National Bank of Serbia

2013

May

INFLATION REPORT

May 2013

INFLATION REPORT

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

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

www.nbs.rs
Number of copies: 60
ISSN 1820-9394

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 May *Inflation Report* was considered and adopted by the NBS Executive Board in its meeting of 14 May 2013.

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

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
SORS – Statistical Office of the Republic of Serbia
Q – quarter
q-o-q – quarter-on-quarter
s-a – seasonally-adjusted
SDR – Special Drawing Rights
WTO – World Trade Organisation
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Contents

I. Overview

Inflationary pressures have weakened significantly since the start of the year, contributing to a fall in year-on-year inflation.

Inflationary pressures weakened significantly during the first quarter. Though year-on-year inflation remains high (11.4% in April), monthly inflation rates averaged only 0.2–0.3% in the last six-month period. These movements reflected the gradual waning of the effects of last year's agricultural shock and the drop in international prices of primary agricultural commodities, as well as the impact of past monetary policy measures.

Inflation expectations of the financial sector decreased this year, while those of other sectors stabilised.

Though still above the upper bound of the target tolerance band, inflation expectations of the financial sector decreased and those of other sectors stabilised in the first quarter. This can be put down to the National Bank of Serbia's efficient communication with the public, since inflation expectations started falling while year-on-year inflation was still on the rise.

Suffering persistent recessionary pressures, the euro area is not likely to recover to any greater extent before 2014.

The euro area economy is most likely to have recorded yet another fall in the first quarter. Despite a mild recovery expected in the second half of the year, the Consensus Forecast places the bloc's economic downturn in 2013 at 0.4%. The International Monetary Fund's projection for the euro area is in the same region (-0.3%). Uncertainty in the financial market lessened in the previous two quarters following the agreement on establishing the banking and fiscal union. Early this year, however, Cyprus faced the banking crisis which fuelled tensions all the way until the end of March, when the Cypriot authorities and international investors struck a financial assistance deal.

Appreciation pressures continued in 2013.

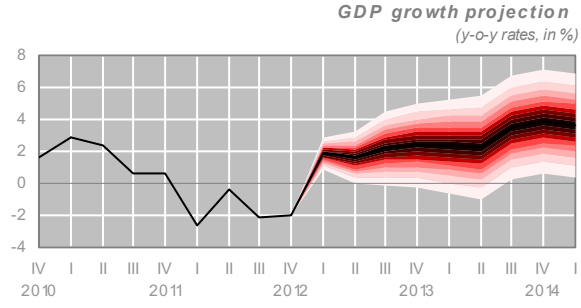
Set in motion in the last quarter of 2012, appreciation of the dinar continued in the first quarter of 2013 despite a mild increase in the country risk premium. The dinar's strengthening reflects tightening of the monetary policy stance, an increase in non-residents' interest in government securities amid ample liquidity in the international capital markets and lower risk aversion, and narrowing of the current account deficit. After the European Commission recommended that negotiations for accession to the European Union should be opened with Serbia, the country risk premium went down and appreciation pressures gained further traction.

Though estimated that the fiscal deficit in 2013 will be higher than planned, we expect the government will proceed with fiscal consolidation.

Based on the performance of fiscal revenue and expenditure in the year to date, it seems that the fiscal deficit of 3.6% of GDP in 2013 will be exceeded. Still, we expect that the enacted fiscal consolidation measures will help alleviate inflationary pressures and narrow the

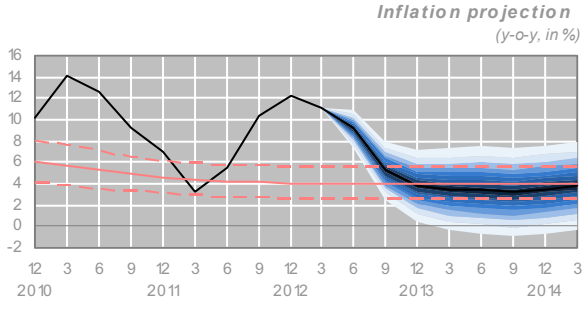
current account deficit, which is estimated at around 8.5% of GDP this year. Higher automobile and oil industry exports are also expected to generate significant positive effects in terms of reducing the foreign trade deficit. This expectation is supported by the fact that euro-denominated commodity exports increased 7.1% s-a in the first quarter, led mainly by the exports of motor vehicles and trailers.

Our GDP growth projection for 2013 has been revised down to around 2.0%.



We estimate that the economic recovery, which started in the last quarter of 2012 and continued in the first quarter of 2013 (1.5% s-a), is of a more durable character and that the Serbian economy is poised for around 2.0% growth in the year as a whole. The projection has been revised down from the previous Report chiefly in response to the anticipated lower growth of the euro area economy. Nonetheless, the key impetus to GDP growth this year will come from net exports. Due to fiscal consolidation, the contributions of government and private consumption will be negative. According to our projection, GDP will grow around 3.0% in 2014, aided by all components of aggregate demand, except by government consumption and investment because of the expected continuation of the fiscal consolidation programme.

Year-on-year inflation is expected to continue down in the coming period and return within the target tolerance band by October.



Consumer price growth in the second quarter will be driven most by the seasonal increase in fruit and vegetable prices. This notwithstanding, year-on-year inflation will continue to fall, returning to single digits by the end of the second quarter and finally, within the target tolerance band by October. In 2014, inflation should stabilise around the target of 4.0±1.5% year-on-year. In the months ahead, the key disinflationary factor driving inflation towards the target tolerance band will be the lower costs of food production. Besides, restrictive monetary policy measures taken by the National Bank of Serbia from mid-2012 will exert their full effect on inflation in the course of this year. The drop in year-on-year inflation will also benefit from the high monthly inflation rates in the same period last year and from the strengthening of the dinar during the last several months. Low aggregate demand remains the key disinflationary factor in the medium term. A positive impact on the process of disinflation could also come from an agreement on a new arrangement with the International Monetary Fund.

The Executive Board of the National Bank of Serbia will consider the possibility of easing the monetary policy stance further in the coming period.

Given the weakening of inflationary pressures, the NBS Executive Board will consider the possibility of easing its monetary policy stance further in the coming period. However, as unexpected changes in the impact of some factors on the above inflation projection remain possible, the expectation stated with regard to the character of monetary policy in the period ahead is in no way binding on the NBS.

II. Monetary policy since the February *Report*

Judging inflationary pressures to be on the downside, the NBS Executive Board kept the key policy rate on hold in March and April, and then trimmed it down in May.

Following upward revision to 11.75% in February, the key policy rate was kept unchanged until May. The NBS Executive Board **did not change the level of the key policy rate in its March and April meetings** judging that, absent internal and external shocks, the monetary policy was tight enough to ensure inflation's return within the target tolerance band (4±1.5%) in the second half of the year. Though y-o-y inflation rate exceeded the target, low monthly inflation rates in the prior six-month period confirmed the effectiveness of past monetary policy measures. The adoption of the fiscal consolidation programme also provided a contribution to macroeconomic stability. Inflationary pressures softened in response to low aggregate demand, falling risk premium and stability of the exchange rate of the dinar. Besides, the effects of past one-off shocks, such as the food price growth, gradually waned and price pressures emanating from the external environment also headed south.

The Executive Board assessed that positive tendencies in economic activity, recorded in late 2012, continued into early 2013. Nascent economic recovery, led by exports, should result in GDP growth of around 2.0% this year. In terms of other components of aggregate demand, positive contribution to GDP growth will come from investments and negative from private and government consumption. Though on the mend, aggregate demand will remain low.

The inflation projection, underlying the Executive Board's decision-making in May, is lower over the entire projection horizon than the one released in February 2013, owing mainly to a sharper fall in prices of primary agricultural commodities. Consistent with this, the key disinflationary factor in the short term will be the anticipated fall in food prices and in the medium term – low aggregate demand. Besides, the full effect of restrictive monetary policy measures taken since mid-2012 will unfold in the course of this year. The drop in y-o-y inflation will also be aided by the high monthly inflation rates from the same period last year and the recent strengthening of the dinar.

The Executive Board holds that the implementation of fiscal consolidation measures will also have a positive impact on the process of y-o-y disinflation. In addition, a deal with the IMF on a precautionary arrangement would reinforce foreign investor's confidence in our economic policy, precipitate a fall in the country risk premium and attract higher capital inflows, all of which working towards stabilisation of inflation and the exchange rate of the dinar.

Inflationary pressures being on the downside, the Executive Board decided in its meeting in May to **trim the key policy rate by 50 bp, to 11.25%**.

III. Inflation developments

Inflationary pressures weakened significantly in Q1, due not only to the gradual depletion of effects of the last year's agricultural shock and falling world prices of primary agricultural commodities, but also to past monetary policy measures.

We estimate that y-o-y inflation reached its peak already in January and is likely to decline further in Q2.

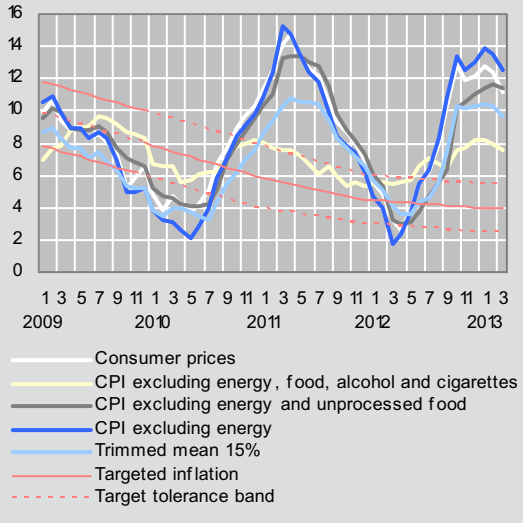
Inflation developments in Q1

Q1 inflation was lower than in Q4 2012. Cost-push pressures in food production declined more than anticipated, while the expected rise in some administered price categories failed to take place.

Consumer prices gained 1.1% in Q1. January and February saw a rise of 0.6% and 0.5% respectively, led mainly by hikes in fruit and vegetable prices and some categories of administered prices. In contrast, no price growth was recorded in March. Owing to greater than expected weakening of cost-push pressures in food production and the absence of adjustments of prices of electricity and some medicaments, y-o-y inflation moved throughout Q1 below the lower bound of the short-term inflation projection published in the February Report. After reaching its peak in January, y-o-y inflation declined in February and March. It touched 11.2% by end-Q1.

Prices of food and non-alcoholic beverages increased by 1.5%. Contrary to the previous quarter, unprocessed food prices picked up by 2.2% in Q1, reflecting a 10.2% rise in vegetable prices (as the imputation of some

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



Sources: SORS and NBS.

After rising in January, y-o-y inflation declined in February and March.

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

	2012				2013
	I	II	III	IV	I
Consumer prices (CPI)	2.0	3.1	4.2	2.3	1.1
Unprocessed food	7.5	14.7	9.1	-7.8	2.2
Processed food	-0.7	1.0	4.2	6.3	1.1
Industrial products excluding food and energy	2.1	1.7	3.6	4.8	1.7
Energy	2.9	0.5	3.5	1.1	-0.2
Services	1.2	2.4	1.4	3.3	0.6
Core inflation indicators					
CPI excluding energy	1.8	3.7	4.3	2.6	1.3
CPI excluding energy and unprocessed food	0.8	1.6	3.3	5.0	1.2
CPI excluding energy, food, alcohol and cigarettes	1.3	2.2	1.5	3.1	0.7
Administered prices	1.3	0.1	2.9	5.2	2.9

Sources: SORS and NBS.

product prices was no longer applied in January). However, for the first time, CPI records show a drop in fruit prices in Q1 (1.5%). Fresh meat prices also declined, for the second quarter in a row. A rise in processed food prices decelerated significantly (1.1% vs. 6.3% in Q4 2012), mainly in response to receding cost-push pressures in food production. Prices of processed meat, bread and cereals gave the strongest boost to food prices.

A sharp deceleration in price growth was also observed for **industrial products excluding food and energy** (1.7%). The main impetus came from the February increase in minimum cigarette excises, and the regular annual adjustment of alcohol excises. A rise in pharmaceutical product prices also made a positive contribution, while a part of the earlier announced hike in medicament prices was postponed.

Energy prices edged down by 0.2%. As the dinar strengthened against the dollar, petroleum product prices fell 2.6% and contributed negatively to headline inflation by 0.1 pp. The main positive impulse came from rising prices of household gas (9.5%) and heating in some towns (joint contribution of these two categories to inflation was 0.1 pp).

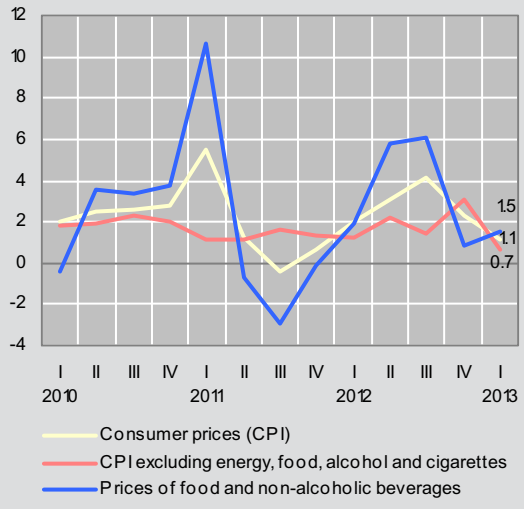
Table III.0.2 **Price indicators**
(y-o-y rates, in %)

	VI 2012 / VI 2011	IX 2012 / IX 2011	XII 2012 / XII 2011	III 2013 / III 2012
Consumer prices	5.5	10.3	12.2	11.2
Domestic industrial producer prices	3.4	7.0	6.4	5.4
Agricultural producer prices	15.4	39.0	35.4	17.3
Prices of elements and materials incorporated in construction	2.3	7.1	5.1	3.3

Sources: SORS and NBS.

