serbia (24 bp) and the largest decrease for Hungary (77 bp) and Croatia (25 bp). Average quarterly figures show a modest increase in the value of EMBI for most regional peers and a decrease for Bulgaria (18 bp), Serbia and Romania (4 bp each). End-July EMBI for Serbia stood at 453 bp, up by 13 bp on the month before.

In July Moody's assigned to Serbia B1 credit ratings with stable outlook. Shortly thereafter Fitch affirmed Serbia's credit rating at BB-, negative outlook.

Just like the dinar, the currencies of other countries in the region pursuing a similar exchange rate regime weakened against the euro in Q2. Looking at end-of-period figures, the Turkish lira (7.6%) and the Polish zloty (3.5%) depreciated the most, while the Romanian leu and the Czech koruna lost 1.0% and 0.8%, respectively. The only currency that rose against the euro in Q2 was the Hungarian forint (3.1%), propelled by the positive assessments of fiscal adjustment and economic growth Hungary recorded in Q1.

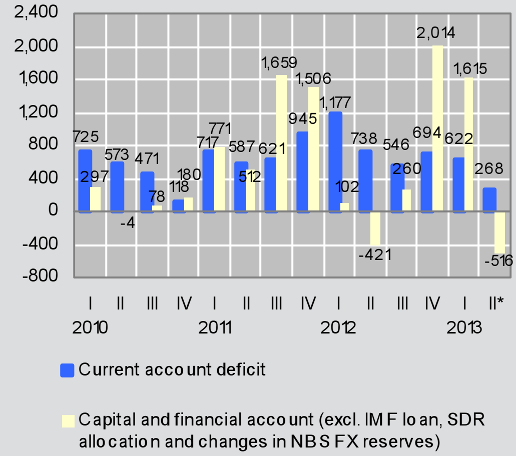
Foreign capital inflow

A net foreign capital outflow was recorded in Q2, mostly on account of portfolio investments because of the early repayment of debt to London Club creditors.

Capital inflow in Q2 was recorded in respect of FDIs and government disbursement of financial loans, while net capital outflow was registered on account of portfolio investments. The NBS, banks and corporates reduced their foreign credit liabilities.

Net FDI inflow totalled EUR 139.0 mln in Q2 or EUR 294.3 mln in the year to June. A bulk of investments were channelled to manufacturing (22.5%), transport and warehousing (22.4%), trade (17.1%), construction (16.1%) and real estate (12.4%).

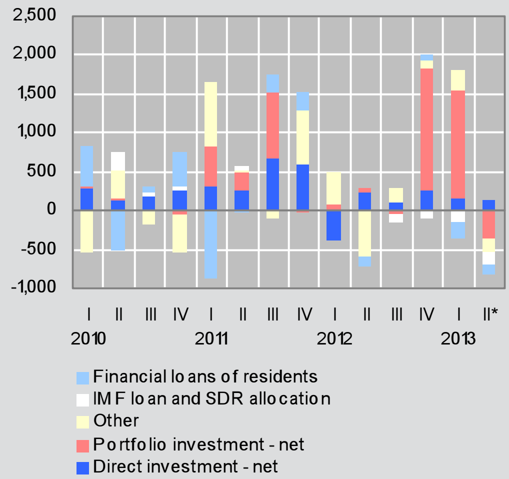
Chart IV.2.5 **Current account deficit and net capital inflow**
(in EUR mln)



Sources: SORS and NBS.
*Preliminary data.

Q2 saw low current account deficit and the net outflow of capital abroad.

Chart IV.2.6 **Structure of the financial account**
(in EUR mln)



Sources: SORS and NBS.
* Preliminary data.

The net outflow of capital, recorded in Q2, was due mainly to the early repayment of the part od debt towards the London club creditors.

Portfolio investments accounted for a net outflow of EUR 346.7 mln, most of which relating to the early repayment of debt to London Club creditors (USD 400.0 mln). As the Fed hinted at the QE reduction, investors' risk aversion in the international market increased and the interest in Serbian government securities declined. In fact, in late May non-residents started pulling out of existing investments in the domestic market.

Net repayment of foreign financial loans by residents came at EUR 115.7 mln in Q2. Banks net repaid EUR 45.0 mln and enterprises EUR 112.4 mln. Net government liabilities under foreign financial loans went up by EUR 41.6 mln on account of loan disbursements from the European Investment Bank, German Development Bank KfW and Council of Europe Development Bank.

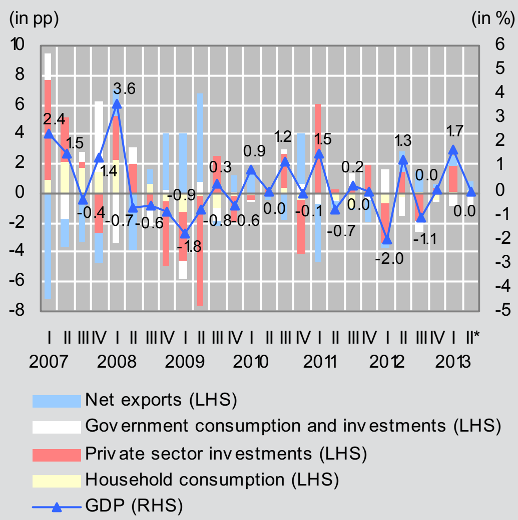
Q2 also saw a negligible decrease in the corporate sector's net trade-related borrowing (EUR 2.3 mln).

An outflow of EUR 147.6 mln was registered on account of repayment of the principal to the IMF.

3. Aggregate demand

Net exports were the main trigger of the quarterly increase in aggregate demand in Q2. Domestic demand, however, declined on the back of contracted investment.

Chart IV.3.1 **Contributions to quarterly GDP growth rate – expenditure side**



Sources: SORS and NBS calculation.
* NBS estimate.

GDP growth will be fully led by net exports in Q2.

Positive foreign trade trends, initiated in Q4 2012, continued through H1. Net exports rose 2.6% s-a in Q2, adding 0.6 pp to GDP. In contrast to the previous quarter, domestic demand fell by 0.5% s-a and gave -0.6 pp to aggregate demand.

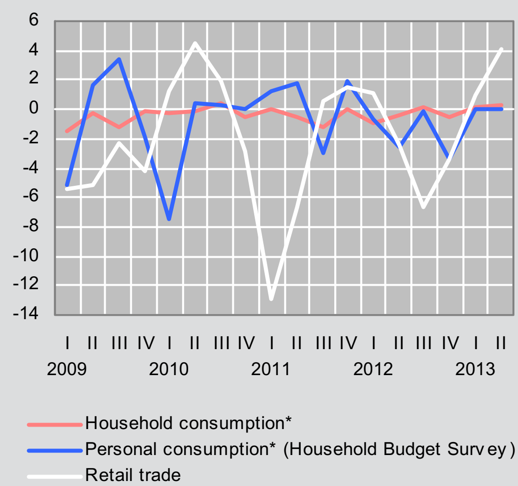
Y-o-y growth in aggregate demand is estimated to have continued, reaching 0.7% in Q2. A 4.0% y-o-y fall in domestic demand (-5.0 pp contribution to aggregate demand) was fully compensated for by a 22.3% increase in net exports (5.7 pp). The vigorous growth in net exports was fuelled by the continued expansion in the automobile industry. Exports of pharmaceutical products and electrical equipment also increased.

According to our estimates, positive trends from H1 will continue into H2 2013, and growth in aggregate demand will equal around 2.0% at the annual level. This growth will be led mainly by rising net exports (2.4 pp). However, fiscal consolidation measures, envisaged by the new budget revision, will drag down private and government consumption, producing a negative contribution to aggregate demand (-0.6 pp and -0.5 pp respectively).

Domestic demand

Falling private investment exerted the strongest impact on the reduction in quarterly domestic demand. In y-o-y terms, all domestic demand components continued down.

Chart IV.3.2 **Household consumption**
(s-a rates, in %)



Sources: SORS and NBS calculation.
* NBS estimates for Q2 2013.

Q2 saw a significant increase in retail trade.

Though a y-o-y fall in **private consumption** is smaller than in Q1, it is estimated to have continued to 0.8% in Q2 (contribution of -0.6 pp to aggregate demand). The recovery of private consumption, declining y-o-y for nine consecutive quarters, is made impossible by the high unemployment rate and the cap on public sector wage growth.

In quarterly terms, private consumption rose 0.3% s-a, as shown by a 4.1% s-a increase in retail trade volumes.

On the other hand, the majority of sources of consumption show negative tendencies. Despite a higher inflow of remittances in Q2, wages and pensions, as the main source of private consumption, recorded a real decline.

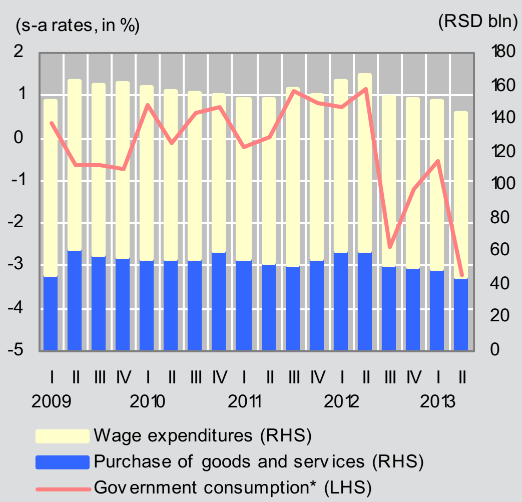
Private investment is estimated to have declined by 5.7% y-o-y (-1.4 pp contribution to GDP) or by 0.6% s-a in quarterly terms (-0.2 pp). A drop in gross value added in construction and the physical volume of production of construction material suggests a downturn in construction activity. Also, the contracted investment volume is evidenced by lower imports of equipment, which is partly due to the completion of the investment cycle in automobile and oil industries. Negative investment tendencies can also be put down to the repayment of corporate external debt.

Table IV.3.1 **Investment indicators**

	2012			2013	
	Q2	Q3	Q4	Q1	Q2
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Construction	-3.2	-8.4	-11.4	-3.0	-3.2*
Industrial production of capital goods (physical volume)	1.9	4.5	-1.2	29.2	4.9
Exports of capital goods**	14.2	-1.5	0.2	6.9	-14.5
Imports of capital goods**	0.5	-2.7	-10.6	3.0	-6.8
Stocks of capital goods	-9.9	1.6	3.6	-1.0	5.3
Industrial production of intermediate goods (physical volume)	3.2	-6.9	-1.1	-0.6	1.5
Exports of intermediate goods**	3.5	-3.1	1.4	11.6	1.9
Imports of intermediate goods**	-0.1	-5.2	2.8	2.7	-6.3
Stocks of intermediate goods	4.1	-3.8	2.8	4.8	2.7
Industrial production of construction materials (physical volume)	3.9	-3.2	-1.4	-5.3	-7.3
Inventories of construction materials	-3.5	1.2	0.7	-4.7	1.0
Government investment***	-31.2	-2.9	4.4	-22.4	-2.5

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

Chart IV.3.3 **Government consumption** (in real terms)



Sources: Ministry of Finance and Economy and NBS calculation.
* NBS estimate for Q2 2013.

Government final consumption recorded a real drop in the fourth consecutive quarter.

Government consumption fell by 3.2% s-a (contribution: -0.6 pp), as shown by the real cut in the public sector wage bill, as a consequence of the 2.0% limit on nominal wage growth in April. Together with the high base caused by the pre-election fiscal expansion in H1 2012, the quarterly decline in government consumption drove down its y-o-y figure by as much as 11.3% in Q2 (contribution -2.4 pp).