A slowdown in price growth was also recorded in the **services** sectors. Prices gained 0.6% in Q1. The greatest positive contribution stemmed from rising prices of telephone services (0.2 pp contribution to headline inflation), while dampened prices in the recreation and culture category provided a negative contribution (-0.2 pp).

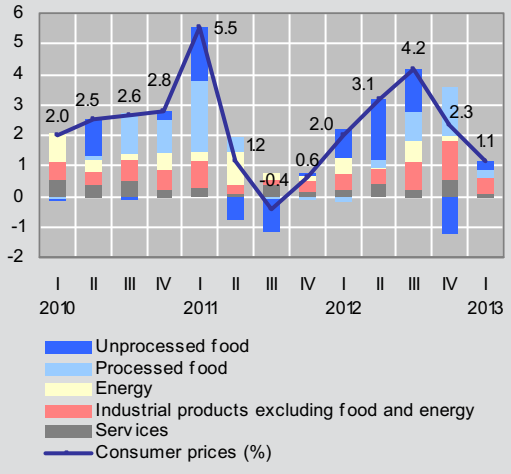
Chart III.0.2 **Price movements**
(quarterly rates, in %)



Sources: SORS and NBS.

Q1 saw significant weakening of inflationary pressures from food prices.

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



Sources: SORS and NBS.

The strongest contribution to Q1 inflation came from fruit and vegetable prices and some categories of administered prices.

[1] Prices of producers in agricultural and fishing sectors.

Core inflation (measured by CPI excluding prices of energy, food, alcohol and cigarettes) underperformed significantly its Q4 outturn and came at 0.7%. Broken down by category, the sharpest positive drive came from higher mobile telephony prices (adding 0.2 pp to headline inflation), while a negative contribution stemmed from a c. 30% decline in travel arrangement prices.

Administered prices rose less (2.9%) than in Q4. The rise was, however, lower than expected in the February *Report* as the adjustment of prices of electricity and some medicaments was postponed, most probably for Q3. Within this group, prices of cigarettes, medicaments, housing utility services, and household gas added the most to the increase.

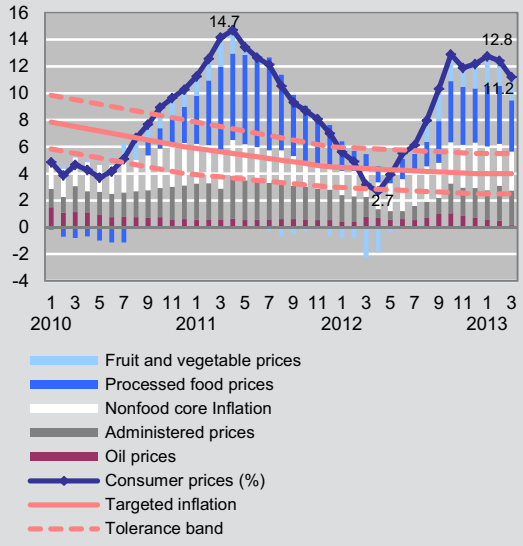
Domestic industrial producer prices rose mildly, by 0.6% in Q1. Growth continued to slow in y-o-y terms, and arrived at 5.4% in March. The steepest rise was noted for water supply (contribution of 0.3 pp). On the other hand, receding cost-push pressures in food production drove down food producer prices (-0.2 pp). A hefty drop was also seen in crude oil and natural gas exploitation.

By contrast to cuts in the previous quarter, **agricultural producer prices**[1] picked up 2.4% in March relative to December. In y-o-y terms, however, they slowed down to 17.3%. In the period under review, prices of fruits, vegetables and industrial crops went up. Conversely, the steepest decline was recorded for cattle breeding prices, including prices of all types of livestock. Prices of milk also declined, which can be correlated with aflatoxin contamination of corn which spread to milk supply.

Prices of elements and materials incorporated in construction rose slightly in Q1 (0.6%), but their y-o-y growth continued to slow and reached 3.3% in March.

Dinar-denominated import prices[2] recorded a 1.7%[3] fall in Q1, mainly in response to dinar's appreciation. In y-o-y terms, dinar-denominated import prices fell in March (0.5%), for the first time since the crisis erupted. As in the previous quarter, import prices declined on the back of falling prices of intermediate goods and world food prices. Rising global oil prices and prices of consumer goods acted in the opposite direction. A further decline in import prices points to further weakening of inflationary pressures from this source.

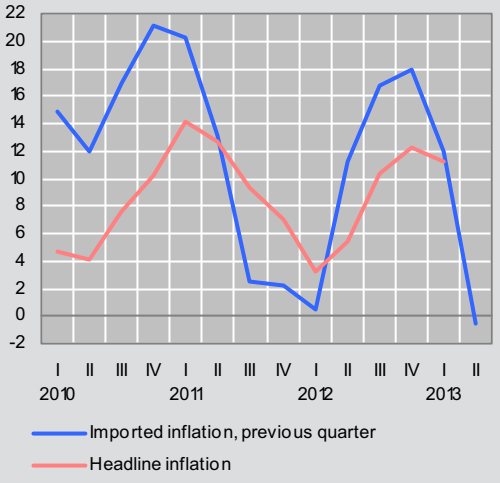
Chart III.0.4 **Contribution to y-o-y consumer price growth**
(in pp)



Sources: SORS and NBS.

The strongest contribution to y-o-y inflation continued to stem from food prices.

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



Sources: NBS and Eurostat.

For the first time since the crisis erupted, import prices declined y-o-y in Q1.

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

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

Text box 1: Impact of new CPI structure on inflation volatility

In the *February Report* we announced that changes would be made in compliance with Eurostat recommendations in respect of weights used in CPI calculation. We expected that the share of food in CPI would be reduced, which would, given the significant volatility of this component, dampen the volatility of headline inflation in the medium run.

In the meantime, a new weight structure was published (Table O.1.1). The share of prices of food and non-alcoholic beverages declined (by 4.2 pp), while the share of industrial products excluding food and energy went up (by 4.4 pp). Also, the share of energy fell, while that of services increased, which is why core inflation (CPI excluding energy, food, alcohol and cigarettes) was up 4.6 pp. As the weight structure changed, the share of administered prices fell 2.0 pp.

Under our estimates, the new CPI structure should have a neutral effect on inflation this year. The fall in inflation may decelerate over the short run owing to the decline in the share of processed and unprocessed food prices that are expected to fall vigorously. In contrast, a decline in electricity weights has the strongest downward effect on inflation projection.

Table O.1.1 **Comparison of weights for selected CPI aggregates**

	Old weights	New weights	Difference
Consumer prices (CPI)	**100**	**100**	**0**
Unprocessed food	13.0	12.6	**-0.4**
Processed food	25.8	21.9	**-3.9**
Industrial products excluding food and energy	25.5	29.9	**4.4**
Energy	17.5	14.8	**-2.8**
Services	18.2	20.8	**2.6**
Core inflation indicators			
CPI excluding energy, food, alcohol and cigarettes	38.3	42.9	**4.6**
CPI excluding energy and unprocessed food	69.5	72.6	**3.1**
CPI excluding energy	82.5	85.2	**2.8**
Food and non-alcoholic beverages	38.8	34.5	**-4.2**
Administered prices	22.5	20.4	**-2.0**
Excise products	11.6	14.1	**2.5**

Sources: SORS and NBS.

To determine the extent to which the above changes in weights will dampen the volatility of headline inflation, we analysed the differences in CPI volatility under the old and new methodology. To calculate the volatility of inflation, we used monthly data on y-o-y inflation for the period from January 2007 to December 2012, and calculated the variance and covariance matrix (Table O.1.2). Data in the main diagonal represent variances of each CPI component, while data outside of the main diagonal are covariances of each of the pairs. The strongest volatility was observed for the unprocessed and processed food components (variances of 199.33 and 61.06 respectively), while the components of services and industrial products excluding food and energy, which constitute the greatest proportion of core inflation, displayed the lowest volatility.

The variance of overall CPI is calculated as the weighted average of variances of each category, first using the old and then new weights and applying the following formula:

$$\sigma^2 = w^T C w$$

where σ^2 – CPI variance; w^T – transposed weight vector; C – variance and covariance matrix; w – weight vector. Consistent with expectations, the **volatility of headline inflation** measured by standard deviations **declined by around 10%** (from 3.71% under the old, to 3.37% under the new weights), while the share of the most volatile CPI components declined (unprocessed and processed food).

In addition to changes in the weight structure in CPI calculation, the volatility of headline inflation is likely to weaken also on account of liberalisation of foreign trade with the EU based on the interim trade agreement. Some food price volatility may also be accounted for by high food import protection which prevents the easing of price shocks in the domestic food market through food imports. Therefore, the implementation of the interim trade agreement, which envisages the lowering of the average customs rate for the import of agricultural products to 3.9% as of 2014 (from 6.9% in 2013), is expected to soften the volatility of domestic food prices in the medium run.

Table O.1.2 **Variance and covariance matrix by CPI categories from January 2007 to December 2012**

	Services	Processed food	Unprocessed food	Industrial products excluding food and energy	Energy
Services	**4.41**	–5.03	–6.07	2.94	0.18
Processed food	–5.03	**61.06**	71.34	–0.31	10.86
Unprocessed food	–6.07	71.34	**199.33**	0.05	9.18
Industrial products excluding food and energy	2.94	–0.31	0.05	**4.00**	–0.39
Energy	0.18	10.86	9.18	–0.39	**10.02**

Sources: SORS and NBS.

Short-term inflation projection

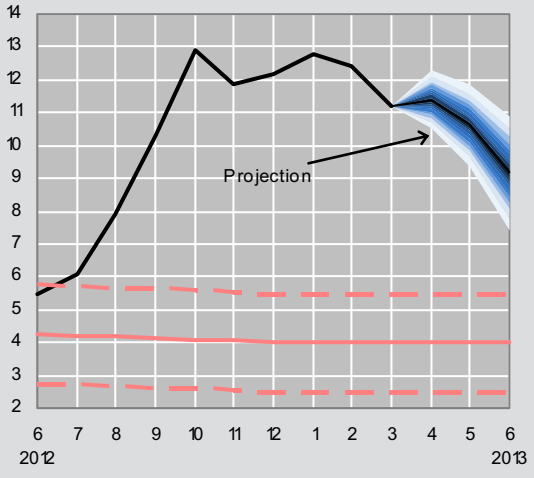
Aided by seasonal fruit and vegetable price hikes, consumer prices are estimated to rise more in Q2 relative to Q1. Despite this, y-o-y inflation will continue down.

Y-o-y inflation is estimated to have reached its peak already in January and is likely to continue down in Q2. In quarterly terms, consumer price growth in Q2 will be largely determined by seasonal fruit and vegetable price hikes.

A positive contribution to inflation will come from food prices in Q2 as well, and will be somewhat higher than in Q1. Unprocessed food prices will go up as seasonal fruits and vegetables appear in the market in May. Processed food prices are not likely to increase owing to weakened cost-push pressures.

Prices of industrial products excluding food and energy are expected to rise slightly in Q2, most notably as a result of a pick-up in medicament prices. The decelerated growth in this price category will be mainly due to the nominal appreciation of the dinar over the past several months.

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



Source: NBS.

A decline in y-o-y inflation, initiated in Q1, will continue.

Notwithstanding the seasonal increase in solid fuel prices, energy prices will probably decline in response to falling petroleum product prices.

The prices of services are expected to exceed the previous quarter levels, most notably as prices of travel arrangements go up with the start of the summer tourist season.

The greatest uncertainty surrounding the Q2 projection stems from the new agricultural season and domestic food prices. Risks to the projection are also associated with administered prices, notably the adjustment of medicament prices.

Text box 2: Projection of primary agricultural commodity prices

The globally bad weather conditions, which weighed down on yields during the last agricultural season, triggered a hefty rise in international prices of primary agricultural commodities (wheat, corn and soybean) in Q3 2012 (charts 0.2.1. and 0.2.2.). The price growth spilled over to the domestic market, fuelling a rise in inflationary pressures as these commodities are the key inputs to food production. The pressures were stronger in Serbia than in other countries because of the high share of food in our Consumer Price Index (CPI). Still, the growth in primary agricultural commodity prices proved only temporary, as a decline was recorded as early as in Q4 and extended into Q1 2013.