As signalled by consolidated capital expenditure, **government investment** fell by 2.5% s-a in Q2 (contribution 0.1 pp). In y-o-y terms, the decline in this component slowed from 50.0% to the still high 24.3% (contribution -0.6 pp).

Net external demand

In Q2, external demand again provided a positive contribution to aggregate demand, thanks mainly to the continuing expansion of the manufacturing industry's export sectors.

Net external demand is estimated to have increased 2.6% s-a in Q2, reflecting a faster real growth in exports (6.7%) relative to imports (3.4%). As y-o-y exports rose by as much as 18.0% and imports by 3.1%, net exports stepped up to 22.3% y-o-y.

Euro-denominated commodity exports, as an indicator of movements in total exports, increased by 3.9% s-a. Similarly to the previous quarter, the greatest contributor to this increase was the automobile industry (28.6%). In this quarter, however, positive trends were also observed in the exports of pharmaceuticals (16.0%), other machinery (11.7%) and electrical equipment (5.1%). The start of production in the Smederevo Steel Plant helped increase the exports of base metals.

On the other hand, negative export trends in agriculture persisted due to diminished stocks on account of low yields last year and dampened export demand caused by aflatoxin-related problems.

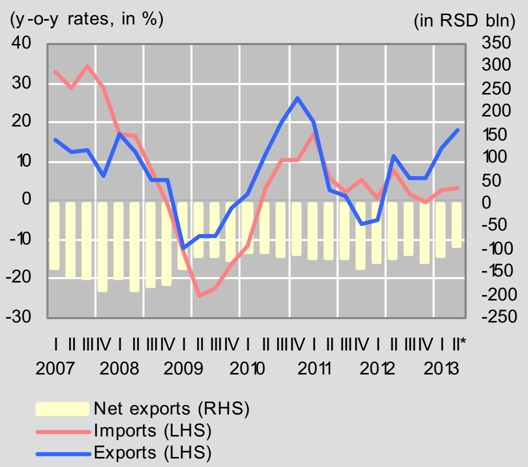
Euro-denominated commodity imports grew 1.4% s-a relative to Q1. The strongest growth was recorded for imports of intermediate goods (5.0%), while imports of equipment and consumer goods contracted by 5.0% and 0.9% s-a, respectively. In terms of economic destination, a q-o-q rise was recorded for imports of energy and capital goods and a fall in imports for intermediate goods.

Positive export trends since the start of the year resulted in an improvement in the indicator of the balance of payments position. At end-Q2, exports were 35.4% higher and imports 12.3% lower than pre-crisis[18]. At the same time, the twelve-month export to import ratio hit the record 67.1%.

The indicator of external demand for Serbian exports[19] picked up in Q2, but remained below its long-term average. Nonetheless, the upward trend this indicator has been showing since Q4 2012 suggests a rise in export demand which can reasonably be expected to step up only once a durable recovery of the euro area economy takes hold.

After falling by 5.1% in April, the price of Ural oil stabilised until the end of Q2 within the range of USD 100–105 per barrel. Slight increases were recorded from time to time in response to improved indicators of economic activity in advanced countries and financial market uncertainties over the continuation of the Fed's accommodative monetary policy stance. When the Fed announced in the second half of June that policy accommodation would be maintained until a durable economic recovery takes hold, uncertainties in the international money market subsided and oil prices headed down.

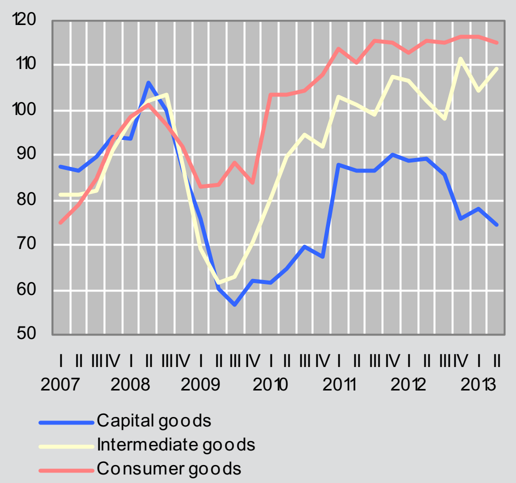
Chart IV.3.4 **Exports and imports of goods and services**
(in constant prices 2010)



Sources: SORS and NBS calculation.
* NBS estimate.

Exports in constant prices recorded much faster growth than imports in Q2.

Chart IV.3.5 **Imports by key components**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Imports of intermediate goods increased, in contrast to imports of equipment and consumer goods which declined in Q2.

[18] H1 2008.

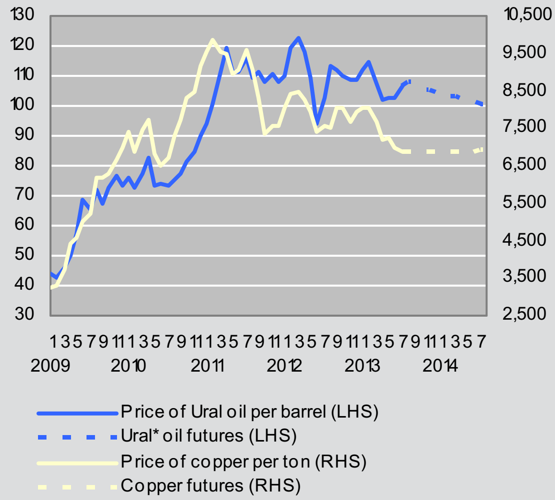
[19] Leading indicator of external demand for Serbian exports was construed based on movements in the European Sentiment Indicator (ESI). It includes 20 of Serbia's most important foreign trade partners – their shares in Serbian exports are used as weights.

In July, oil prices rose by 4.5% as a result of political instability in Egypt and improved indicators of economic activity in the euro area and the United States.

Copper price experienced a sharp fall in Q2 in terms of both quarterly averages and end-of-period figures (around 10.0%). The fall reflects China's lower import demand because of weaker economic growth indicators, as well as Chile's increased copper output. In late June, the fall was also underpinned by the weakening of the dollar which ensued after the Fed said it would maintain the degree of monetary policy accommodation.

Global food prices maintained their average level recorded in Q1. The strongest upward pressure came from the prices of milk and dairy products which jumped by around 15.0% in April. Other components of the global food price index were on the decline, the sharpest experienced, as in Q1, by cereals and sugar. The decline in cereal prices is attributable most to good weather conditions worldwide and expectations of a bumper crop compared to last year's production. The cereals being a key input in the production of animal feed, their falling prices spilled over to the international prices of meat.

Chart IV.3.7 **Oil and copper price movements**
(average monthly prices, in USD)

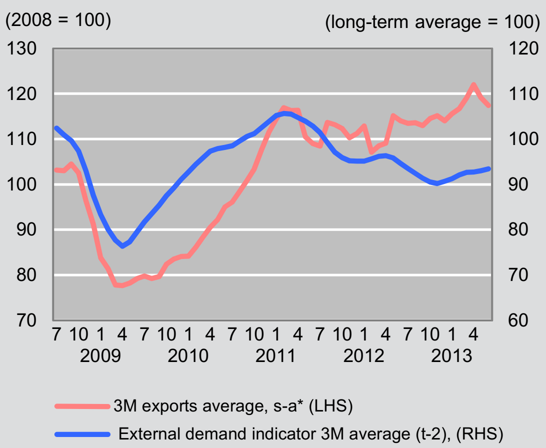


Sources: Bloomberg and NBS calculation.

* Price of oil futures for Ural oil was calculated based on historical price differences between Brent and Ural oil.

Global oil prices were relatively stable in Q2, while copper prices declined.

Chart IV.3.6 **External demand and Serbian exports**

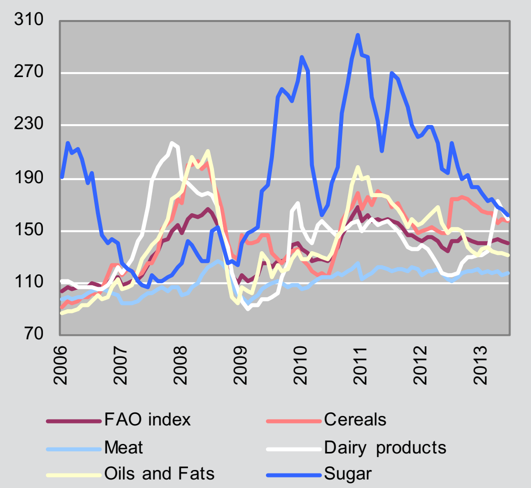


Sources: European Commission, SORS and NBS.

* Excluding automobile industry.

Growing exports in Q2 were consistent with movements in Serbia's external demand indicators.

Chart IV.3.8 **World food price index**
(in real terms, 2002 - 2004 = 100)



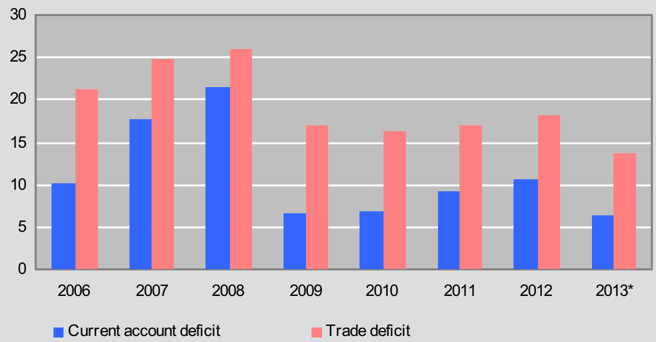
Sources: FAO, UN.

World food prices stagnated on average in Q2 relative to Q1.

Text box 3: Reduction in the current account deficit in 2013

After more than a triple reduction in 2009 and 2010 relative to the pre-crisis period (2008), the current account deficit has widened over the last two years, reaching 10.5% of GDP in 2012. The increase was due mainly to the investment cycle in automobile and oil industries, which entailed higher imports of equipment and intermediate goods, and to high pre-election fiscal spending in H1 2012. According to the NBS projection, activation of these investments and fiscal consolidation should bring down the current account deficit to below 7.0% of GDP in 2013, which is closer to a sustainable level.

Chart O.3.1 **Current account and trade deficits**
(in % of GDP)



* NBS projection.

In contrast to the narrowing of the deficit in 2009 and 2010, the expected improvement this year will be backed by improvements in the trade balance spurred by an increase in exports, and not by a reduction in imports. This is corroborated by trends in place since early 2013. In the first six months of 2013, the current account deficit (EUR 890.7 mln) was by 53.5% lower y-o-y, mainly on account of a considerable increase in exports relative to imports (20.2% vs. 1.9% y-o-y). A rise in exports was the most evident in the automobile industry (around 425.0% y-o-y), primarily owing to 'Fiat Serbia', but also to producers of car components. Exports stepped up in other important export sectors as well (the chemical industry, production of rubber and plastic products, production of electrical equipment). More significant exports of the oil industry are expected as of H2 this year. Low imports in the same period are due to the completion of the above investment cycles and low domestic demand. For instance, within petroleum products, the imports of gas oils[1] fell by more than 50.0% y-o-y in H1 (around EUR 145.0 mln) and equipment imports by 5.0% y-o-y.

Positive trends regarding a reduction in external disequilibrium are also confirmed by exports which exceeded the pre-crisis level by 36.4% in the first six months, while imports fell 9.8% below this level[2]. At the same time, the 12-month coverage of imports by exports hit record 67.1% in June. Provided exports and imports stay at Q2 levels until end-2013, all other things being equal, the current account deficit could fall below 6.0% of GDP this year. Though lower in 2013 than last year because of negative effects of the last year's drought on exports of agricultural products in H1 (notably of corn[3]), these exports will increase in H2.