Chart O.2.1 **Corn prices in domestic and international markets**

(USD/t)

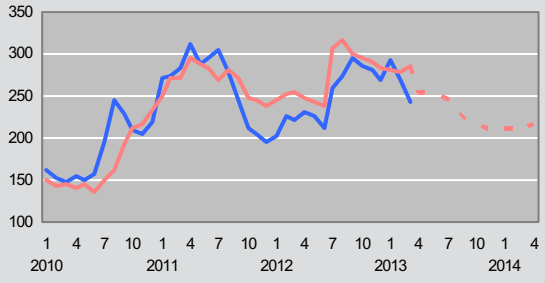
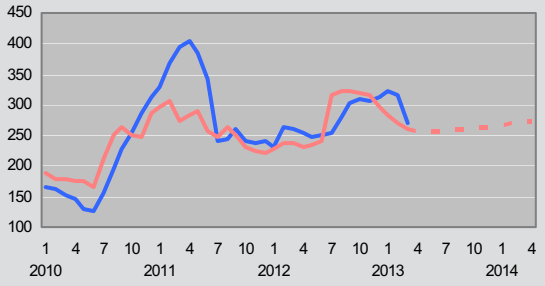


Chart O.2.2 **Wheat prices in domestic and international markets**

(USD/t)



Novi Sad commodity exchange — Chicago exchange — Futures

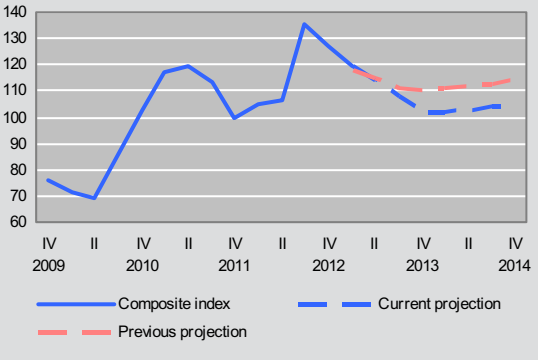
Sources: Novi Sad commodity exchange, CBOT – *Chicago Board of Trade*.

The Q1 fall in international cereal prices reflects improved prospects for agricultural production worldwide. The condition of winter crops in the largest cereal producers (USA, EU, Russia, Ukraine) is satisfactory, and good weather conditions (sufficient, but not excessive rainfall) will have a positive impact on the spring sowing. Good results are also expected in Latin America, where corn and soybean harvest is under way, which will ease the upward pressure on international prices of these crops until the autumn harvest in the USA and Europe. In terms of domestic cereal prices, the fall was caused not only by the decline in international cereal prices, but also by the aflatoxin-contaminated corn. The fall in domestic prices was marked in Q1, when the price of corn plummeted by 10.6% (end of period) amid reduced export demand which fell victim to contaminated corn. The price of wheat also headed down (by around 15%) following announcement of an intervention from commodity reserves that took place in mid-April.

The Q1 fall in primary agricultural commodity prices was in line with our expectations from the February Report. However, as the fall was sharper than assumed, we have revised our 2013 projection for these prices from -14% to -22% (chart O.2.3). The achievement of this projection should lead to significantly lower food production costs this year, which is why inflation is expected to return within the target tolerance band already in late Q3, i.e. earlier than assumed in the previous projection.

Chart O.2.3 **Composite index of prices of primary agricultural commodities**

(Q4 2011 = 100)



Source: NBS.

The current projection operates on the assumption of an average agricultural performance, which means that a potentially stronger/weaker performance would weaken/strengthen the disinflationary effect of food prices this year. Still, as the spring harvest is only beginning and the results of this year's agricultural production are uncertain at this point, the movements in primary agricultural commodity prices remain a risk to the projection. Information on this year's agricultural performance will be available around mid-year, which means that the next *Inflation Report* should provide a more reliable projection of the effect of food prices on inflation.

Inflation expectations

Inflation expectations of the financial sector drifted down, while those of other sectors stabilised. The share of enterprises expecting no changes in prices of their products and services over the next six months rose to a record high.

According to Bloomberg and Ipsos surveys, inflation expectations of the financial sector drifted down in Q1, while those of other sectors stabilised.

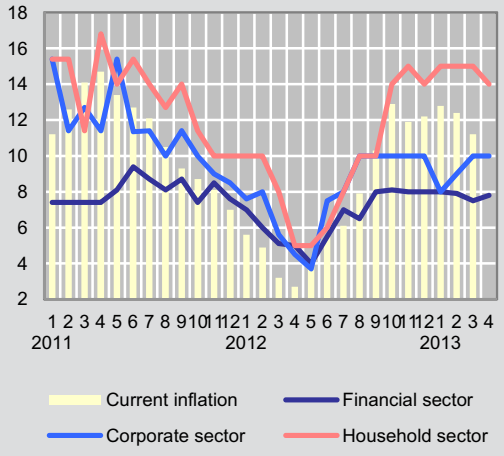
According to the **Bloomberg** survey, one-year ahead inflation expectations of the **financial sector** declined from 8.0% in December to 6.9% in March. They rose to 7.3% in April, but moderated to 7.0% already in May.

According to the **Ipsos** survey, one-year ahead inflation expectations of the **financial sector** also declined in Q1, though to a lesser degree – from 8.0% in December to 7.5% in March. **Corporate** expectations, flat from August to December (10.0%), edged lower to 8.0% in January, but went up by 1.0 pp both in February and March, thus returning to the 10.0% figure. Following the January increase of 1.0 pp (to 15.0%), household expectations remained stable until the quarter-end. In April, inflation expectations rose to 7.8% for the financial sector, stagnated for the corporate sector, and went down to 14.0% for households.

The dispersion of financial sector respondents' answers differed in the two surveys. Under the Bloomberg survey, the disagreement among respondents was significantly smaller relative to the previous quarter. As indicated by the Ipsos survey, the dispersion continued up until January. It declined thereafter, but remained pronounced. Different dispersion movements in the two surveys are due to the increasing number of respondents in the Bloomberg survey who expect closer to average inflation, while the opposite tendency is present in the Ipsos survey. Among corporate respondents, the dispersion of expectations continued up and reached its record high in February. The dispersion among households has been on a constant rise since August last year, and continued into Q1.

Under the Ipsos survey, following the January rise, February and March saw a decrease in the net percentage

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

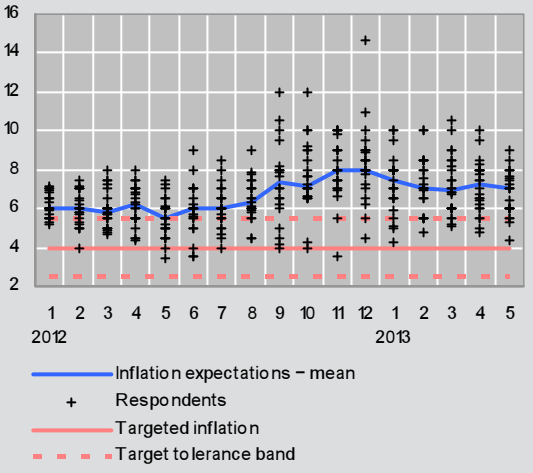


Sources: Gallup, Ipsos and NBS.

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

Inflation expectations of the financial sector declined, while those of other sectors stabilised despite high y-o-y inflation.

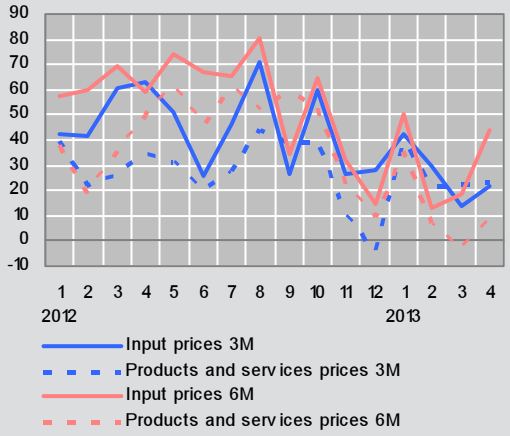
Chart III.0.8 **One-year ahead expected and targeted inflation – financial sector**
(y-o-y rates, in %)



Sources: Bloomberg and NBS.

Dispersion of inflation expectations of the financial sector was smaller compared to the previous quarter.

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 a rise in prices of inputs and their products and services declined in February and March. It, however, rose in April.

of enterprises[4] expecting elevated cost-push pressures from input costs and the net percentage of enterprises expecting an increase in prices of their products and services. This percentage rose in April. It is, however, encouraging that the share of enterprises expecting no changes in their prices over the next six months reached a record high (86.1%).

The high share of enterprises expecting an increase in prices of their products and services over the next three months is most probably due to the expected electricity price hike.

[4] 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.

Text box 3: Falling inflation expectations precede actual y-o-y inflation

Inflation expectations of economic agents play an important role in monetary policy and communication of inflation targeting central banks, particularly when inflation deviates from the target for a prolonged period. Such deviation, as a rule, prompts the deviation of inflation expectations and creates the risk of longer than usual off-target inflation episodes. Therefore, an important concern for policymakers is how quickly inflation expectations return within the target tolerance band.

As shown by experiences of other countries with off-target inflation episodes, inflation expectations do return to the target, but usually only after inflation itself returns to the target. Based on the analysis of 24 off-target inflation episodes in 14 countries[1], two important conclusions can be drawn: a) inflation expectations deviate less than inflation; b) inflation expectations deviate from the target more persistently than inflation. Inflation expectations return to their average value only around six quarters after inflation itself returns to the target.

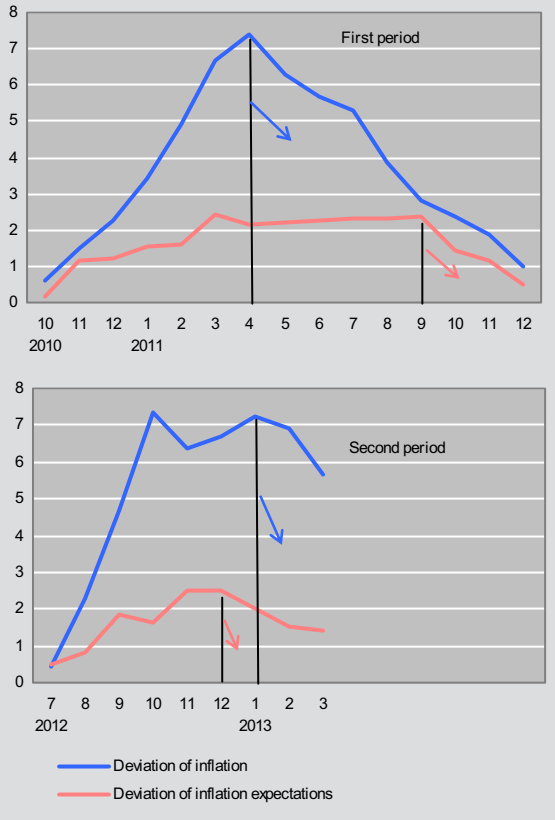
Y-o-y inflation in Serbia has moved above the upper bound of the target tolerance band since July 2012. This is why one-year ahead inflation expectations have also been on a rise. A similar situation was recorded in late 2010 and early 2011. In both of these periods, inflation deviated from the upper bound of the target tolerance band primarily on the back of growth in food prices, caused by a bad agricultural season and a sharp rise in world food prices. However, the peak in y-o-y inflation was higher in the former (14.7% in April 2011) than in the latter period (12.9% in October 2012). Chart O.3.1 shows that initial deviations of inflation from the upper bound of the target tolerance band rise sharply in both periods, reaching an almost identical peak six months later (7.4 pp in the first and 7.3 pp in the second period). Thereafter, deviations decrease as the effects of the shock wear off.

As shown in charts, deviations of one-year ahead inflation expectations from the upper bound of the target tolerance band reach an almost identical peak after five months (2.4 pp in the first and 2.5 pp in the second period), while in the first period considerable deviation continues into the following five months. Expectations deviate much less than inflation in both periods. Their deviation, however, lasts longer in the first period – they begin to fall five months after inflation declines. In contrast to other countries, the second period shows a positive tendency – a decline in inflation expectations precedes actual inflation.

The beginning of fall in inflation expectations before inflation itself may indicate greater credibility of economic policy. It also reflects efficient communication of the National Bank with the public.

Chart O.3.1 **Deviation of inflation and inflation expectations from the upper bound of the target tolerance band**

(in pp)



Sources: Bloomberg and NBS.

[1] The Czech Republic, Hungary, Norway, Poland, Sweden, Great Britain etc; see: Corder, M and Eckloff, D (2011), 'International evidence on inflation expectations during sustained off-target inflation episodes', Bank of England Quarterly Bulletin, Vol. 51, No. 2, pages 111–15.

IV. Inflation determinants

1. Money and capital market trends and bank lending

Interest rates

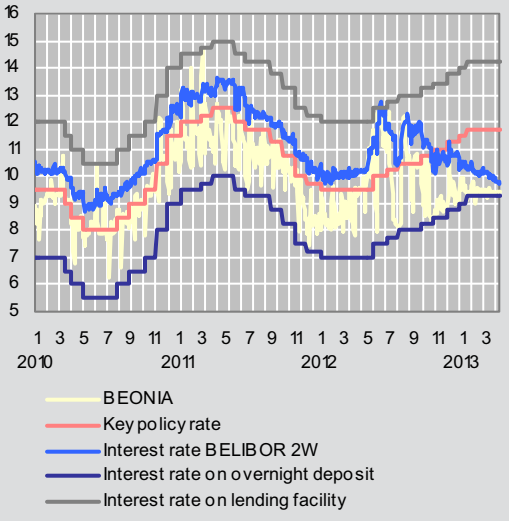
Increased dinar liquidity of the banking sector drove down money market rates in Q1.

Money market rates drifted down in Q1 on account of increased bank liquidity stemming primarily from the monetisation of government FX deposits. As a result, banks' demand at NBS repo auctions was rising throughout the period which, coupled with the withdrawal of a limited amount of liquidity through reverse repo auctions, pushed down the weighted average rate in securities sale to 9.28% by end-March. At the same time, banks retained large amounts in overnight accounts with the NBS.

As bank liquidity went up, demand in the overnight money market contracted. Average daily trading volumes shrank to RSD 1.3 bln, down by RSD 5.2 bln on Q4 2012. The volatility of BEONIA declined further. BEONIA mirrored the weighted average rate at repo auctions throughout the review period. It moved slightly above the rate on overnight deposits with the NBS.

Rates of all maturities, notably long-term, headed down in the interbank money market. Average monthly three- and six-month maturity rates were by 0.9 pp lower in March than in December 2012. In the same period, average

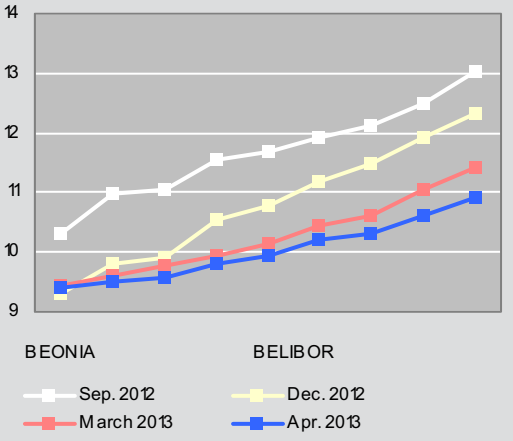
Chart IV.1.1 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

Elevated banking sector liquidity drove further down money market rates.

Chart IV.1.2 **Yield curve in the interbank money market**
(average values, p.a., in %)



Sources: Thomson Reuters and NBS.

In March and April, average monthly BELIBOR rates of all maturities trended below the key policy rate.

monthly rates of all maturities trended below the key policy rate and ranged from 9.6% to 11.4%.

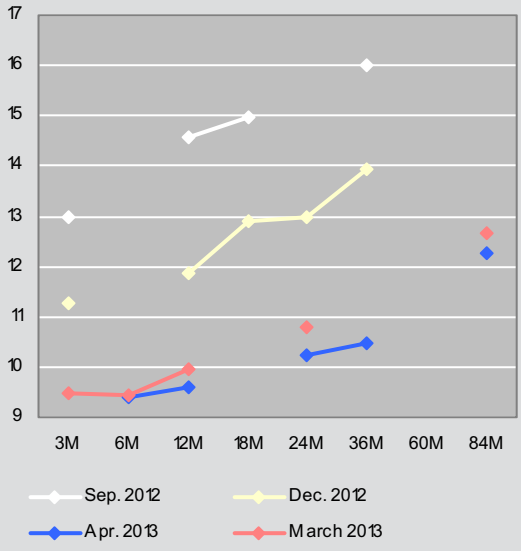
Money market rates continued down in April and trading in the overnight interbank market receded.

Q1 saw a further decline in rates in the primary market of dinar government securities, set in train in Q4 2012 with the stabilisation of the dinar, adoption of the fiscal consolidation plan and elevated liquidity in the international capital market. Rates declined also on account of successful sales of eurobonds, which lessened the pressure relating to the collection of domestic funds. Rates of all maturities lost more than 1.8 pp and the weighted average rate fell 2.1 pp to 10.4%. At end-Q1, rates moved from 9.45% for six-month to 12.65% for new, seven-year maturities, which is why the dinar yield curve lengthened. Owing to heightened non-resident demand for government dinar securities, the entire volumes were sold at most auctions and the performance rate went up by almost 13 pp to 87.6%. Securities worth nominal RSD 96.3 bln were sold in Q1 (of total RSD 110 bln) and RSD 74.4 bln fell due. As a result, the stock of debt in respect of sold dinar securities went up by RSD 22.0 bln to RSD 376.5 bln.

Three auctions of euro-denominated securities were held in Q1, at 100% performance. The auctions closed at 3.9% for one-year and 4.9% for two- and three-year maturities. Compared to last auctions, one- and three-year[5] maturity rates lost 1.8 pp and 0.1 pp respectively, while the two-year maturity rate stayed flat. At auctions held in Q1, securities were sold at nominal EUR 130.0 mln, while the value of securities due was EUR 204.9 mln. By end-March, the stock of debt came at EUR 939.7 mln.

The secondary market featured falling rates and higher trading volumes. Yield to maturity rates ranged in March from 9.4% for one-month to 13.7% for eleven-month maturity. Relative to the quarter earlier, trading volumes went up 80% to RSD 71.7 bln in Q1. Excluding trading up to two business days from the primary settlement date,

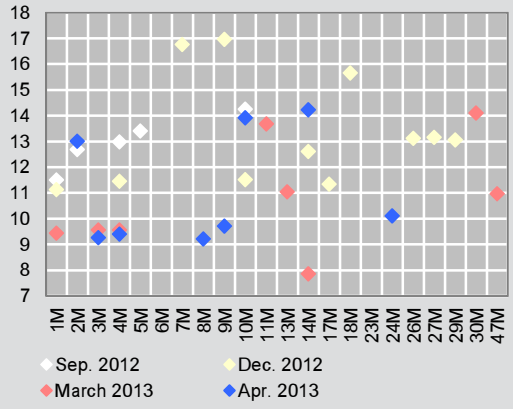
Chart IV.1.3 **Interest rates in the primary market of government securities**
(p.a., in %)



Source: Ministry of Finance and Economy.

The dinar yield curve narrowed further in Q1, while in March it was lengthened to seven years.

Chart IV.1.4 **Yield rates in the secondary market of government securities***
(weighted average values, p.a., in %)



Sources: Ministry of Finance and Economy and Central Securities Depository.

* Excluding all trading up to two business days from the day of primary trading settlement and including all trading above RSD 5 mln.

Yield rates in the secondary market continued down in Q1.

[5] The previous three-year maturity auction was held in May 2011, and the one-year auction in October 2012.

trading volumes were RSD 14.2 bln, up by RSD 2.7 bln from the previous quarter.

Another successful eurobond auction was held in February – seven-year bonds were sold at USD 1.5 bln, at the yield rate of 5.15% (the coupon rate 4.875%). This time as well, investor demand considerably exceeded supply.

The slow decline in rates on government securities continued in April, both in primary and secondary markets.

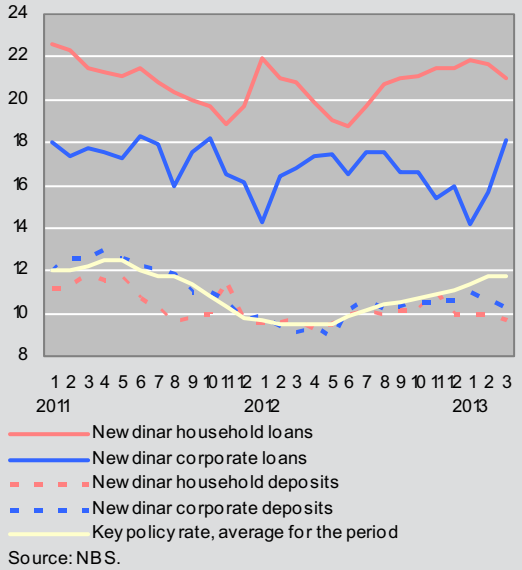
The weighted average rate on new dinar corporate and household loans rose 1.9 pp to 19.3% in March. At the same time, rates on corporate loans went up and those on household loans declined.

The price of dinar corporate loans increased 2.2 pp to 18.1% in March. This was due to rising rates on current asset loans (by 3.5 pp to 19.0%) which accounted for more than a half of new dinar loans. High rates on investment loans also gave a contribution, though smaller – these rates amounted to 18.3% in March, up by 1.9 pp on end-2012. Rates on other corporate loans shed 0.7 pp and arrived at 16.1%. The sharpest drop was recorded for rates on export loans (3.8 pp) with a negligible share in new loans.

Rates on dinar household loans were down 0.5 pp to 21.0% in March, due mainly to falling rates on cash loans (down 0.5 pp from end-2012 to 21.0% in March). In the same period, rates on consumer loans fell 1.8 pp to 21.8%.

Rates on new euro loans and dinar euro-indexed loans lost 0.1 pp in Q1 and came to 8.0% in March. This reflected a 0.1 pp drop in corporate rates, to 7.9% in March. Rates on corporate loans edged down on the back of a 0.2 pp decline in current asset loans (to 8.4%), which may be associated with the extension of subsidised loans. Rates on investment and other loans fell 0.1 pp and 0.8 pp, to

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

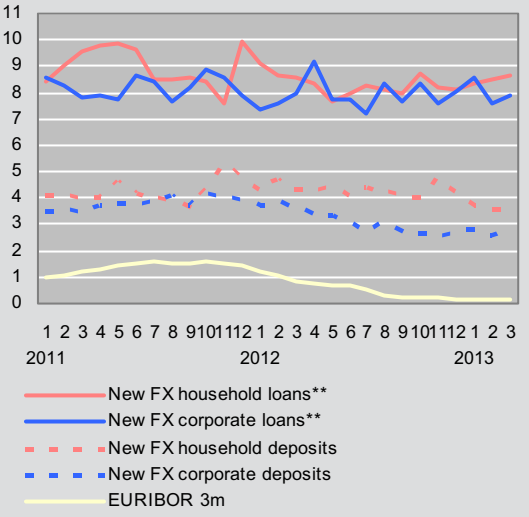


Source: NBS.

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

All rates on dinar loans and deposits went down in Q1, apart from rates on corporate loans.

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 price of household FX borrowing increased in Q1, while rates on FX savings declined.

7.0% and 7.7% respectively. Household loan rates picked up 0.6 pp to 8.7% as rates on housing (0.2 pp) and consumer loans (1.7 pp) expanded. Rates on other loans lost 2.0 pp.

Relative to end-2012, weighted average rates on new dinar, both household and corporate deposits fell 0.3 pp in March, to 9.7% and 10.3% respectively. Rates on euro savings deposits were down 0.6 pp to 3.5% for households, while remaining flat in the corporate sector – 2.7% in March.

In Q1, interest margins were up 2.2 pp on dinar and 0.3 pp on FX sources of funding.

Stock exchange trends

Indices on the Belgrade Stock Exchange trended further up in Q1. Trading volumes expanded as well.

On a rise since December 2012, prices of shares on the Belgrade Stock Exchange (BSE) continued up in January. They rose further until end-Q1 though at a slower pace. BELEX15 edged up 10.1% to 576.7 index points by end-March. BELEXline was up 7.9% to 1,085.3.

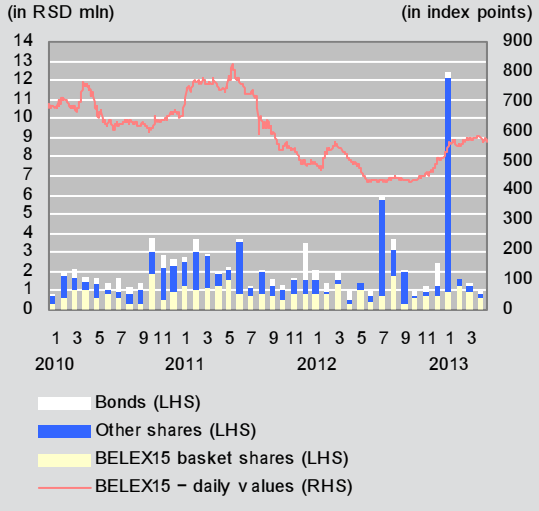
The above movements may be associated with positive investor expectations regarding macroeconomic performance in 2013 – economic growth, lower inflation and higher exports. Adoption of the fiscal consolidation programme and stability of the dinar also boosted the investor sentiment.

Trading in shares came at RSD 14.9 bln in Q1, mainly on account of block trading. But for this transaction, trading was RSD 4.1 bln, up by RSD 1.1 bln on Q4. Of this, trading in shares within BELEX15 equalled RSD 3.1 bln, up by 56.6% on Q4 2012.

Foreign investors were more active on the purchase than sale side – they bought RSD 0.6 bln net in Q1.

Trading in frozen FX savings bonds amounted to mere RSD 0.3 bln, down from RSD 1.5 bln in Q4. Yield to maturity rates also declined and ranged from 4.2% for A2016-series to 4.6% for A2014-series. An increase was noted only for the yield on bonds due this year – by 0.9 pp to 5.7%.

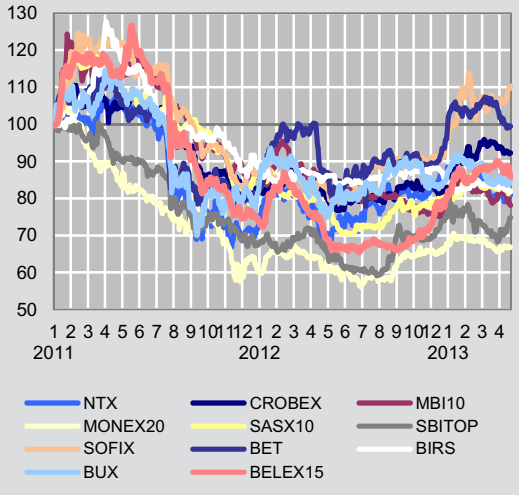
Chart IV.1.7 **BELEX15 and Belgrade Stock Exchange turnover**



Source: Belgrade Stock Exchange.