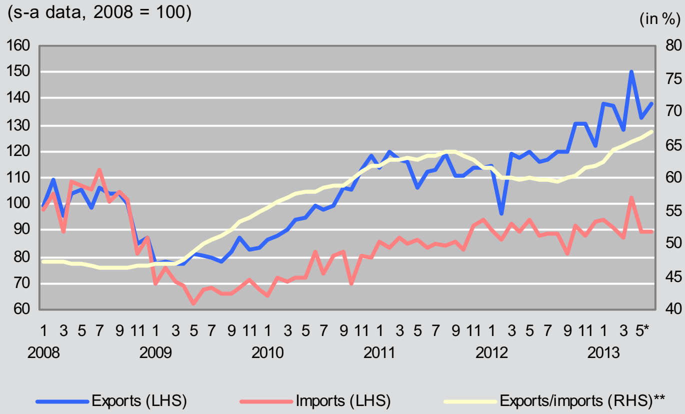
[1] Gas oils include, inter alia, Euro 5 standard derivatives, which the Oil Industry of Serbia began to produce last year.

[2] Average exports/imports in H1 2008.

[3] In the first five months of this year, corn exports were lower by around EUR 200.0 mln, or around 11 times y-o-y.

Chart O.3.2 **Commodity exchange**

(s-a data, 2008 = 100)



* Exports declined in May as Easter (two non-working days) was celebrated in May, instead of April as usual.

** 12-m moving averages.

Source: NBS.

The current account deficit equalled 5.7% of GDP in H1. The improvements were due to favourable trade movements, lower interest outflows (17.8%) and higher remittances inflow (22.8%) compared to the same period last year.

At the annual level, the current account deficit will fall to around EUR 2.1 bln and the trade deficit around EUR 4.5 bln, which is a reduction of 33.4% and 17.0% respectively relative to last year. In addition, the physical volume of exports is likely to accelerate to 11.5%, and that of imports to slow to 1.8%.[4] Interest outflow will amount to around EUR 950.0 mln this year (a 15.9% increase from 2012), and current transfers inflow to around EUR 3.1 bln (a 3.5% increase).

A reduction in the current account deficit is expected in the coming years as well, but at a more gradual pace. In addition to the expectedly higher exports of automobile and oil industries, and exports of agricultural products, a further increase in exports will be aided by the recovery in the euro area, i.e. in our most important foreign trade partners.

[4] Last year's physical volume of exports and imports rose by 4.2% and 2.5% respectively.

4. Economic activity

Economic recovery, set in train in late 2012, continued in Q2, but the negative output gap deepened nonetheless.

According to the Statistical Office flash estimate, the economy grew 0.7% y-o-y in Q2. The recovery trend, initiated in Q1, continued, though at a slower pace.

GDP stagnated in q-o-q terms and fell 0.3% s-a measured by NAVA. Though still below the pre-crisis figure[20] – 1.7% measured by GDP and 2.0% measured by NAVA, economic activity has accelerated since early 2013 towards the pre-crisis level.

The physical volume of industrial production rose 1.0% s-a in Q2 and was fully determined by positive trends in manufacturing, which rose 2.8% s-a and gave a 1.8 pp contribution to total industry. Contrary to this, the sectors of mining and electricity, gas and steam supply posted a quarterly decline (3.5% and 3.9% s-a respectively) and added negative 0.2 pp and 0.6 pp to total industry respectively.

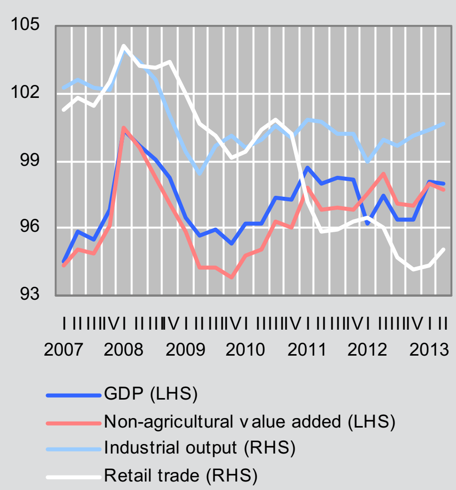
Within manufacturing, the main boost to the physical volume came from the production of coke and petroleum products (1.3 pp). Positive trends were noted in the production of chemical products, motor vehicles and base metals, as a result of launched production in the Smederevo steel plant in Q2. The strongest negative contribution was provided by the production of pharmaceutical products (-0.2 pp).

Quarterly GDP growth will be negatively affected (0.1 pp) by the downturn in construction, which shrank 3.2% s-a in Q2, as indicated by the reduced physical volume of non-metal minerals production. Following three negative quarters, retail trade picked up in the year to date, particularly in Q2 (4.1% s-a).

It is estimated that y-o-y GDP growth in Q2 was led by agricultural recovery (0.9 pp) and rising industrial production (0.3 pp), while construction (-0.9 pp) and trade (-0.6 pp) exerted a negative impact.

The physical volume of industrial production rose 2.9% y-o-y in all sectors of the industry. The main impetus was provided by manufacturing (2.3 pp) whose physical volume was up 3.0%. Other contributing sectors included

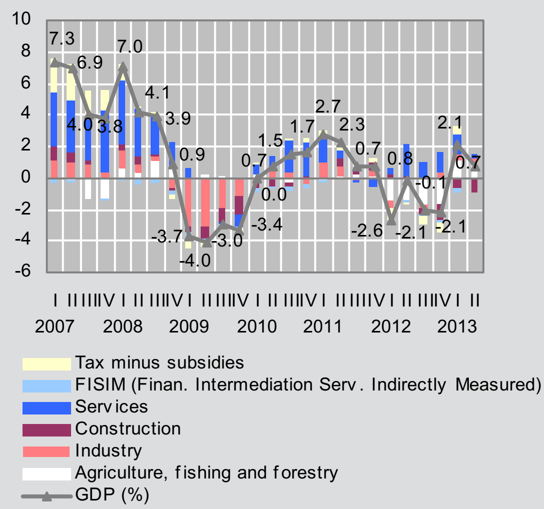
Chart IV.4.1 **Economic activity indicators**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Economic activity stagnated in Q2, while the recovery of retail trade continued.

Chart IV.4.2 **Contribution to y-o-y GDP growth rate – production side**
(in pp)



Sources: SORS and NBS calculation.

In Q2, a y-o-y rise in GDP was still led by growth in agricultural and industrial production.

[20] H1 2008.

mining (0.1 pp) and electricity, gas and steam supply (0.5 pp) which rose 1.7% and 3.2% y-o-y in Q2 respectively.

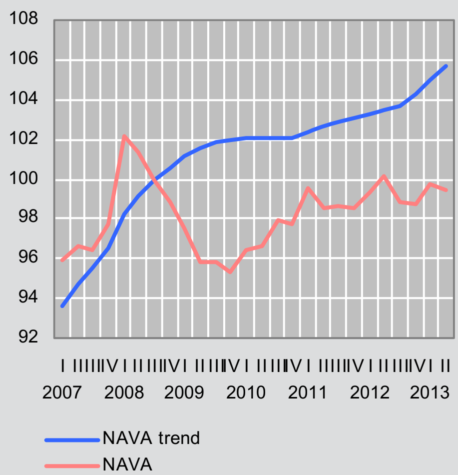
Within manufacturing, a vigorous y-o-y rise in the physical volume of production continued in the sectors of motor vehicles and trailers (220.4%) and coke and petroleum products (37.6%), with the contribution of 2.6 pp and 2.5 pp respectively.

According to our estimate, 2013 economic growth will reach around 2.0%, mainly owing to the recovery of agricultural (1.0 pp) and industrial (0.7 pp) production.

After the exceptionally bad last year's agricultural season, this year is likely to witness robust growth (around 14%). Favourable weather conditions will prop up the yields of most crops, helping reduce costs and revive cattle breeding production.[21]

As estimated by the NBS, all industrial sectors will rebound in 2013. The main contribution will come from manufacturing (0.5 pp), including mining and electricity, gas and steam supply (0.1 pp each). Within manufacturing, the strongest contributors will be the production of motor vehicles (1.0 pp) and petroleum products (0.5 pp). A weaker than expected recovery in the euro area will reflect in slow growth or a downturn in other sectors of manufacturing.

Chart IV.4.3 **Output gap**
(T3 2008 = 100)



Source: NBS calculation.

The deepening of the negative production gap in Q2 was due to rising production potentials of the economy.

The NAVA trend, used for estimation of the economy's production potential[22], increased in Q4 2012, on account of activation of new production capacities in automobile and oil industries. In contrast, economic activity measured by NAVA stagnated in Q2 and led to the deepening of the negative production gap. This indicates that aggregate demand will continue to generate disinflationary effects in the medium run.

[21] See Text box 5: Effects of the new agricutural season, p. 44.

[22] The NAVA trend estimated by Kalman filter is used for approximation of potential GDP.

Text box 4: Positive effects of automobile industry expansion

Positive effects of Fiat's production in Serbia on GDP growth, recorded in Q4 2012, continued through H1 2013. Around 30,000 cars were produced in 2012, with 110,000–140,000 planned this year. As most of the production was exported, the automobile industry has given a significant contribution to narrowing of the country's current account deficit. This, however, increases the domestic economy's exposure to the developments in the international environment.

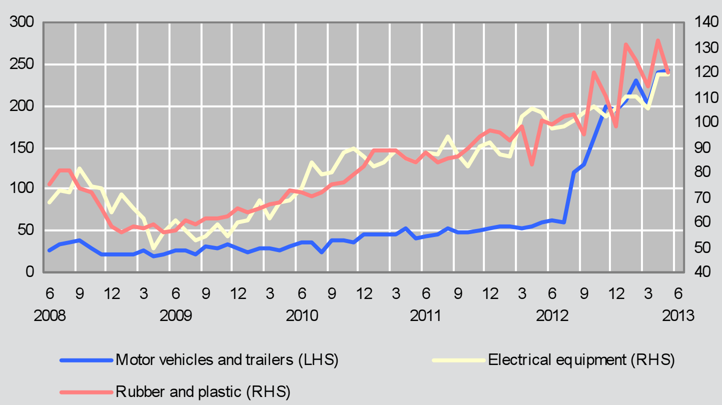
As the major part of production is intended for exports, conditions in the target markets – those of the EU and USA, will influence demand and thus crucially determine the level of production. The situation in the EU market is not encouraging. After two years of sluggish growth, 2012 saw a 5.5% drop in car sales. In contrast, the US car market, to which Fiat's exports were launched in Q2, has recorded recovery over the past several years (sales grew 13.4% in 2012). The first positive assessments of the new FIAT 500L model in the USA may instigate demand and boost deliveries from Serbia.[1]

Broken down by country, most cars were exported in H1 to the Italian market which recorded an 8.9% drop in car sales in the period observed. It should, however, be underscored that a large number of cars exported to Italy are intended for re-export to euro area markets, which implies smaller direct exposure of the domestic car industry to the Italian market. Other important export markets in H1 were Germany, France and Great Britain. A positive effect on future exports may be expected from conclusion of the agreement with the Russian Federation on duty-free exports of motor vehicles.

In addition to the production in Fiat and cooperative companies[2], significant growth is recorded in other companies operating in the automobile industry, which independently export their entire production to foreign markets. According to data of the Business Registers Agency, the number of employees in these companies rose by around 3,000 in 2012, reaching close to 14,000 by the year-end. Also, their operating revenue rose by over 50% compared to 2011. As some of these companies are classified not only under the production of motor vehicles, but also in other areas of manufacturing, a rise in exports of electrical equipment, rubber and plastic has also been evident since the start of 2013 (Chart O.4.1).