A rise in share prices was accompanied with higher trading volumes in Q1.

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



Sources: BSE and regional stock exchanges.

The stock exchange in Belgrade was among the ones that recorded a rise in indices.

In the course of Q1, corporate bonds were traded only in January when three transactions accounted for RSD 158.6 mln.

As share prices increased, the BSE market capitalisation grew in Q1 by RSD 36.9 bln to RSD 813.1 bln by end-March. Broken down by segment, capitalisation of the regulated market was up RSD 35.6 bln to RSD 491.3 bln, while the MTP[6] capitalisation rose RSD 1.3 bln to RSD 321.8 bln. The share of market capitalisation in estimated GDP picked up 0.4 pp to 23.3% in March.

Apart from the BSE, indices also rose in Zagreb (15.4%) and Sofia (11.2%). Indices of Montenegrin, Banja Luka and Budapest stock exchanges declined somewhat, while the Ljubljana index lost 6.7%.

BELEX15 and BELEXline fell a tad in April (3.0% and 2.4% respectively) and trading volumes contracted by one third. At the same time, indices on regional stock exchanges recorded minimum changes.

Monetary aggregates

All monetary aggregates declined in Q1, though less than usual for this time of the year.

In Q1, total reserve money lost 1.0% (RSD 6.2 bln) nominally and 2.1% in real terms. Dinar reserve money narrowed by 1.5% (RSD 4.7 bln) and 2.6% in nominal and real terms respectively.

Dinar reserve money was created mainly on account of more intensive government spending, and sterilised in open market operations. Borrowing in the international market through the issue of seven-year eurobonds drove up balances in the government FX account by EUR 1.1 bln, including net FX reserves. In February and particularly in March, the government converted into dinars and spent a portion of its FX deposits, thus providing a major impetus to reserve money. Government dinar spending in February also benefited the rise in reserve money. The liquidity created was withdrawn through open market operations – RSD 35.2 bln via the repo sale of securities.

In the structure of dinar reserve money, cash in circulation contracted RSD 8.4 bln, as customary for the year start. Bank dinar reserves[7] went up RSD 2.2 bln. Throughout Q1, banks were building up balances in their overnight deposits with the NBS. Required reserves allocated in dinars gained RSD 1.0 bln and dinar deposits of local authorities added RSD 1.5 bln.

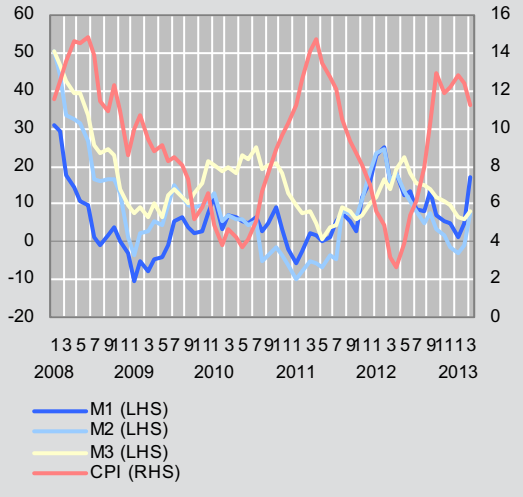
Money supply declined in quarterly real terms, with dinar monetary aggregates M1 and M2 down by 0.2% and 1.5%

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

	2012			2013	Share in M3 March 2013 (%)
	June	Sep.	Dec.	March	
M3	12.0	3.2	-2.5	-2.7	100.0
FX deposits	15.1	5.7	2.2	-2.5	70.5
M2	4.9	-2.3	-12.2	-3.2	29.5
Time and savings dinar deposits	0.8	-9.4	-21.1	-15.8	10.3
M1	7.7	2.6	-6.3	5.2	19.2
Demand deposit	1.7	0.1	-1.6	18.1	12.9
Currency in circulation	18.5	6.9	-13.7	-14.1	6.3

Source: NBS.

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



Sources: SORS and NBS.

The decision of economic entities to keep funds in the most liquid accounts gave the strongest boost to acceleration in y-o-y growth in money supply in Q1.

[6] 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.

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

respectively. The broadest aggregate M3 also dropped, by 2.2%. In real y-o-y terms, M1 gained 5.2%, while M2 and M3 shed 3.2% and 2.7% respectively.

The fall in M3 was chiefly due to private sector lending, notably that of companies. Total net effect of government's activity on the contraction in M3 was smaller as part of it served to lift up the M3 aggregate. More precisely, the new eurobond issue drove down net claims on the government and propped up net FX reserves.

Broken down by M3 component, a rise was noted only for demand deposits (RSD 11.3 bln), mainly balances in accounts of public enterprises and other financial institutions. In addition to cash in circulation, savings and term deposits also decreased, by RSD 4.8 bln. The stock of euro deposits remained largely unchanged from end-2012. In addition, balances in accounts of households and public enterprises went up, while those of companies shrank. Though less than in Q4 during the "savings week", FX savings went up in Q1 (EUR 103.0 mln) more than customary for this period of the year. Dinar savings were also on the up (RSD 1.1 bln), notably deposits termed up to three months and those from six months to one year.

The monetary multiplier remained almost unchanged from Q4 2012. The velocity of circulation slightly accelerated in Q1, consistently with economic growth.

Though dinar deposits declined, increased cash in circulation raised up dinar monetary aggregates in April. M3 contracted under the impact of falling FX deposits and dinar's appreciation.

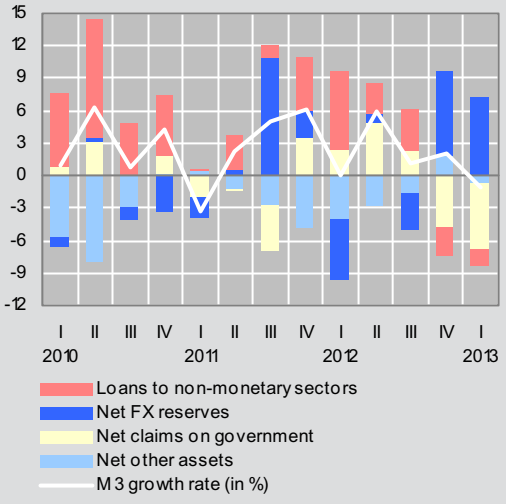
Bank lending

Bank lending slackened further in Q1 – it practically stagnated y-o-y and declined in quarterly terms.

Y-o-y growth in domestic lending slackened further in Q1. It reached 1.8% in March excluding the exchange rate effect[8].

At the quarterly level and excluding the exchange rate effect, domestic lending slowed 0.4%. As loan

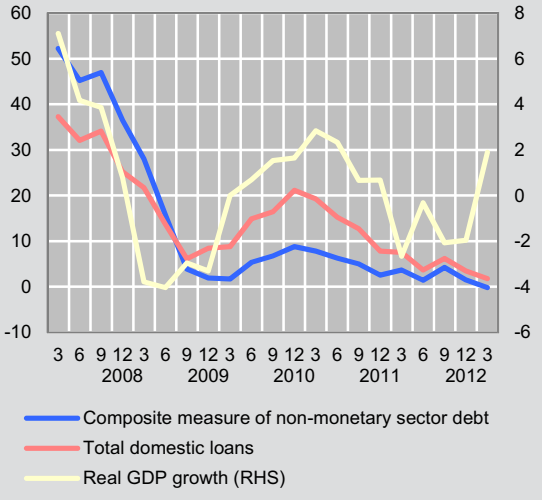
Chart IV.1.10 **Contribution to M3 3-month growth rate**
(in percentage points)



Source: NBS.

A drop in net domestic assets impacted on a decline in M3 in Q1.

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



Sources: NBS and SORS.

In contrast to economic activity, there are still no signs of recovery of lending activity.

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

receivables declined, their share in estimated GDP also fell – by 2.4 pp to 53.4% at end-Q1, as a result of contraction in corporate lending.

Sources of funding expanded based on rising dinar deposits. Though household FX savings deposits went up, the level of total FX deposits remained flat on end-2012. However, throughout Q1 banks favoured non-risk investment as they continued to step up investment in repo securities. They also tapped into funds for the purpose of external debt repayment.

Excluding the exchange rate effect, corporate lending fell 0.9% at the quarterly level, or RSD 8.3 bln in absolute terms. Corporate loan receivables rose only in February, which may be linked to the extension of subsidised loans to entrepreneurs and SMEs. In Q1, new corporate lending lost c. 30% q-o-q, or 17% y-o-y. As usual, current asset loans were dominant among fresh loans.

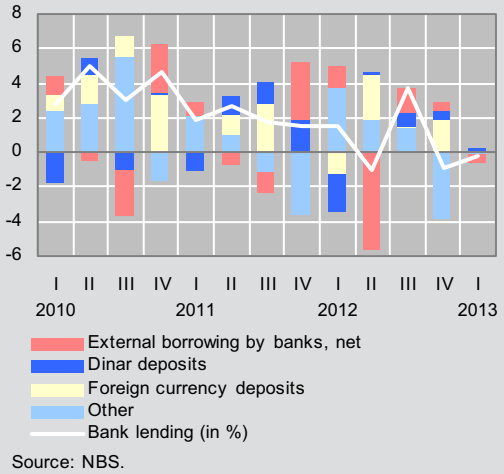
Household lending rose mildly in Q1 – RSD 3.8 bln or 0.7% excluding the exchange rate effect. Cash and housing loans were prevalent among new loans. Consumer loans were used somewhat more than in Q4 2012, while the most expensive form of borrowing – credit cards and current account overdrafts, stayed unchanged.

Subsidised lending abated relative to Q4 – it totalled RSD 36.9 bln, of which RSD 35.0 bln concerned liquidity and current asset loans. The extension of subsidised loans, recorded over February and March, will most probably be suspended as budgetary funds earmarked for these purposes have been spent. Subsidised housing lending showed a relatively stable dynamics throughout the review period (RSD 1.9 bln).

The share of dinar in total corporate and household loans rose 0.2 pp from December 2012 to 28.2% in March. The share of dinar loans went up in the household (0.9 pp) and declined in the corporate sector (0.2 pp). Excluding the exchange rate effect[9], the share of dinar in total loans fell 0.1 pp to 27.9% in March.

The NPL share was 19.9% in March (gross principle), up by 1.3 pp on end-2012. The rise in NPLs was more pronounced in the corporate sector (1.6 pp) – 20.8% in March. The loan repayment capacity of households

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

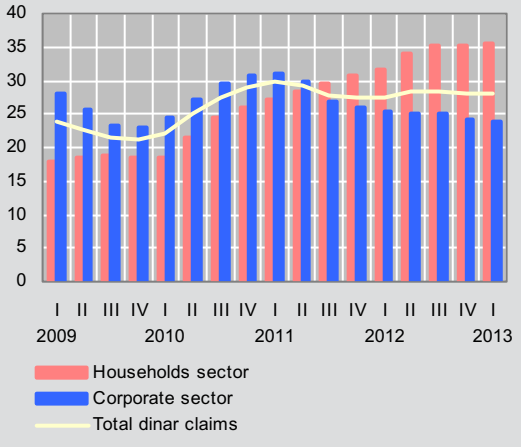


Source: NBS.

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

A rise in bank dinar claims on the NBS and shrinking external liabilities impacted negatively on growth in lending activity.

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



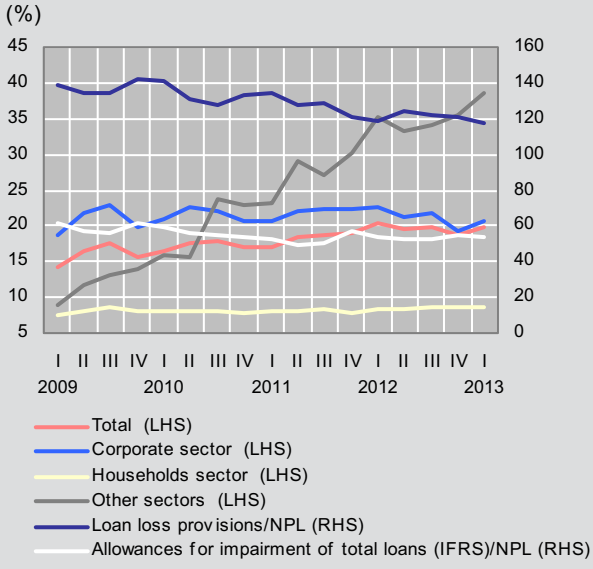
Source: NBS.

* Excluding the exchange rate effect.

The share of dinar loans increased in the household sector Q1, while it went down in the corporate sector.

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

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



Source: NBS.

The share of NPLs in total loans has increased since early 2013.

worsened somewhat from end-2012 (0.2 pp) and equalled 8.7%[10] in March.

Despite the high NPL share, the capital adequacy ratio of 20.4% in March is indicative of unimpaired stability of the domestic banking sector. Allowances for impairment were 53.7% of NPLs in March. At 117.3%, loan loss provisions fully covered the level of NPLs in March.

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

Set in motion in the previous quarter, appreciation of the dinar continued into Q1. The NBS intervened in the IFEM by buying foreign exchange.

The exchange rate ranged from 111.1 to 112.4 dinars per euro in Q1, exhibiting daily volatility of ±0.4%. Both end-of-period and average figures for Q1 show that the dinar appreciated against the euro by 1.6%.

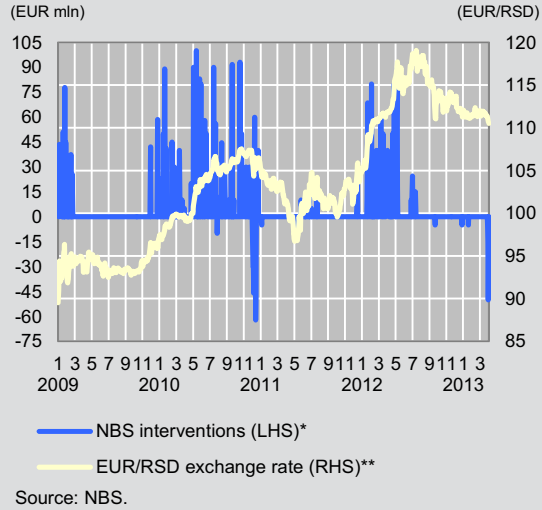
The dinar's strengthening against the euro, parallel with the euro's advancing against the dollar, led to an average 3.4% gain of the dinar against the dollar relative to Q4. End-of-period, the dinar weakened 1.4% against the dollar as the greenback started strengthening vis-à-vis the euro from February onwards.

Consistent with these trends, the nominal effective exchange rate of the dinar[11] appreciated on average by 1.9% in Q1, ending the period 1.0% stronger than in Q4. With nominal appreciation and a domestic inflation rate higher than abroad, the real effective exchange rate of the dinar recorded average appreciation of 2.7% (2.5% against the euro and 3.5% against the dollar).

Moderate strengthening of the dinar in Q1 can be put down to several factors: tightening of the monetary policy stance, an increase in non-residents' interest in government securities amid ample liquidity in the international capital markets and lower risk aversion, and narrowing of the current account deficit.

In the course of Q1, clients sold more foreign exchange to banks than they bought from them. Domestic corporate

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



Source: NBS.

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

The dinar appreciated mildly in Q1.

[10] Including entrepreneurs, loan arrears also rose 0.2 pp, to 10.1%.

[11] 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).

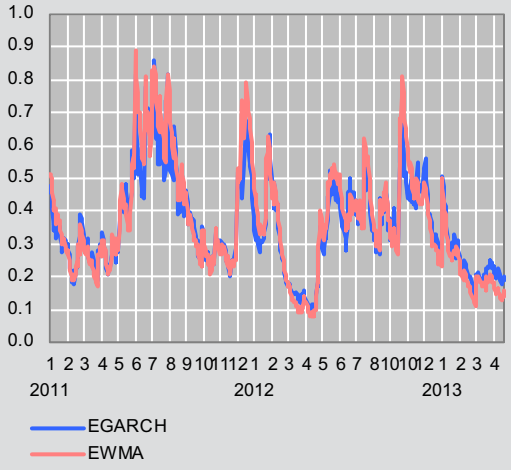
demand was unusually low and net sale of foreign exchange to this category of clients fell by around 30% both q-o-q and y-o-y. In general, most of the corporate demand comes from energy importers. As part of the energy imports funding was secured by borrowing abroad, the demand for foreign exchange subsided. With exports outpacing imports, the foreign trade deficit turned out considerably lower in Q1. Coupled with a stable inflow of remittances, this brought about a narrowing of the current account deficit and contributed to a mild strengthening of the dinar. The adoption of the fiscal consolidation programme and the strengthening of the national currency encouraged non-residents to invest into government dinar securities. Increased dinar liquidity, arising primarily from monetisation of government FX deposits, was mopped up mainly through open market operations, which means that no depreciation pressures arose on this account.

IFEM trading volumes continued contracting in Q1. Daily volumes averaged EUR 43.8 mln, down by around 41.0% both q-o-q and y-o-y. Low trading volumes can be attributed to weaker residents' demand, relatively high dinar and foreign exchange liquidity of banks and reduced volume of arbitrage-motivated trading by banks. During Q1, exchange rate volatility, measured by *EWMA*[12] and *EGARCH*[13] methods, decreased from one month to the next, recording the lowest average quarterly value since early 2011.

The NBS intervened in the IFEM twice in the course of Q1 – in January and February, by buying EUR 5.0 mln in an effort to ease excessive daily volatility of the dinar exchange rate. The NBS continued organising regular quarterly FX swap auctions to encourage the development of the interbank FX swap market. It swap bought and sold EUR 26.0 mln in Q1. In addition to quarterly auctions, as of March the NBS organises two-week FX swap auctions so as to facilitate liquidity management and increase the efficiency of the money market. The swaps consist of two legs and are organised under market conditions. The NBS swap bought and sold EUR 12.0 mln in March.

The dinar's rise continued in April (1.3%). The foreign exchange market was marked by heightened demand for dinars stemming from increased non-residents' investment in government securities. Foreign exchange supply increased also as a result of the purchase of foreign

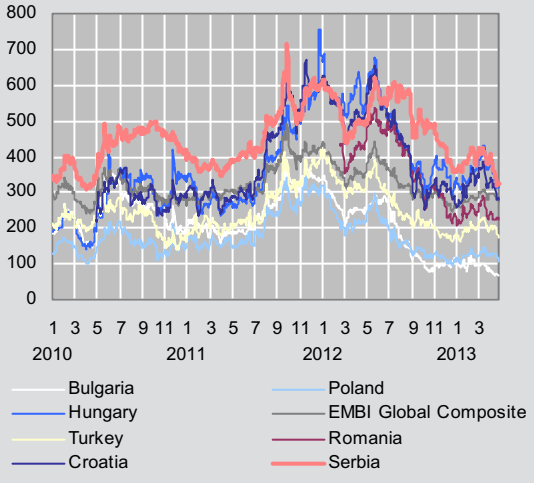
Chart IV.2.2 **Short-term volatility of the RSD/EUR exchange rate**
(in %)



Source: NBS.

Volatility of the dinar against the euro narrowed each month in Q1 .

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



Source: JP Morgan.

In Q1, risk premium rose the least in Serbia compared to other countries in the region.

[12] 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.

[13] 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. .

cash. After the European Commission recommended that negotiations for accession to the European Union should be opened with Serbia, the country risk premium went down and appreciation pressures gained further traction.

To ease excessive daily volatility of the exchange rate in late April, the NBS intervened three times in the foreign exchange market and bought a total of EUR 70.0 mln. In FX swap auctions, the NBS bought and sold EUR 20.0 mln, respectively.

The risk premium, measured by EMBI, increased across the region relative to end-2012. The smallest increase was registered for Bulgaria (5 bp) and Serbia (25 bp), and the largest for Hungary (84 bp), especially in March, as a consequence of the adoption of economic policy measures which led to a downgrade in the country's credit rating outlook and the weakening of the forint. Looking at average quarterly figures, the steepest decline is observed in EMBI for Serbia (70 bp) and Romania (45 bp). April saw a decrease in EMBI values for all countries in the region. Relative to end-March, EMBI for Serbia fell by 61 bp, to 355 bp.

In March, Standard & Poor's affirmed Serbia's credit rating at BB-, retaining the negative outlook.

In addition to the dinar, the Turkish lira and the Romanian leu appreciated against the euro in Q1 (1.4% and 1.0%, respectively, end-of-period). The currencies of other regional peers running a similar exchange rate regime lost against the euro, the loss being the sharpest in the case of the Hungarian forint (4.3%).

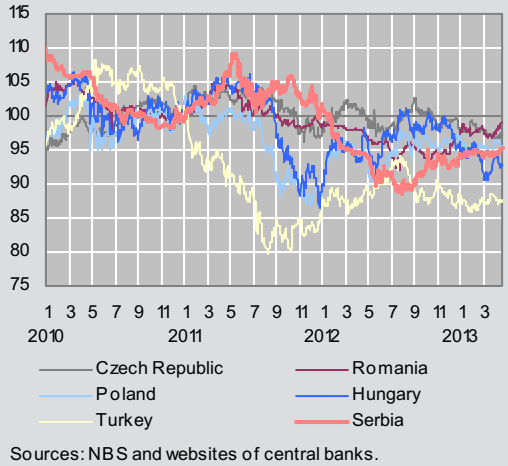
Foreign capital inflow

Most of the capital inflows in Q1 came from government borrowing in the international financial market. Some of the inflow also came from FDIs, while residents reduced their foreign credit liabilities.

High capital inflow and a low current account deficit brought about a rise in foreign exchange reserves and aided the strengthening of the dinar.

Capital inflow stemmed mainly from portfolio investments, and to a lesser extent, from FDIs. Government disbursement of financial loans stepped up, and so did corporate disbursement of trade loans. Banks, the National Bank of Serbia and the corporates reduced their foreign credit liabilities in the course of Q1.

Chart IV.2.4 **Movements in exchange rates of national currencies against the euro**
(daily data, December 31, 2012 = 100)

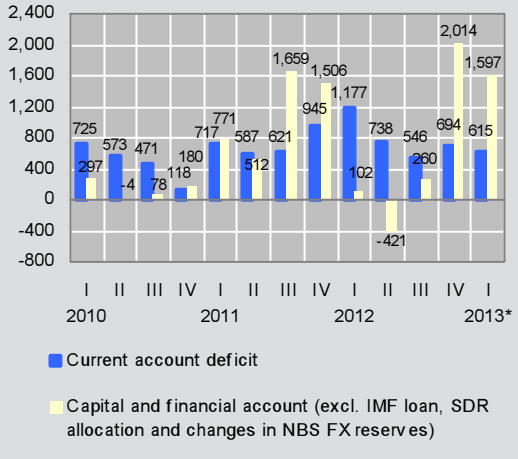


Sources: NBS and websites of central banks.

* Growth indicates appreciation.

In the course of Q1, the dinar strengthened more than currencies of countries running similar exchange rate regimes.

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



Sources: SORS and NBS.

* Preliminary data.

The net capital inflow exceeded many times the needs for financing the current account deficit in Q1.

Net FDI inflow totalled EUR 155.3 mln in Q1. Most of these investments were channelled in financial services (29.5%), wholesale trade (27.1%), production of beverages (14.6%) and construction (12.9%).

Portfolio investments accounted for an inflow of EUR 1.4 bln. Of this amount, EUR 1.1 bln was generated by the February issue of seven-year RS eurobonds in the international financial market. A part of the funds secured through eurobond issue was used for the settlement of government liabilities under costly loans disbursed in the prior period. Thus, the government made an early repayment of USD 400.0 mln worth of debt to the London Club creditors by the end of April. Besides, non-residents' interest in government securities in the domestic market continues to grow. In Q1 alone, these investments provided an inflow equivalent to that registered in 2012 as a whole.

In Q1, residents net repaid their debt under foreign financial loans by EUR 199.0 mln. Banks net repaid EUR 327.0 mln, mostly long-term debt, and enterprises EUR 32.5 mln. Net government liabilities under foreign financial loans went up by EUR 160.4 mln.

Q1 also saw a EUR 70.7 mln rise in the corporate sector's net borrowing under trade loans.

An outflow of EUR 146.9 mln was registered on account of repayment of the principal to the IMF.

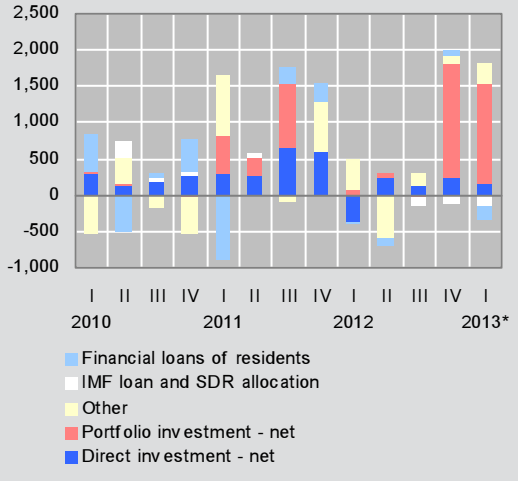
3. Aggregate demand

Aggregate demand is estimated to have risen in Q1 on the back of an increase in net exports. Domestic demand stagnated in s-a terms due to a drop in government investments.

According to the Statistical Office, aggregate demand in 2012 declined by 1.7%. Observing the structure of aggregate demand, the negative contribution came from private consumption (-1.5 pp) and private investments (-1.0 pp), while the positive impulse originated from government consumption and investments (0.5 pp), attributable to fiscal expansion in H1. Net exports contributed 0.3 pp, as a result of automobile exports launched in H2.

Aggregate demand registered a 1.5% quarterly growth in Q1, primarily driven by an increase in net exports (1.5 pp). Observed year-on-year, stronger net exports gave a positive contribution (5.6 pp) to a 1.9% rise in aggregate demand.