Despite the Fiat's planned output of at least 110,000 cars in 2013, we assumed a more conservative figure of 100,000 cars and a 38% share of the domestic component. In this case, the estimated contribution of the automobile industry to GDP growth would be 1.0 pp in 2013. The recovery in the euro area in 2014 could give a further boost to Fiat's production and exports.

Chart O.4.1 **Exports of selected branches of manufacturing**
(s-a data, 2012 = 100)



Sources: SORS and NBS calculation.

[1] On 15 July, the USA Today published positive reviews after new FIAT 500L was tested.

[2] Johnson Controls, Magnetti Marelli, Sigit and PMC Automotive.

5. Labour market developments

Wages

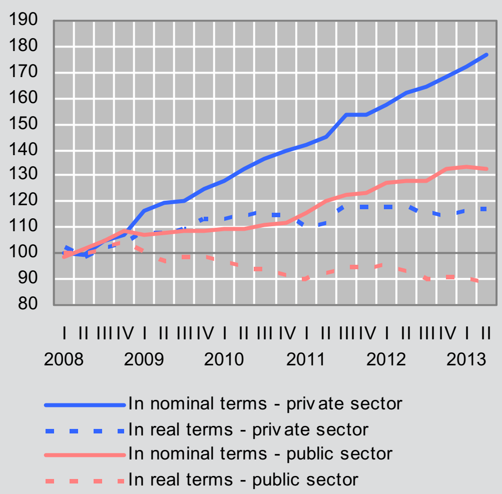
Private sector net wages registered real growth in Q2, while those in the public sector continue down. Lowering of industrial unit labour costs in manufacturing persists in s-a terms.

Nominal growth of average net wages in Q2 (1.4% s-a) was insufficient to bring about an increase in real terms (-0.5% s-a), despite slackened inflation. Real wages in the private sector recorded a quarterly increase, while those in the public sector declined.

The highest quarterly wage increase in real terms was noted in the trade and information and communications sectors. Unlike in Q1, all industrial sectors witnessed a rise in real wages. Average real wages in agriculture decreased for the fifth consecutive quarter, which can be attributed to last year's poor agricultural season. Real wages in the construction sector are also retreating.

Y-o-y, nominal net wages continued to grow in Q2 (6.2%), while their drop is accelerating in real terms (5.7%). Despite a mild 2.0% rise in April, public sector wages recorded a real y-o-y decrease in Q2 (4.7%). On the other hand, real y-o-y drop in private sector wages is slowing down in the current quarter (0.8%).

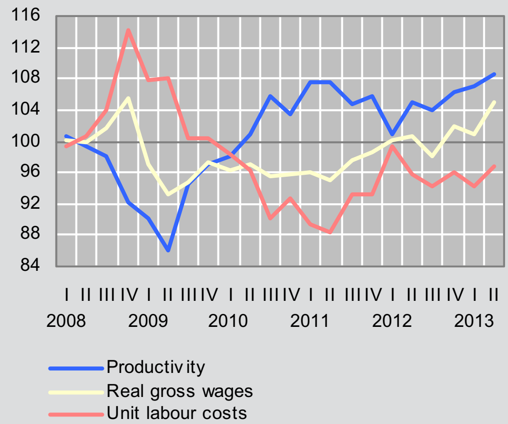
Chart IV.5.1 **Average net wages**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

In Q2, wages increased in the private sector and declined in the public sector.

Chart IV.5.2 **Movements in productivity, real gross wages and unit labour costs in industry**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

Faster growth in gross real wages than productivity resulted in a rise in unit labour costs in industry in Q2.

The average net wage paid out in Serbia in Q2 rose from a quarter earlier and equalled RSD 44,249.

Real wage bill marked a 1.6% s-a drop in Q2, mostly in response to a reduction in employment figures. This indicates that adjustment in the labour market is still primarily a result of reduced employment.

Industrial unit labour costs rose by 2.6% s-a in Q2 on account of gross real wages growing faster than productivity. Nevertheless, in the manufacturing sector, which produces most of the tradable goods, productivity outpaced wage growth in Q2, leading to further reduction in unit labour costs (-1.1% s-a), that has already been observed for three straight quarters.

Employment

Compared to last year, the results of the most recent Labour Force Survey are more favourable than in April, but less favourable than the results of the October survey. Hence we should pause before drawing any conclusions about labour market indicators, if they are to be reliable.

Labour market indicators showed signs of mild recovery relative to the previous year. In April 2013, unemployment declined by 1.4 pp compared to April 2012 (from 25.5% to 24.1%). At the same time, employment pushed up slightly by 2.0 pp (from 34.3% to

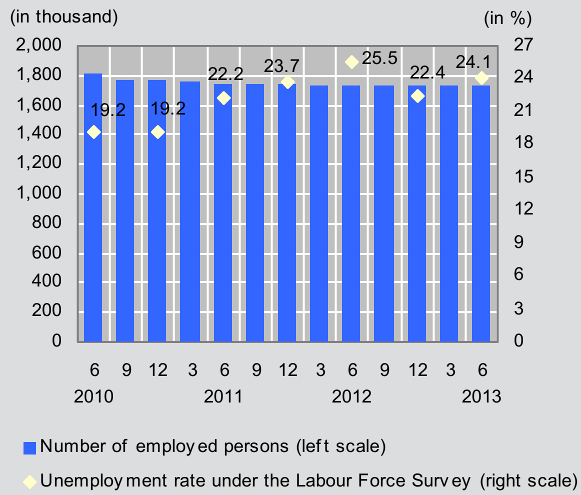
36.3%), and the activity rate by 1.8 pp (from 46.1% to 47.9%). Still, despite obvious improvement, these indicators remain among the least favourable in Europe.

On the other hand, comparing the results of the latest survey with those from October 2012, a continuation is observed in terms of the negative tendencies in the labour market which first emerged with the outbreak of the crisis in 2008. Hence, we should put off making any conclusions about the situation in the labour market, if they are to be reliable.

An improvement of labour market indicators from a year earlier can be related to economic recovery that began in Q4 2012. The recovery was led by the expansion in manufacturing export sectors (most notably the automobile and oil industries), therefore employment for the entire manufacturing industry rose by as many as 24,956 persons over the past year. High employment growth in this period was also recorded in agriculture as well as in information and communications, while the largest drop was noted for the construction sector.

The rise in employment and activity rates led to a decline in unemployment relative to April 2012. During the past year, unemployment fell by 28,114 persons, with a portion of the jobless shifting to the category of informally employed – in April 2013, the informal employment rate rose by 1.2 pp, to 18.2%. Yet, unemployment remains a serious problem in the domestic labour market. Data about unemployment among the young (15–24 years) are particularly worrying – although it has declined, the figure still stands at around 50%. The share of the long-term unemployed in total unemployment is large (above 75%). If these indicators continue high for an extended period, an erosion of "human" capital could occur, putting a strain on long-term growth potential.

Chart IV.5.3 **Employment figures and unemployment rate**



Source: SORS.

The unemployment rate declined over the past year.

Observed by employment category, the number of self-employed and employed rose over the past year, while the number of contributing family workers decreased. A reduction in the number of full-time employed (43,590) was offset by an increase in part-time employment (49,330). This suggests that employers are still uncertain as to which way the economy will be going in future.

Unlike the positive trends recorded by the Labour Force Survey, the Statistical Office's RAD research, monitoring the number of formally employed[23], registered a fall of 1,612 persons in Q2. The decline was for the major part attributable to lower employment numbers in the public sector. Private sector also saw employment cuts. In y-o-y terms, growth was recorded in the public sector driven primarily by the increase in the number of employees working in administrative services. Conversely, private sector employment in Q2 was lower compared to the previous year, for the most part due to a reduction in the number of entrepreneurs and their employees.

According to the National Employment Service, from April 2012 to April 2013, the number of jobless persons actively seeking employment rose by 17,623, which is inconsistent with the results of the Labour Force Survey. However, an analysis of the last quarter showed that the number of unemployed declined by 15,990. Consequently, the number of unemployment beneficiaries in Q2 also went down by 7,470, coming at 65,761 in June.

6. International environment

The euro area economy is estimated to have contracted in Q2 and is expected to enter gradual recovery in the second half of the year. Unlike the Fed, the ECB has made no hints yet at reducing the degree of monetary policy accommodation.

[23] Formal employment means labour under a formal employment contract with the employer (legal entities and private entrepreneurs). Employment figure does not include persons working under a Special Services Contract or a Contract on Temporary and Interim Services.

Recession in the euro area continued into Q1, the sixth quarter in a row, but the fall (0.3%) was less severe than in Q4 2012. PMI and Eurocoin readings for Q2 signal another quarterly fall in the bloc's GDP. June unemployment stayed at the all-time high of 12.1%.

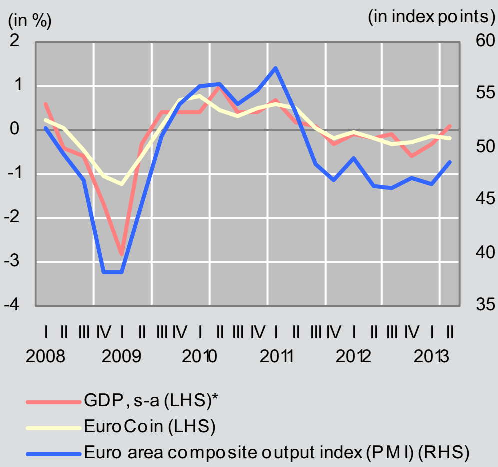
This year's **growth projection for the euro area** has again been revised down – the Consensus Forecast and the IMF now project a fall of 0.6%. The recovery should start in H2, gain ground in 2014 and result in GDP growth of 0.8%. The main propellent of growth should be the recovery of external demand from the United States and emerging markets. The easing of tensions over the sovereign debt crisis should help improve the investment climate, which is why private investments are expected, after quite a while, to aid the healing of the economy. Fiscal consolidation measures in some of the currency union members and high unemployment, on the other hand, will continue to dampen economic growth, though less so than in the prior period.

It is expected that Germany, which has been recording modest growth since the beginning of the year (0.1% s-a in Q1), will lead the euro area recovery. Germany's PMI Composite increased from May to 50.4[24] points in June, indicating that economic activity stayed in the growth zone in Q2 as well. Italy's economy is still in recession due to the collapse of domestic demand, but a mild rise in its exports and PMI Manufacturing suggest that the next year could be brighter. The slowing pace of contraction in peripheral economies could be a sign that the recession is bottoming out.

Even though **euro area inflation** rose in June to 1.6% y-o-y, inflationary pressures remained low due to the fall in primary commodity prices and weak aggregate demand. This created the scope for the ECB to lower the main refinancing rate by 0.25 pp in May, to the historical low of 0.5%. In a bid to assure investors that the reduction of monetary accommodation is not on the table, after the policymakers' meeting in July the ECB made an unconventional move in its communication with the public and announced that the main rate would stay low for an extended period of time.

As the short-term **growth prospects for Central and East Europe** deteriorated slightly in Q2, the Consensus Forecast scaled its projection down to 2.3% and the IMF to 2.2%. The deterioration reflects high external debt and dependence on economic movements in the euro area –

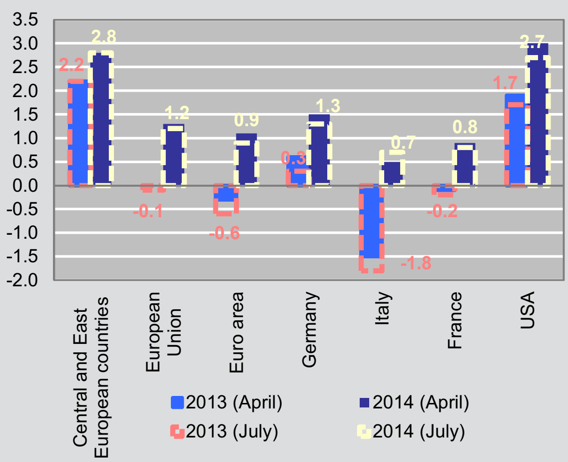
Chart IV.6.1 **Movements in GDP and economic activity indicators of the euro area**
(quarterly rates)



Sources: Eurostat, Markit Group and Banca d'Italia.
* Consensus Forecast estimate for Q2 2013.

Indicators show economic downturn in the euro area in Q2, while gradual recovery is expected as of H2.

Chart IV.6.2 **Revisions of real GDP growth forecasts for 2013 and 2014 by the IMF***
(%)



Sources: IMF WEO (April 2013) and IMF WEO Update (July 2013).
* Revision compared to April WEO.

In July, the IMF adjusted downward its growth forecasts for the majority of advanced economies.

[24] The value of this index above 50 points indicates expansion and below 50 points contraction in economic activity.

their main export market. The economies of the Czech Republic, Croatia and Slovenia, which contracted in 2012, are set to contract further in 2013. Hungary, by contrast, recorded a 0.7% s-a growth in Q1 and is, by all estimates, likely to growth 0.3% in 2013 as a whole.

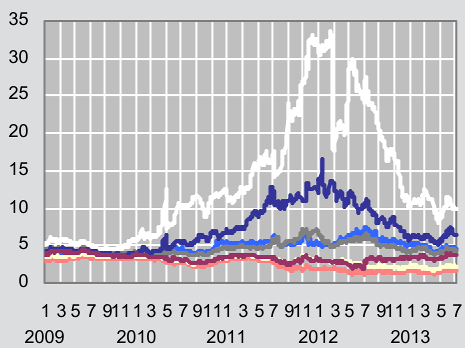
Reflecting dampened aggregate demand and lower prices of raw materials, inflationary pressures continued to recede in Q2 in practically all **Central and East European countries**. The sharpest disinflation was registered in Poland, where y-o-y inflation fell to 0.2% in June. The central banks of Poland, Hungary and Turkey responded to the weakening of inflationary pressures by further monetary policy easing. July saw the start of easing in Romania, while the central banks of Poland and Hungary revised their policy rates further down.

After rising marginally in Q4 2012 (0.1% s-a), the **US economy stepped up** in Q1 (to 0.3% s-a), helped by the buoyant consumer spending and higher exports. According to preliminary estimates, growth continued into Q2 (0.4% s-a). And yet, in 2013 as a whole, growth is expected to slow down relative to 2012 (to 1.7%), as a consequence of the effects of fiscal austerity measures and worsening global growth prospects. **The unemployment rate edged up** by 0.1 pp to 7.6% in May and stayed at the same level through June. Non-farm payroll employment in June (195,000), however, signalled positive trends in the US labour market. Already in July, the unemployment rate fell to 7.4%. Though its y-o-y rate rose to 1.8% in June (0.4 pp on May), **US inflation remains under control** and below the level warranting monetary policy action.

The Fed raised its growth projection for 2014 in June and confirmed the hints from May by saying that it could start reducing the **QE programme**[25] in H2 2013 and wind it down altogether by mid-2014 if the economic growth becomes firm enough and unemployment falls below 7%. This shook the financial markets globally – stock exchange indices plunged, sovereign bond yields soared and nearly all emerging market currencies depreciated. At the same time, the IMF revised its growth projection for the US economy in 2014 by 0.2 pp, down to 2.7%.

The **exchange rate of the euro against the dollar** exhibited high volatility in the course of Q2. The greenback strengthened in May following a cut in the ECB's rate, only to tumble against the euro in the first half of June when the ECB President indicated that further

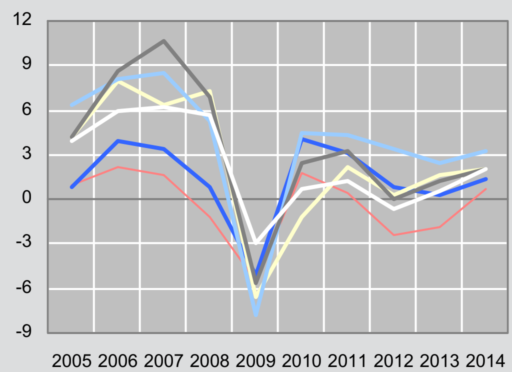
Chart IV.6.3 **Yield on 10-year bonds of euro area members**
(daily data, in %)



Source: Bloomberg.

The Fed's hint at downsizing of the quantitative easing programme impacted on a mild increase in sovereign yields across the euro area in June.

Chart IV.6.4 **GDP movements of Serbia's key foreign trade partners**
(y-o-y, in %)



Source: IMF WEO (latest available data).

The growth forecast for Serbia's main foreign trade partners was adjusted downward.

[25] Monthly purchase of mortgage-backed and government bonds which currently stands at USD 85 bln.

monetary easing was on the back burner. After that, the dollar bounced back, propped up by the Fed’s hint at QE tapering. However, with the release of favourable macroeconomic indicators for the euro area as of mid-July, the dollar entered a slide against the euro, which continued until the end of the month.

Gold marked heavy losses in Q2. At the end of the period, it fell by more than 25% amid globally subsiding inflationary pressures and weaker demand for gold which is traditionally used as a hedge against inflation.

The **credit ratings** of some regional peers were revised in the course of Q2. Standard&Poor's lowered Macedonia’s rating by one notch, from BB to BB–, and Fitch lowered Slovenia’s rating by one level too, from A– to BBB+. In both cases, the downgrades reflect deterioration of the fiscal outlook. At the same time, Fitch upgraded the credit rating for Greece, from CCC to B–, citing the country’s progress in cutting its budget deficit and the receding risk of its euro area exit.

V. Inflation projection

Y-o-y inflation is expected to fall back within the target tolerance band by October and stay within it thereafter. In addition to restrictive monetary policy measures taken in H2 2012 and H1 2013, the fall will be prompted by lower food production costs, weak aggregate demand and the effect of last year's high base. The risks to the projected inflation path are associated mainly with movements in agricultural commodity prices, and to a degree, with developments in the international environment and fiscal policy at home.

After contracting in 2012, the Serbian economy is expected to expand on the back of net exports by around 2.0% in 2013 and by around 2.5% in 2014.

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. This projection assumes an active monetary policy which aims 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

In Q2, y-o-y inflation moved within the band of short-term projection published in the May *Report*. Though its fall was interrupted in April, it returned to single digits in Q2, as projected in the previous Report. The still relatively high y-o-y inflation rate of 9.8% in June is for its major part attributable to the price increases in the period July-October 2012 (7.1 pp) and much less to those in the last eight months (2.5 pp).

Administered price growth (0.7%) was significantly lower than in Q1, and was driven by the prices of medicaments. Since the beginning of the year administered prices recorded relatively small growth (3.6%), reflecting, inter alia, the deferral of electricity price revision until the second half of the year.

While inflation expectations of households declined in Q2, expectations of the financial and corporate sectors remained broadly unchanged. According to the latest *Bloomberg* and *Ipsos* surveys, one year-ahead inflation expectations of the financial sector remain above the upper bound of the target tolerance band and measure 6.9% and 7.5%, respectively.

As most regional peers, the dinar suffered losses against the euro in Q2 (0.4%)[26]. It should be noted that the dinar strengthened during the first half of Q2 amid buoyant supply of foreign exchange resulting from non-residents' investment in government securities and increased foreign cash purchases from exchange offices, only to succumb to depreciation pressures from late May onwards. Depreciation pressures emerged as a consequence of global factors (Fed's hint at the QE programme reduction, which spurred a rise in risk premiums[27] across the region, Serbia included), but received an additional impetus from the negative assessments of the state of Serbia's public finance.

As a result of real appreciation of the dinar, which matched the appreciation trend[28], the real exchange rate gap remained closed in Q2, i.e. the import cost-push pressure on prices remained neutral[29].

Consolidated budget deficit in the first six months of the year (4.6% of GDP) turned out higher than planned due to the underperformance of public revenue. The recently adopted additional measures of fiscal consolidation included a budget revision, a cap on the growth in pensions and public sector wages through 2014 and a plan

[26] Average nominal depreciation during the period.

[27] Measured by EMBI.

[28] Real exchange rate trend is estimated by applying the Kalman filter.

[29] Net importers' marginal costs.

of implementation of a package of structural reforms. The revised budget envisages a central government deficit of 4.7% of GDP in 2013, which should result in a consolidated general government deficit of 5.2% of GDP.[30]

According to NBS estimates for Q2, GDP stagnated q-o-q and rose 0.7% y-o-y. On the expenditure side, net exports increased, while domestic demand plummeted. As in the previous two quarters, export growth was led by the automobile industry exports. On the production side, the largest positive contributions to GDP came from agricultural production and manufacturing industry.

Negative output gap[31] widened slightly in Q2, as a result of NAVA stagnation, on the one hand, and a rise in potential output (activation of new production capacities in the automobile and oil industries), on the other. The negative output gap indicates further demand-side disinflationary pressures in the medium run.

Recessionary pressures continue to sweep through the euro area. *PMI* and *Eurocoin* readings for Q2 signal another quarterly fall in the bloc's GDP. According to the June figures, euro area unemployment remained at the record 12.1%. After cutting the main refinancing rate to the historical low of 0.5%, the ECB announced it would keep the rate low for an extended period of time.

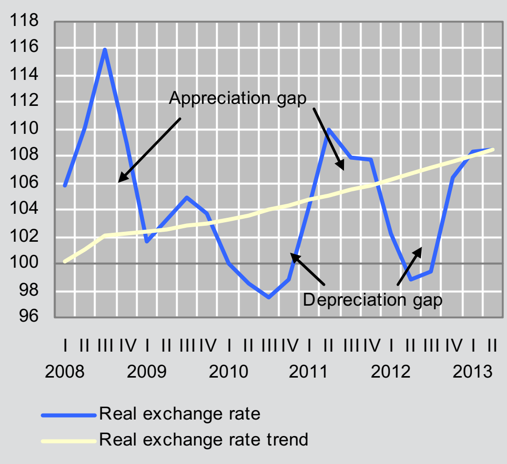
Projection assumptions

External assumptions

The assumption for the euro area's GDP growth in 2013 (-0.6%) has been revised down by 0.2 pp relative to the May projection. The euro area economy is expected to enter recovery in H2 2013, leading to a 0.8% growth in 2014. In the coming period, the recovery of external demand from the United States and emerging markets should be the main propellent of growth. Domestic demand, on the other hand, will continue to act as a damper, though less so than in the prior period. The dampening effect will stem from the high unemployment rate and fiscal consolidation in some of the currency union members.

Euro area inflation measured 1.6% y-o-y in June. Inflation expectations for 2013 and 2014 remain firmly anchored below 2.0%. According to Consensus Forecast,

Chart V.0.1 **Real exchange rate and its trend***
(base index, Q1 2010 = 100)



Source: NBS.

* The estimate is based on the assessment of the impact of the real exchange rate on inflation.

The real exchange rate gap remained closed in Q2.

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

	2013		2014	
External assumptions				
EU inflation (Q4 to Q4)	1.3%	(-0.3)	1.5%	(-0.2)
ECB policy rate (year-end)	0.5%	(-)	0.5%	(-)
Euro area GDP growth	-0.6%	(-0.2)	0.8%	(-0.1)
International prices of primary agricult. commodities (Q4 to Q4)*	-30.0%	(-8.0)	7.0%	(+3.5)
Ural oil price per barrel (year-end, USD)	106	(+6.0)	106	(+6.0)
Internal assumptions				
Administered prices (Dec to Dec)	9.8%	(+0.1)	9.0%	(+1.0)
Trends				
Appreciation trend of the real exchange rate (average)	1.8%	(-0.1)	2.0%	(-)
Real interest rate trend (average)	3.2%	(+0.6)	3.3%	(+0.8)

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

[30] See text box 1: Budget revision and new structural adjustment measures, p. 6.