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

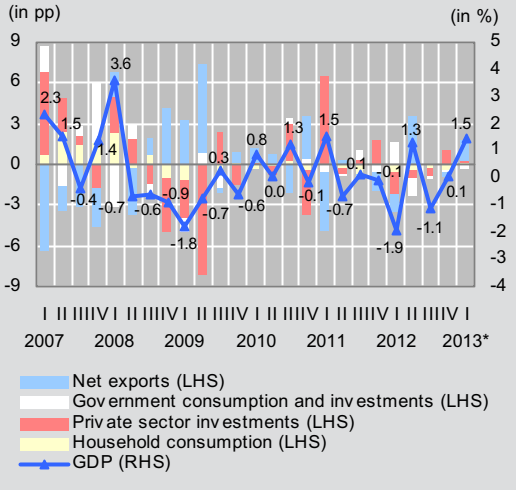


Sources: SORS and NBS.

* Preliminary data.

The most important capital inflow in Q1 was recorded on the basis of government borrowing in the international market.

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



Sources: SORS and NBS.

* NBS estimate.

GDP growth in Q1 was mostly driven by net exports and, to a lesser degree, by an increase in private consumption and investments.

Domestic demand stagnated in quarterly terms, whereas y-o-y it continued to subside at the same rate as in the previous quarter.

Following a drop in Q4, net exports recorded a 5.7% upswing in Q1. The increase is most notable on a y-o-y level (18.1%), which is largely attributable to the low base, caused by an extremely cold spell in February 2012.

We estimate that in 2013, aggregate demand led by net exports (contribution to GDP 1.5 pp) will increase by around 2.0%. The projection is based on the anticipated boost in the export of automobiles and petroleum products. A positive contribution is also expected from private (1.3 pp) and government investments (0.5 pp). On the other hand, private (-0.8 pp) and final government consumption (-0.5 pp) will have a dampening effect on account of anticipated effects of fiscal consolidation measures.

Domestic demand

All components of domestic demand, save government investments, recorded an s-a rise from the quarter before, whereas y-o-y, all components except private investments continue to contract.

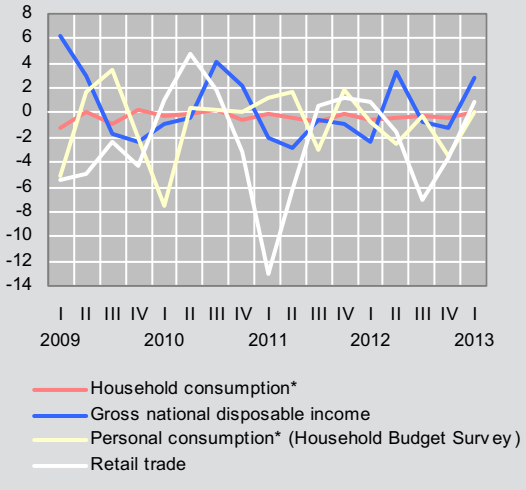
A fall in private consumption is estimated to have decelerated y-o-y to 1.8% in Q1 (contribution -1.6 pp), moving in the negative zone for eight consecutive quarters. This component of aggregate demand has borne the brunt of the financial crisis since its outbreak, almost constantly recording a y-o-y drop.

In s-a terms, private consumption edged up by 0.1% (contribution 0.1 pp) reflecting growth in real household income in Q1 and a mild recovery of retail trade.

NBS estimates indicate that real household income rose by 3.2% s-a, pushed up largely by increased remittances. Household consumer lending and the wage bill also went up, while social transfers fell. Retail trade perked up by 0.8% relative to the previous quarter, although y-o-y its decline accelerated to 11.6% (from 11.1% in Q4).

In Q1, **private investments** are estimated to have risen from a quarter earlier by 3.9% y-o-y (contribution 0.7 pp) and by 0.9% s-a (contribution 0.2 pp). This is indicated by an increase in the physical volume of the production of capital goods, equipment imports and net FDI inflow in the observed period.

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

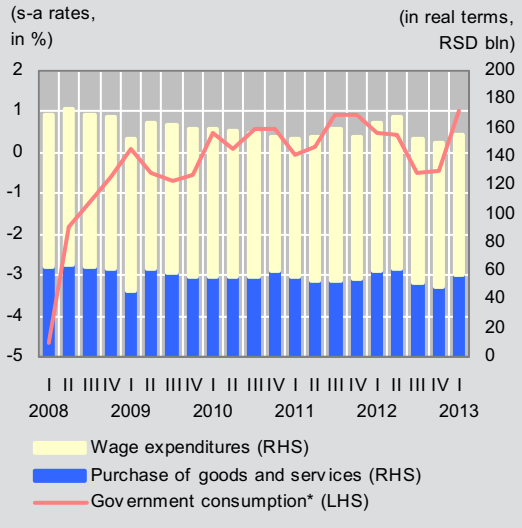


Source: NBS.

* NBS estimates for Q4 2012.

Early 2013 saw a mild recovery of retail trade.

Chart IV.3.3 **Government consumption**



Source: NBS.

* NBS estimate for Q1 2013.

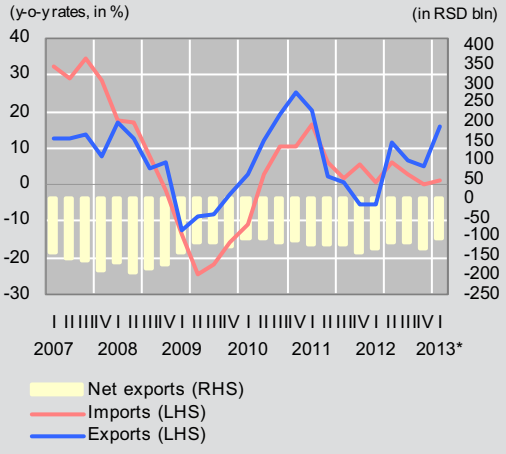
Government outlays for the purchase of goods and services recorded the largest increase in Q1.

Table IV.3.1 **Investment indicators**

	2012				2013
	Q1	Q2	Q3	Q4	Q1
Real indicators (seasonally-adjusted, quarterly growth, in %)					
Construction	-2.3	-1.4	-6.5	-10.8	2.3*
Industrial production of capital goods (physical volume)	-3.2	5.8	2.6	-1.5	26.9
Exports of capital goods**	10.8	9.3	0.8	-0.9	2.4
Imports of capital goods**	-2.6	1.9	-4.5	-11.7	3.3
Stocks of capital goods	-7.8	-10.4	1.9	3.7	-1.0
Industrial production of intermediate goods (physical volume)	-5.2	6.0	-8.7	-1.4	-1.1
Exports of intermediate goods**	-13.7	4.1	-3.5	4.3	7.9
Imports of intermediate goods**	6.9	0.3	-6.0	4.0	1.3
Stocks of intermediate goods	-3.2	4.2	-4.0	2.7	4.9
Industrial production of construction materials (physical volume)	-7.2	2.2	-2.2	-1.4	-4.3
Inventories of construction materials	-8.2	-3.8	1.2	1.1	-4.8
Government investment***	53.1	-30.3	-2.2	-2.3	-17.2

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

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



Source: NBS.
* NBS estimate.

Export in Q1 registered a strong y-o-y growth triggered by the continued expansion in the automobile industry.

The highest negative contribution to y-o-y growth of aggregate demand in Q1 (-2.8 pp) arose from **government consumption and investments**, which are estimated to have fallen by 11.1%. The two components together recorded a q-o-q drop of 1.3% s-a (contribution -0.3 pp).

Y-o-y, government consumption shrank by 5.6% (contribution -1.2 pp), partly due to the base effect attributable to high consumption in Q1 2012. Relative to the previous quarter, final government consumption gained 1.0% (contribution 0.2 pp) mirroring real growth in government outlays for the purchase of goods and services.

On the other hand, government investments plunged y-o-y by 49.6% (contribution -1.6 pp). A slump of 17.2% s-a (-0.5 pp) from a quarter earlier is signalled by movements of consolidated capital expenditures.

Net external demand

Positive trends in the automobile industry exports recorded in Q4 2012 continued into Q1 2013, making net external demand a positive contributor to the recovery of aggregate demand.

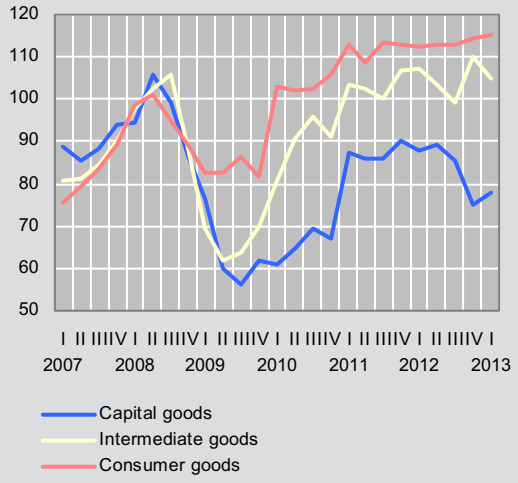
Net external demand increased 5.7% s-a in Q1, reflecting a faster real growth in exports (5.6%) relative to imports (1.3%). Y-o-y, net external demand stepped up (18.1%), adding 5.6 pp to the growth in aggregate demand.

Euro-denominated commodity exports grew 7.1% s-a in Q1, exerting a strong downward pressure on the current account deficit. The largest growth was recorded in manufacturing, where exports of motor vehicles and trailers climbed by 27.4% and exports of chemical products by 58.8%. Positive trends were also recorded for the exports of metal products and electrical equipment.

On the other hand, the declining trend of agricultural product exports from H2 2012 continued into Q1 2013 (-17.7%), but this was expected given the considerably lower agricultural yields last year. A fall was registered also for exports of pharmaceutical products and preparations (-10.1%).

Euro-denominated commodity imports grew 1.0% s-a in Q1. The strongest growth was recorded for imports of equipment (3.3%), which signals a recovery of investment activity. Imports of consumer goods also increased (0.8%), but those of intermediate goods declined (4.7%). In terms of economic destination, a rise was recorded for imports of capital goods and durable consumer goods, while the sharpest fall was registered for energy imports.

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



Sources: SORS and NBS.

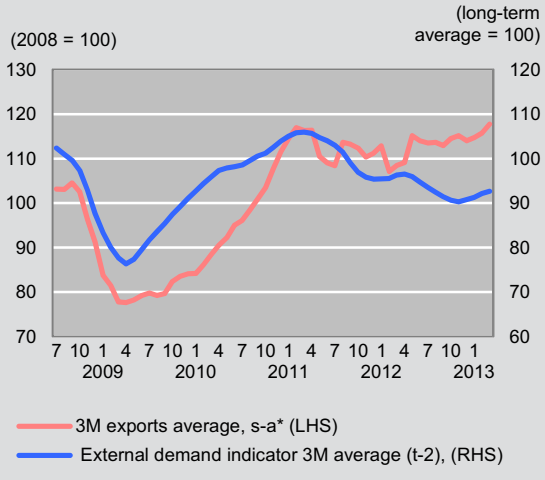
Higher equipment imports in Q1 signal a recovery of private investments in the coming period.

With s-a commodity exports growing faster than imports[14] in Q1, exports to imports ratio edged up by 3.1 pp from December (64.9% relative to 61.8%). At end-Q1, exports were 28.1% above and imports 14.4% below their pre-crisis levels[15].

A potential rise in exports in the coming months is also suggested by the indicator of external demand for Serbian exports[16], which picked up slightly in Q1. However, this indicator is still below its long-term average, meaning that no major growth in exports can be expected before a durable recovery of the euro area economy takes hold.

The rise in global oil prices, in train since late 2012, extended to January and the first half of February with the strengthening of optimism among market participants as regards the global economic recovery and the easing of uncertainties over fiscal problems in the United States. However, as the relevant indicators in advanced economies signalled a slower than expected economic growth, oil prices headed down from late February onwards. Political uncertainty in the wake of elections in Italy and the deepening of the banking

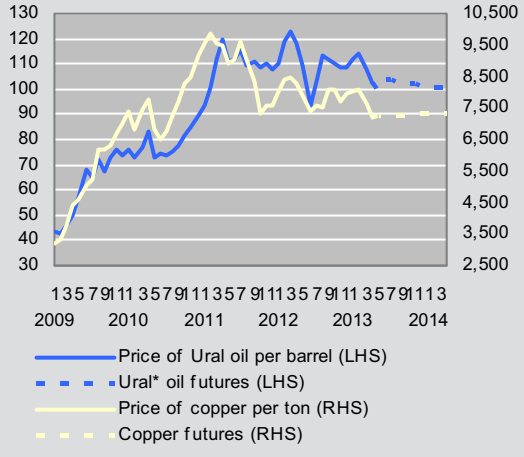
Chart IV.3.6 **External demand and Serbian exports**



Sources: European Commission and NBS.
* Excluding automobile industry.

Movements of key indicators for foreign trade partners signal increased demand for Serbian exports.

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



Sources: Bloomberg and NBS.

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

Global oil prices on average stagnated in Q1, however, a sharp drop is recorded as of April.

[14] 12-month moving average.

[15] H1 2008.

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

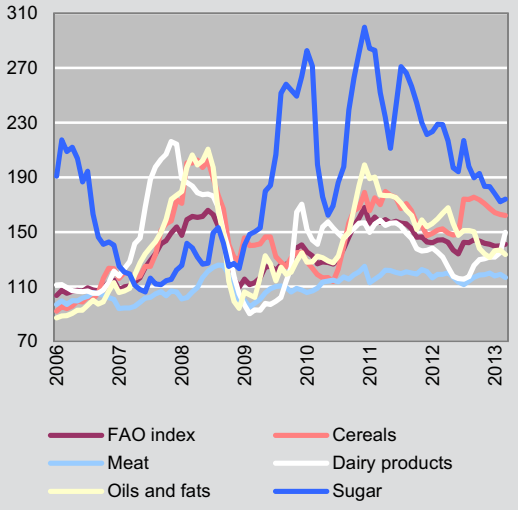
crisis in Cyprus put additional downward pressure on oil prices.