[31] 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 the potential output.

[32] The assumption for the euro area's GDP growth in 2013 and 2014 is consistent with the latest *Consensus Forecast*.

the markets expect no further lowering of the ECB's main refinancing rate until the end of this year.

The movements of primary agricultural commodity prices internationally have a decisive impact on the movements of these prices locally. Continued fall in international prices of wheat and corn in Q2 induced a fall in their local counterparts. Current commodity futures signal a sharp fall in international prices of primary agricultural products through end-2013. The projection assumes that prices will record some growth in 2014 relative to this year.

The end-2013 price of oil is expected to be around USD 106.0 per barrel. Even though the current oil futures suggest a lower price by the end of 2014, the projection assumes it will stay at the level recorded in 2013.

Internal assumptions

The current medium-term inflation projection is based on the assumption that administered price growth in 2013 (9.8%) will be close to the one from 2012.

Broken down by quarter, most of the administered price growth will take place in Q3 (around 4.0%), chiefly on the back of the increase in electricity prices.

The projection envisages that administered prices will grow faster in 2014 than total CPI due to the gradual removal of price disparities. The administered price growth anticipated in 2014 is by 1.0 pp higher than in the May *Inflation Report*.

Text box 5: Effects of the new agricultural season

Last year's agricultural production was strongly affected by bad weather, which brought about lower yields and a rise in international and domestic prices of primary agricultural commodities. This year, however, the weather has been generally conducive to agricultural activities, which gives us grounds to expect opposite trends in terms of agricultural output and prices.

According to the latest estimates of the US Department of Agriculture, global wheat production should grow by 6.5% in 2013. Growth is expected even in countries that were badly drought-stricken last year and that are among the world's largest wheat exporters (EU, Russia and Ukraine). This should result in a good wheat supply until the next harvest and in lower prices. An increase in global production is also envisaged for corn (12.2%), thanks mainly to the recovery of production in the United States following last year's drought.

The prospects for the main crops in Serbia are also bright. The wheat harvest was completed in July and, according to preliminary estimates, the yields should hit the record level of around 2.5 mln tonnes, which is by over 30% more than last year (Table O.5.1). New corn crops, to be harvested in September, are in good condition at present. Provided the weather does not go into extreme over the next month, corn production should increase significantly relative to the previous year. Industrial crops (sunflower, sugar beet and soy beans) are also looking good and are expected to provide a positive contribution to the overall agricultural production. On the downside, the hot spell with no rainfall since mid-July could have a negative impact on corn and industrial crops which are now in a sensitive stage of development. Nonetheless, we think it is highly unlikely that last year's low yields will recur since the condition of the soil is now much better than a year earlier thanks to lesser exhaustion[1] and greater amounts of precipitation during the winter and spring months.

Table O.5.1 **Actual and projected yields and the production of the most important agricultural products**

	Average yields (tonne/hectare)		Actual production (1,000 tonnes)		Estimated annual growth (in %)
	2012	2013**	2012	2013**	2013/2012
Wheat	4.0	4,5*	1,911.0	2.508*	31.3*
Corn	2.8	4.8	3,533.0	5,731	62.2
Sunflower	2.2	2.3	366.0	437	20.4
Soybean	1.7	2.5	280.6	400	37.0
Sugar beet	35.9	48.1	2,328.3	3,000	10.5

* NBS projection.
** Estimate of the Ministry of Agriculture, Forestry and Water Management.
Sources: SORS, Ministry of Agriculture, Forestry and Water Management, NBS.

Based on the above, agricultural production in 2013 is estimated to grow around 14%, adding 1.0 pp to the recovery of economic activity. A higher production of corn and wheat will provide for their higher exports. Still, to ensure safe placement in foreign markets, preventive measures must be taken in the storage of the new corn crop so as to preclude the contamination seen last year.

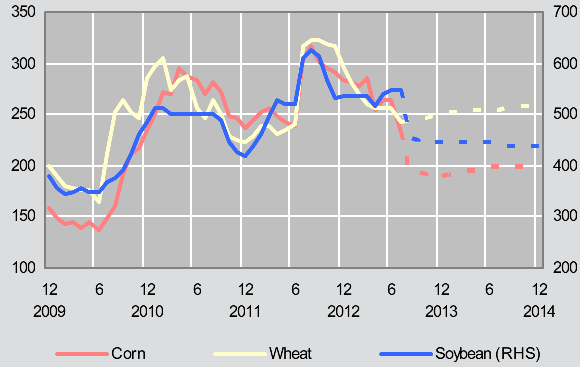
A large increase in exportable surplus of wheat and corn relative to the previous year will amplify the effect of the international prices of these commodities on their domestic counterparts. The price of domestic wheat plummeted in July by 27.0%, adjusting to the price prevailing in the neighbouring markets. Similar movement is expected for domestic corn

[1] Low yields in the previous agricultural season implied smaller exhaustion of the soil reserve of nutrients.

prices once the new crop arrives in October. The price of old corn crops lost 7.7% already in July, and thus inched closer to the price of wheat – used in part as a substitute in livestock feed. The first deal on the sale of new soy bean crops suggests that the new harvest in September could lower the price of soy beans by as much as 40% relative to 2012.

The falling prices of primary agricultural commodities will lead to lower costs in the production of processed food. At year level, these costs are estimated to go down by around 30% (Chart O.5.1). The extent to which the drop in production input prices will feed into lower prices for end-consumers will depend on the market conditions in food production and trade. According to our estimates, food prices will be the main disinflationary factor in the period ahead.

Chart O.5.1 **Prices of primary agricultural commodities and their futures**
(USD/t)



Source: *CBOT - Chicago Board of Trade.*

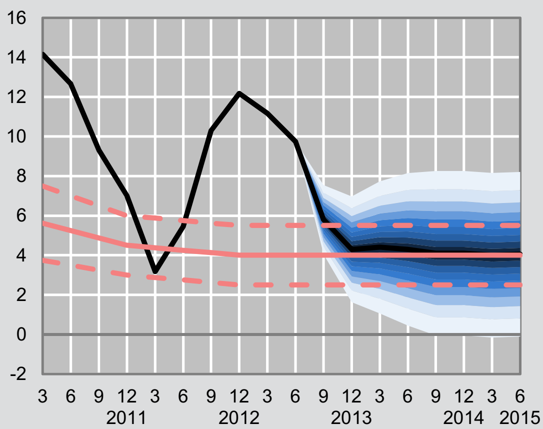
Inflation projection

Y-o-y inflation will continue down at a faster pace in Q3 and will fall back within the target tolerance band by October. After that, in Q4 and 2014, it should move within the target (4±1.5 pp).

The key disinflationary factor driving inflation towards the target tolerance band will be the lower cost-push pressure in food production. The factors working in the same direction include past monetary policy measures, low domestic demand and high last year's base (i.e. high monthly inflation rates in August–October 2012).

Lower costs in food production are expected primarily on account of a further fall in prices of primary agricultural commodities. It is quite certain already that this year's agricultural season will be significantly better than last year's both at home and worldwide.[33] International wheat prices continued to fall throughout Q2 and in early Q3, while the new (autumn) corn and soy bean crops are futures traded at 35.0% and 25.0% lower prices than in the same period last year. Taking into account high dependence of agricultural commodity prices at home on the movements of those abroad, and assuming there are no shocks, the cost of raw materials in the domestic food production should be significantly lower at least until the next agricultural season. Consistent with this, the rates of food inflation should also be on the downside in the period ahead.

Chart V.0.2 **Inflation projection**
(y-o-y, in %)



Source: NBS.

Y-o-y inflation is expected to return within the target tolerance band by October. Risks to the inflation projection are symmetrical.

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%. Outturns of inflation are also expected to lie somewhere within the entire fan chart 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%.

Another positive effect on food inflation, i.e. a direct disinflationary effect on CPI in Q3 will come from fruit and vegetable prices. These prices usually fall in Q3, but the fall could be even more pronounced this year because of the stable weather conditions since mid-June. For that reason and the decline in primary agricultural commodity prices, price growth in Q3 will be much lower than in Q2.

Besides, restrictive monetary policy measures taken by the NBS in H2 2012 and H1 2013 remain a contributor to the fall in y-o-y inflation, while low aggregate demand continues to play the most important role in slowing the domestic price growth in the medium term.

By contrast to the above disinflationary factors, the upward revision of some administered prices, notably electricity in August, will produce inflationary pressures. However, given the relatively limited direct and indirect effect of this increase on inflation (around 0.7 pp) and the fact that it has been already factored in the projection, inflation's return within the target tolerance band will not be at risk. According to our estimates, administered prices will contribute around 2.0 pp to inflation in 2013, the largest contribution being that of electricity prices.

The weakening of the dinar in late May and early June, i.e. potential opening of the depreciation gap of the real exchange rate in the coming period, could put some upward pressure on import prices, but the intensity of this pressure will depend on the net importers' ability to command higher prices against the backdrop of depressed demand.

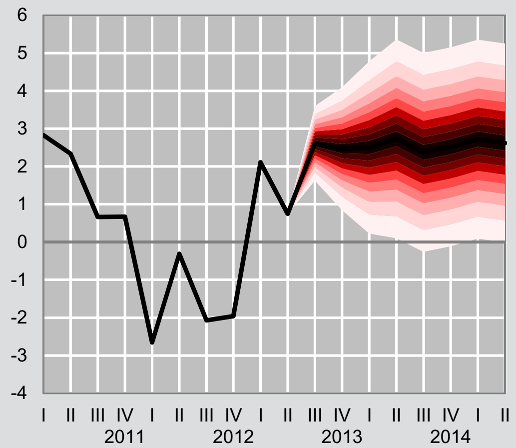
The NBS Executive Board will continue to monitor closely the movements in agricultural commodity prices and the international environment. Assuming commodity prices decline further, no external shocks occur and fiscal consolidation is implemented as planned, the Executive Board will consider the possibility of further monetary policy easing in the coming period.

[33] See text box 5: Effects of the new agricultural season, p. 44.

According to the NBS projection, after contracting in 2012, **GPP** will grow around 2.0% in 2013. This projection is based on the expected increase in agricultural production relative to the previous year (assuming average agricultural season) and on further expansion of the automobile and oil industries. Upgraded production capacities of these two industries will make net exports the key contributor to GDP growth this year, despite deteriorated prospects for the recovery of Serbia's main foreign trade partners. On the other hand, headwinds to GDP growth will be coming from private and government consumption due to low real income and implementation of fiscal consolidation measures, respectively.

Looking at 2014, private consumption is likely to stagnate and government consumption to decline amid continuing fiscal consolidation. According to our projection, GDP will grow around 2.5%, propelled mainly by net exports, and to a lesser degree by investments. This projection has been revised down (by 0.5 pp) relative to the May *Report* as the growth prospects for the euro area had deteriorated in the meantime.

Chart V.0.3 **GDP growth projection**
(y-o-y rates, in %)

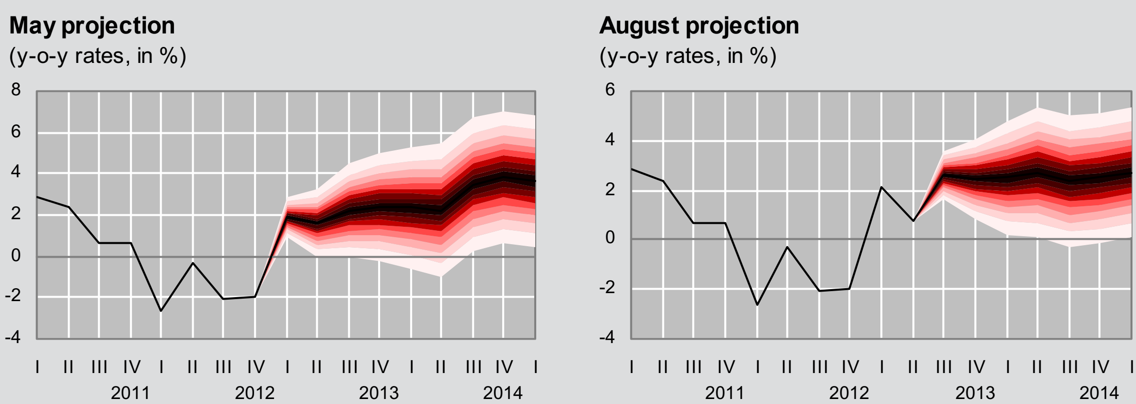


Source: NBS.

Economic activity is likely to record growth of around 2.0% in 2013 and around 2.5% in 2014.

The risks to the GDP growth projection are balanced, i.e. deviations are equally possible in either direction. Uncertainties surrounding the projection relate mainly to the start and pace of recovery of the euro area, notably Serbia's main foreign trade partners, and to an extent, to the possibly better-than-average agricultural season this year.

Chart V.0.4 **Current vs. previous GDP growth projection**



Source: NBS.

The GDP growth projection remained unchanged in 2013, while the 2014 projection was revised down by 0.5 pp.

Risks to the projection

The risks to the projected inflation path are associated primarily with movements in agricultural commodity prices, and to a degree, with developments in the international environment and fiscal policy at home.

The current inflation projection operates on the assumption of an average agricultural season in Serbia and worldwide, which should lead to a further drop in domestic and international prices of primary agricultural commodities. However, if the decline in these prices does not persist until the end of the year, food prices will generate weaker disinflationary pressures, and vice versa – if the decline proves steeper than anticipated, the disinflationary effect of food prices will be stronger.

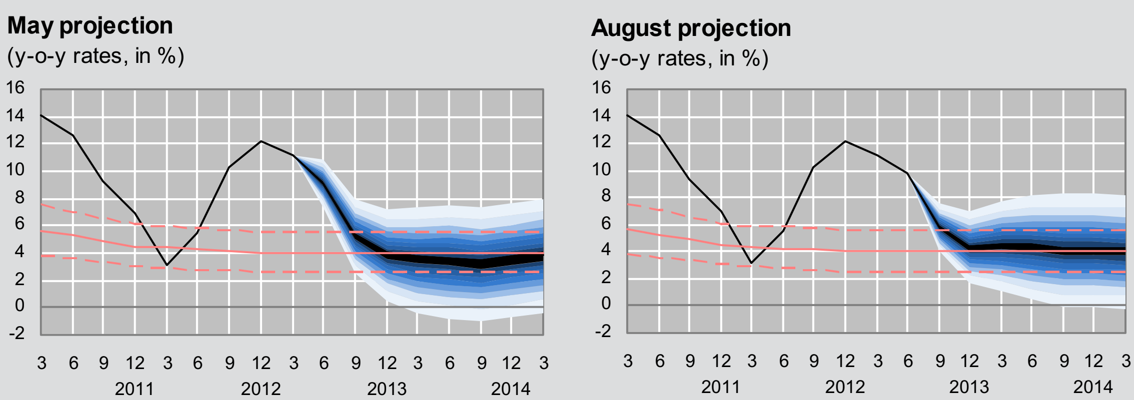
The outlook for fruit and vegetable prices is also uncertain. Namely, even though these prices usually fall in Q3 and should, by all indications, do so this year as well, this is a category of prices that generally exhibit a great deal of volatility. Consequently, their movements cannot be predicted with certainty, i.e. their impact on the projected inflation path is possible in either direction.

Developments in the international environment significantly affect the economic situation in Serbia because of our strong financial and economic linkages with other countries, members of the euro area in particular. A possibly sharper-than-expected GDP drop in 2013 in the euro area could strain Serbia's export opportunities and induce a widening of the negative output gap, i.e. stronger disinflationary pressures from aggregate demand. Furthermore, a negative turn of events in the international financial markets could reflect on the country risk premium and movements in the domestic financial market.

A certain amount of risk is also associated with fiscal movements at home, i.e. a possibly higher-than-expected consolidated budget deficit (5.2% of GDP). This risk has, however, lessened following the adoption of additional fiscal consolidation measures.

On balance, the risks to inflation projection are judged to be symmetrical.

Chart V.0.5 **Current vs. previous inflation projection**



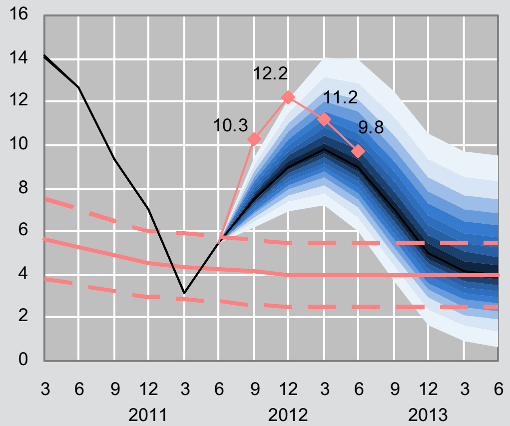
Source: NBS.

The new inflation projection was slightly higher compared to the May 2013 projection.

Comparison with the previous projection

The projected spread of inflation outcomes over the entire projection horizon is slightly higher than in the May *Report*, due above all to the higher-than-expected growth in unprocessed food prices (i.e. fruit and vegetables) in Q2. Nonetheless, inflation's return within the target tolerance band is still expected by October. The medium-term projection band remains unchanged.

Chart V.0.6 **Inflation outturn vs. August 2012 inflation projection**
(y-o-y rates, in %)



Source: NBS.

In Q3 and Q4 2012, y-o-y inflation was outside of the August 2012 projection band.

In Q3 and Q4 2012, y-o-y inflation moved above the upper bound of the band projected in August 2012, reflecting a stronger-than-expected growth in prices of primary agricultural commodities and fruit and vegetables caused by prolonged drought. Such inflation outturn was underpinned by the higher-than-anticipated growth in administered prices and the October increase in VAT and excise duties. However, as the effect of the agricultural shock waned, y-o-y inflation retreated within the above band in H1 2013, coming closer to the mid-point of the projection in Q2.

Table A
Indicators of Serbia's external position

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Q1 2013	Q2 2013
EXTERNAL LIQUIDITY INDICATORS (in %)													
Forex reserves/imports of goods and services (in months)	4.1	4.7	3.9	6.1	9.0	7.2	5.2	9.5	8.2	8.7	7.6	8.2	7.4
Forex reserves/short-term debt	360.7	535.6	702.2	519.2	941.7	917.5	380.8	528.8	546.4	1,861.0	2,213.0	3,285.1	3,459.1
Forex reserves /GDP	13.6	16.4	16.3	24.2	38.7	33.8	25.0	36.6	35.7	38.3	36.5	38.9	34.0
Debt repayment/GDP	1.4	2.0	3.9	4.7	7.0	10.1	10.6	11.4	12.6	13.0	13.6	13.7	15.4
Debt repayment/exports of goods and services	7.0	9.0	16.4	17.7	23.5	33.2	34.0	39.1	35.2	35.6	34.3	33.7	35.6
EXTERNAL SOLVENCY INDICATORS (in %)													
External debt/GDP	58.7	55.9	49.8	60.1	60.9	60.2	64.6	77.7	84.9	76.7	85.9	87.7	83.1
Short-term debt/GDP	3.8	3.1	2.3	4.7	4.1	3.7	6.6	6.9	6.5	2.1	1.6	1.2	1.0
External debt/exports of goods and services	300.9	251.6	211.5	228.9	204.1	197.3	207.6	265.3	236.2	210.3	215.9	216.2	202.5
FINANCIAL RISK EXPOSURE INDICATORS (in %)													
Forex reserves/M1	143.3	195.1	220.1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	425.6	371.5
Forex reserves/reserve money	131.9	167.8	165.5	169.8	179.5	173.8	140.7	190.5	196.4	207.6	197.9	213.6	192.1
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP	59.3	63.9	73.7	73.6	81.2	85.8	86.8	75.6	88.2	89.3	97.3	94.6	97.7
MEMORANDUM: (in EUR million)													
GDP (in EUR million)	16,028	17,306	19,026	20,306	23,305	28,468	32,668	28,954	28,006	31,472	29,932	7,446	8,181[1)]
External debt	9,402	9,678	9,466	12,196	14,182	17,139	21,088	22,487	23,786	24,125	25,721	26,722	26,072
External debt servicing	218	348	736	945	1,635	2,885	3,453	3,314	3,542	4,085	4,084	1,000	1,261
Central bank foreign exchange reserves	2,186	2,836	3,104	4,921	9,020	9,634	8,162	10,602	10,002	12,058	10,914	11,844	10,673
Short-term debt	606	529	442	948	958	1,050	2,143	2,005	1,830	648	493	361	309
Current account balance	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-1,910	-1,887	-2,870	-3,155	-622	-268

		2004	2005		2006		2007	2008	2009	2010	2011	2012	2013
		Nov.	May	July	Feb.	Apr.	June	Dec.	Dec.	Nov.	Mar.	Aug.	July
CREDIT RATING	S&P	B+		BB-	BB-/positive		BB-/stable	BB-/negative	BB-/stable		BB /stable	BB-/negative	
	Fitch		BB-			BB-/stable		BB-/negative		BB-/stable		BB-/negative	BB-/negative
	Moody's												B1 /stable

Methodological notes:
Foreign exchange reserves/imports of goods and services (in months) - ratio of foreign exchange reserves at end-period to average monthly imports of goods and services during that period.
Foreign exchange reserves/short-term debt (in %) - ratio of foreign exchange reserves to short-term debt at end-period.
Foreign exchange reserves/GDP (in %) - ratio of foreign exchange reserves at end-period to GDP.
Debt repayment/GDP (in %) - ratio of debt repayment to GDP during period under review.
Debt repayment/exports (in %) - ratio of debt repayment to exports of goods and services during period under review.
Debt/GDP (in %) - ratio of outstanding debt at end-period to GDP.
Debt/exports (in %) - ratio of outstanding debt at end-period to annual value of exports of goods and services.
Foreign exchange reserves/M1 (in %) - ratio of foreign exchange reserves to money supply at end-period.
(Exports + imports)/GDP (in %) - ratio of value of exports and imports of goods and services to GDP during period under review.

1) NBS estimate.

Notes:
1. Data are subject to corrections in line with the official data sources.
2. As of October 2006, the IMF publication "International Financial Statistics" features a page on monetary statistics of the Republic of Serbia. This required the NBS to bring its statistical reports in compliance with international statistical standards and methodology harmonised, at the level of the IMF, for all countries. We have adjusted our financial risk exposure indicators accordingly.
3. Trade with Montenegro is registered within relevant transactions as of 2003.
4. Foreign debt repayment does not include: short-term debt repayment and advanced debt repayment.
5. In accordance with BPM 5, a portion of estimated remittances was transferred from the financial account to the current account.
6. As of 01.01.2010 Statistical Office, according to UN recommendations, applies general trade system which is 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 special trade system.
7. In September 2010, the methodology of external debt statistics was changed – public sector external debt includes liabilities under SDR allocation (EUR 443.5 mln) used in December 2009, as well as the capitalised interest to the Paris Club Creditors (EUR 86.4 mln). Private sector external debt excludes loans concluded before 20 December 2000 in respect of which no payments are made (EUR 875.4 mln, of which EUR 397 mln related to domestic banks and EUR 478.4 mln to domestic enterprises).

Table B
Key macroeconomic indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Q1 2013	Q2 2013
Real GDP growth (in %)[1]	4.3	2.5	9.3	5.4	3.6	5.4	3.8	-3.5	1.0	1.6	-1.7	2.1	0.7
Consumer prices (in %, relative to the same month a year earlier)[2]	14.8	7.8	13.7	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	11.2	9.8
NBS foreign exchange reserves (in EUR million)	2,186	2,836	3,104	4,921	9,020	9,634	8,162	10,602	10,002	12,058	10,914	11,844	10,673
Exports (in EUR million)[3,8]	3,125	3,847	4,475	5,330	6,949	8,686	10,157	8,478	10,070	11,472	11,913	2,964	3,545
- growth rate in % compared to a year earlier	16.0	23.1	16.3	19.1	30.4	25.0	16.9	-16.5	18.8	13.9	3.8	17.6	17.0
Imports (in EUR million)[3,8]	-6,387	-7,206	-9,543	-9,613	-11,971	-16,016	-18,843	-13,404	-14,643	-16,627	-17,211	-4,077	-4.448
- growth rate in % compared to a year earlier	27.2	12.8	32.4	0.7	24.5	33.8	17.7	-28.9	9.2	13.6	3.5	0.9	2.9
Current account balance[4,8]													
(in EUR million)	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-1,910	-1,887	-2,870	-3,155	-622	-268
as % of GDP	-4.2	-7.8	-13.8	-8.8	-10.1	-17.7	-21.6	-6.6	-6.7	-9.1	-10.5	-8.4	-3,3
Unemployment according to the Survey (in %)[5]	13.3	14.6	18.5	20.8	20.9	18.1	13.6	16.1	19.2	23.0	23.9		24.1
Wages (average for the period, in EUR)	152.1	176.9	194.6	210.4	259.5	347.6	402.417	337.9	330.1	372.5	364.5	370.8	394.8
RS budget deficit/surplus (in % of GDP)[6]	-4.3	-2.6	-0.3	0.3	-1.9	-1.7	-1.7	-3.4	-3.7	-4.2	-5.7	-6.0	-5.2
Consolidated fiscal result (in % of GDP)	-1.8	-2.4	0.8	0.9	-1.9	-2.0	-2.6	-4.5	-4.7	-4.9	-6.4	-4.4	-4.8
RS public debt, (external + internal, in % of GDP)[6,7]	72.9	66.9	55.3	52.2	37.7	31.5	29.2	34.7	44.5	48.2	59.3	62.5	60.6
RSD/USD exchange rate (average, in the period)	64.29	57.56	58.45	66.87	67.03	58.39	55.76	67.47	77.91	73.34	88.12	84.61	85.90
RSD/USD exchange rate (end of period)	58.98	54.64	57.94	72.22	59.98	53.73	62.90	66.73	79.28	80.87	86.18	87.43	87.41
RSD/EUR exchange rate (average, in the period)	60.69	65.12	72.69	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	111.70	112.15
RSD/EUR exchange rate (end of period)	61.52	68.31	78.89	85.50	79.00	79.24	88.60	95.89	105.50	104.64	113.72	111.96	114.17
Memorandum													
GDP (in EUR million)	16,028	17,306	19,026	20,306	23,305	28,468	32,668	28,954	28,006	31,472	29,932	7,446	8,181[1,9]

[1] At constant prices of previous year.

[2] Retail prices until 2006.

[3] Trade with Montenegro is registered within relevant transactions as of 2003.

[4] In accordance with BPM 5, a portion of estimated remittances was transferred from the financial account to the current account.

[5] Source: Labour Force Survey, Statistical Office.

[6] Source: MoF for public debt and NBS for estimated GDP.

[7] Gouverment securities at nominal value.

[8] As of 1 January 2010, the Statistical Office, according to UN recommendations, applies the general trade system which is a broader concept and includes all goods entering/exiting the country's economic territory, apart from goods in transit. The Statistical Office published comparable data for 2007, 2008 and 2009. Previous years are disseminated under a special trade system.

[9] NBS estimate.

* Preliminary data.

Notes:

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

Appendix 1. National Bank of Serbia's Letter to the Government of the Republic Serbia on Reasons Why Inflation Departed from the Target

Belgrade, 12 July 2013

GOVERNMENT OF THE REPUBLIC OF SERBIA

Ivica Dačić, Prime Minister

Dear Mr Dačić,

As inflation has been trending above the upper bound of the target tolerance band for six consecutive months, we address you in accordance with the Agreement Between the National Bank of Serbia and the Government of the *Republic of Serbia on Inflation Targeting* (Section 6, paragraph 4) in order to explain why inflation has moved away from the target tolerance band, to describe the measures we have taken so far and specify those that must be taken in the future to ensure low and stable inflation in the medium run, and to set out the period within which we expect inflation to return within the target tolerance band.

While running above the target tolerance band in the first half of the year, y-o-y inflation fell from 12.8% in January to 9.8% in June. High y-o-y inflation rates in the first half of the year were due primarily to the high monthly consumer price growth rates in the second half of 2012. Inflation growth in the second half of 2012, from 6.1% in July to 12.2% in December, was for its major part driven by a markedly robust growth in food prices. Out of the 6.1 pp rise in y-o-y inflation during this period, 4.0 pp were accounted for by food prices. In line with our expectations, food prices were also a key contributor (1.9 pp) to the fall in y-o-y inflation from 12.8% in January to 9.8% in June 2013.

The reason behind high volatility in food prices lies in low agricultural production and a significant rise in food prices in 2012 worldwide, but also in the specificities of the Serbian food market. Due to existing systemic solutions, food prices in Serbia are much more volatile than in other countries of the region. As their share in the consumer price index is rather high, food prices are a significant contributor to the volatility of headline inflation. In addition to food, inflation growth was also fuelled by the increase in the VAT rate and excise duties in October 2012. Based on our estimates, the effects of this increase were one-off and added 1.1 pp to inflation growth. Furthermore, import costs generated high inflationary pressures as a result of the dinar's weakening in the first half of 2012.

The NBS Executive Board has taken measures within its remit to bring back medium-term inflation within the target tolerance band. Monetary policy tightening, initiated in June 2012, continued in early 2013. In January and February, the key policy rate was raised by 25 bp in each month – to 11.75%. Given the nature of factors which drove up inflation (supply-side shocks), the key policy rate was raised to prevent the second-round effects, i.e. the spill-over to other prices. Past monetary policy measures have already produced effects – in the first half of the year, inflation equalled only 3.0%. Estimating that, in the absence of internal and external shocks, y-o-y inflation will return within the target tolerance band of 4±1.5% by October, the NBS Executive Board cut the key policy rate in May and June to its current level of 11.0%.

Monetary policy measures to be adopted by the NBS in the coming period will aim to ensure price stability in the medium run. Greater efficiency of monetary policy in delivering low and stable inflation will be aided by consistent implementation of fiscal consolidation and structural reforms, including economic policy measures directed towards stabilisation of the food market, strengthening of competition and transparency of plans and mechanisms of administered price adjustments. The NBS will continue to pursue monetary policy in a consistent and predictable way, taking due account of economic developments and inflationary pressures, thus contributing to the creation of a more stable business and investment environment.

Yours sincerely,

Dr Jorgovanka Tabaković

Submitted to:

- Mr Rasim Ljajić, Vice-President of the Government and Minister of External and Internal Trade and Telecommunications
- Mr Mlađan Dinkić, Minister of Finance and Economy
- Mr Goran Knežević, Minister of Agriculture, Forestry and Water Management

Index of charts and tables

Charts

Tables

Charts in boxes

Tables in boxes

Executive Board meetings and changes in the key policy rate

2012

Date	Key policy rate (p.a., in %)	Change (in basis points)
19 January	9.50	-25
9 February	9.50	0
8 March	9.50	0
12 April	9.50	0
10 May	9.50	0
7 June	10.00	+50
12 July	10.25	+25
9 August	10.50	+25
6 September	10.50	0
9 October	10.75	+25
8 November	10.95	+20
14 December	11.25	+30

2013

Date	Key policy rate (p.a., in %)	Change (in basis points)
17 January	11.50	+25
5 February	11.75	+25
12 March	11.75	0
11 April	11.75	0
14 May	11.25	-50
6 June	11.00	-25
11 July	11.00	0
8 August	11.00	0
12 September		
17 October		
7 November		
12 December		

Press releases from NBS
Executive Board meetings

Press release from Executive Board meeting held on June 06 2013

At its meeting today, the NBS Executive Board decided to cut the key policy rate by 0.25 pp to 11%.

The above decision is based on the assessment that y-o-y inflation and inflationary pressures will continue to subside over the coming months, which is expected to be confirmed by the monthly inflation rate in May. The fall in y-o-y inflation will be sustained by the monetary policy measures taken thus far, lower food prices in the new agricultural season, low aggregate demand and additional fiscal consolidation measures that will eliminate uncertainty with regard to the future economic policy. In the best collective judgement of the Executive Board, y-o-y inflation will return within the target tolerance band of 4±1.5% by October.

Given the narrowing of the foreign trade and current account deficits, the Executive Board attributed current developments in the foreign exchange market to trends in international financial markets and greater investor risk aversion.

The Executive Board concluded that results of fiscal consolidation and its effects on monetary policy and future NBS measures will depend on concrete measures, the dynamics of their adoption and comprehensiveness of reforms in the field of public finance.

The next rate-setting meeting will be held on 11 July 2013.

Press release from Executive Board meeting held on July 11 2013

In its meeting today the NBS Executive Board decided to keep the key policy rate unchanged at 11 percent.

Year-on-year inflation is on a decline, reflecting chiefly low aggregate demand. Good agricultural season and favourable developments in the global market of agricultural produce will contribute to the lowering of food prices in the domestic market. The deceleration in credit activity and lower growth of salaries and pensions confirm that low aggregate demand will continue to be the key disinflationary factor in the period ahead. The Executive Board expects inflation to return within the target tolerance band by October.

Unfavourable movements in international financial markets have led to higher investor risk aversion, which has sparked an increase in risk premia and depreciation pressures almost throughout the region.

The Executive Board holds that the effects of additional fiscal consolidation measures and the implementation of structural reforms will contribute to further subsiding of inflationary pressures and aggregate demand and will help increase investor interest in the Serbian economy.

The next rate-setting meeting of the Executive Board will take place on 8 August.

Press release from Executive Board meeting held on 8 August 2013

In its meeting today, the Executive Board decided to keep the key policy rate unchanged at 11%.

The Board stated that the fall in year-on-year inflation continues, largely owing to monetary policy measures and stabilisation in the food market. The weakening of inflationary pressures indicates that the trend will accelerate in the coming period and that inflation will return within the target tolerance band (4±1.5 %) by October.

The economic recovery that started in late 2012 has continued in 2013. The Executive Board estimates that the Serbian economy will grow 2% this year, led by rising exports. The sustainability of economic recovery is indicated by the easing of external imbalances and the current account deficit of 5.7% of GDP in the first half of the year.

The Executive Board believes that additional fiscal consolidation measures and the implementation of structural reforms will contribute to the further reduction in inflationary pressures and external imbalances, giving a positive boost to Serbia's investment risk perception.

However, given the higher risk aversion of international investors, prompted by the Fed's hint at downsizing of the quantitative easing programme, which spurred a rise in the country's risk premium and depreciation pressures in Serbia and almost all countries in the region, the Executive Board decided to keep the key policy rate unchanged.

The next rate-setting meeting will be held on 12 September 2013.

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