Ural oil entered a steep decline in early April, ending the month 6.5% lower relative to March. The fall reflected further deterioration in the global economic prospects, increased oil inventories in the United States and OPEC's lowered outlook for global oil demand.

Even though the price of copper remained broadly unchanged in Q1 relative to Q4 in terms of quarterly averages, end-of-period figures indicate a 4.2% decline. The pattern of copper price movements is very much similar to that exhibited by oil prices, which shows that the same factors determined the balance in both markets.

Global food prices continued down in Q1. The global food price index lost 1.2% on average from a quarter earlier, mostly due to cereal and sugar prices, whose fall extended to Q1 as a result of more favourable weather conditions than in the previous season. Meat prices also edged down following a decrease in the price of animal feed. On the other hand, dairy prices recorded yet another relatively high quarterly increase amid a reduction in milk supply caused by the long-lasting drought in New Zealand, one of the world's largest dairy exporters.

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



Sources: FAO, UN.

World food prices continued to decline in Q1 owing to lower prices of cereals and sugar.

4. Economic activity

Following a decline in 2012, the economy is expected to pick up in 2013 driven by a rebound in agriculture and industrial production. Economic recovery will also induce some further narrowing of the negative output gap in Q1.

The Statistical Office data for 2012 indicate that the economy shrank by 1.7% in real y-o-y terms. The GDP fall may primarily be attributed to a decline in agricultural activity (-17.1% y-o-y, GDP contribution -1.5 pp) caused by the extensive drought, but also to a fall in construction and industry.

Positive economic tendencies observed in late 2012 continued in early 2013. Estimated growth in Q1 is 1.5% s-a, primarily prompted by a boost in agricultural (contribution 0.6 pp)[17] and industrial production (contribution 0.2 pp).

The physical volume of industrial production in Q1 recorded a 0.9% s-a increase. Quarterly boost was recorded in mining (3.8% s-a, contribution 0.3 pp) and electricity, gas and steam supply (3.1% s-a, contribution 0.7 pp), whereas manufacturing receded by 0.1% s-a (contribution -0.1 pp).

Within manufacturing, chemical products (0.8 pp) generated the greatest positive contribution to the increase in the physical volume of overall industry. Motor vehicle production reported a surge of 20.2% s-a (0.5 pp), signalling a continued improvement in automobile industry production in Q1. By contrast, the production of computers, electronic and optical products, as well as of coke and petroleum derivatives had a negative contribution (-1.3 pp and -1.1 pp respectively).

A positive contribution to quarterly GDP growth can be expected from a rebound in the construction sector (0.1 pp), given the low base from a quarter earlier. In addition, as retail trade picked up by 0.8% s-a in Q1, growth in the

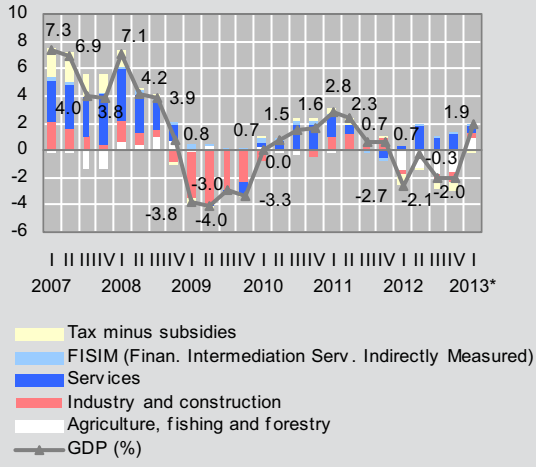
[17] Since full data on agricultural production indicators in Q1 are not yet available, the estimate of growth in Q1 is based on the percentage of the anticipated annual increase in this sector.

trade sector's gross value added (0.2 pp) will positively contribute to the economy.

Relative to the same period last year, we estimate that the economy will record a 1.9% rise in Q1, which will also be primarily led by growth in industrial (0.9 pp) and agricultural (0.8 pp) production. Favourable results in industry are attributable, to a degree, to the low base effect, as this sector was the hardest hit by the cold snap in Q1 2012. An impulse to y-o-y growth will come from the information and communications sector (0.6 pp), while the construction sector will give a negative contribution (-0.4 pp).

The physical volume of industrial production in Q1 recorded a strong y-o-y growth of 5.1%, with the major boost coming from manufacturing (3.5 pp). The highest y-o-y hike was noted in motor vehicle (247.8%) and petroleum derivatives production (47.8%), which jointly contributed 4.9 pp to the y-o-y industrial growth. On the other hand, a y-o-y downturn in the physical volume was registered in the production of computers and electronic equipment (-2.6 pp) and base metals (-0.6 pp).

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

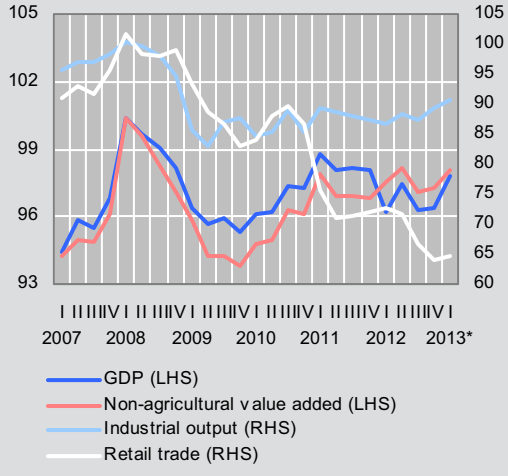


Sources: SORS and NBS.

* NBS estimate.

Y-o-y GDP growth in Q1 is attributable to the increase in agricultural and industrial production.

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

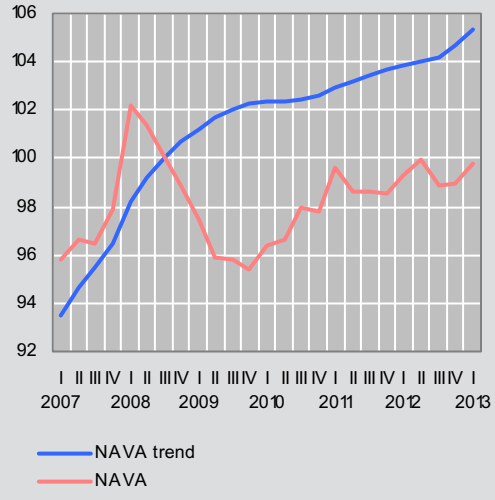


Sources: SORS and NBS.

* NBS estimate.

Larger industrial production and a mild recovery of retail trade indicate a continued rebound in economic activity in Q1.

Chart IV.4.3 **Output gap**
(Q3 2008 = 100)



Source: NBS.

The negative output gap slightly narrowed on the back of stronger economic activity in Q1.

[18] The assumed annual agricultural growth is based on the assumption of an average agricultural season, i.e. yields at the level of a ten-year average in the period 2001–2010.

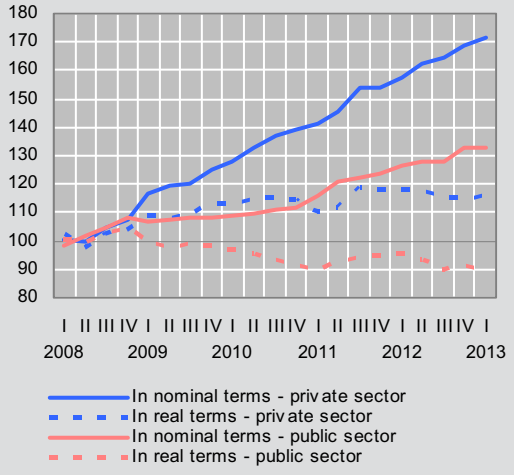
NBS estimate for 2013 puts GDP growth at around 2.0%. The largest positive contribution to economic recovery should be expected from agricultural (1.0 pp)[18] and industrial production (0.7 pp).

All industrial sectors are likely to pick up in 2013. Manufacturing is expected to add most to GDP growth (0.5 pp), while a lesser contribution will be generated by the mining and electricity, gas and steam supply sectors (0.1 pp each).

The expansion of the automobile industry that commenced in H2 2012 will continue this year. Assuming the output of 100,000 vehicles by Fiat Automobiles Serbia, with a 38% participation of the domestic component, the estimated push from this industrial branch to GDP growth in 2013 will be 1.0 pp. A positive contribution is also expected on account of higher petroleum derivatives production (0.5 pp) owing to the new production capacities installed in the oil industry. Conversely, a negative contribution to GDP movements (-1.0 pp) will arise from the anticipated slump in other manufacturing branches, mostly driven by poor economic performance in the euro area.

Despite moderate economic growth in Q1, as measured by NAVA, the negative output gap has narrowed only slightly. This reflects the increase in potential GDP[19] in Q4 2012, following the launch of new production capacities in the automobile and oil industries. Hence, high negative values of the production gap indicate that aggregate demand is still quite low, which gives us ground to expect disinflationary pressures to continue in the foreseeable future.

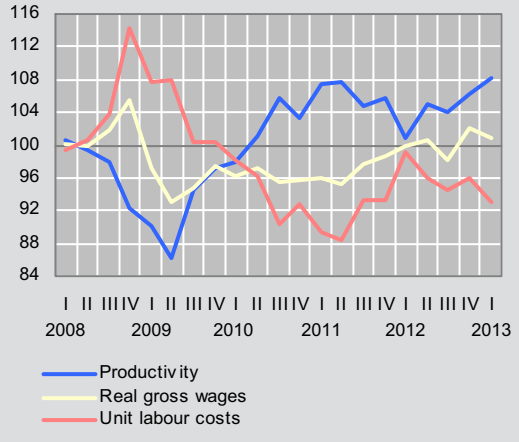
Chart IV.5.1 **Average net wages**
(s-a, H1 2008 = 100)



Source: SORS.

Average real net wage declined marginally in Q 1, primarily in response to a drop in public sector net wages .

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



Source: SORS.

Industrial unit labour costs declined on account of higher productivity and a drop in real gross wages in industry.

5. Labour market developments

Wages

Q1 saw a modest nominal increase in average net wages. Industrial unit labour costs are lower relative to the previous quarter.

Average net wages in Q1 registered a mild nominal growth of 0.5% s-a, while falling in real terms by 0.8% s-a, despite the slower price increase in this quarter. Nominal net wage growth in the private sector

[19] NAVA trend assessed by the Kalman filter is used to approximate potential GDP.

decelerated to 2.0%, whereas in the public sector wages fell by 0.2%, contrary to a quarter earlier.

The greatest wage increase was registered in the construction and real estate activities sectors. On the other hand, all industrial sectors displayed a real s-a slump in net wages, most notably in electricity, gas and steam supply, as well as in the information and communications sector.

Nominal y-o-y growth in net wages slowed to 6.0% in Q1, while the y-o-y drop in real net wages accelerated to 4.8%. Imposed restrictions on the increase of public sector wages accelerated their real y-o-y decline of 8.4%. Real net wages in the private sector continued to decline y-o-y (1.8%), though at a slower pace relative to the quarter before.

The average net wage paid out in Serbia in Q1 equalled RSD 41,403.

In response to a drop in real gross wages and a rise in productivity, industrial unit labour costs shrank in Q1 by 3.0% s-a. A milder decline of 0.9% s-a was recorded in manufacturing as the decelerated growth in productivity was followed by stagnation in real gross wages.

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

Source: SORS.

Employment continued to recede in Q 1.

Employment

The nascent economic recovery from the previous two quarters failed to reflect in improved conditions in the labour market.

Positive developments recorded in the Labour Force Survey for October 2012 did not correspond to monthly labour market indicators. The RAD statistical research, conducted by the Statistical Office, showed that Q1 employment is still receding. Seemingly, most of the branches have not yet experienced economic growth, which would have encouraged a recovery of employment.

Total employment in Q1 fell by 6,567, with the private sector accounting for all of the decline, whereas public employment went up. Almost a half of the total decline refers to employment cuts in industry (3,326), of which 2,976 in manufacturing. Furthermore, a significant drop in employment figures was registered in construction (2,522) and trade (2,051). On the other hand, private sector employment went up only in financial activities and insurance (640).

Lower employment in the private sector was partly offset by an increase in public sector employment by 4,646 persons. The growth is almost entirely attributable to increased hiring for administrative and support service jobs.

Q1 also saw a 0.4% dip in formal employment[20], hence the March figure stands at 1,716,227.

Unemployment continued to swell in Q1, though at a slower rate q-o-q. March unemployment was up 4.1% against December, and 1.2% relative to the same period last year.

The unfavourable developments in the labour market are further weighed down by the increased number of unemployment beneficiaries. In March, they numbered 71,145, up by 4,463 persons against December 2012.

At the end of March, the relevant ministry announced a programme of proactive employment measures for 2013,

[20] 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.

for which RSD 3.4 bln was earmarked in the budget, the same as last year. The most important measures involve encouraging self-employment, continuing practical training programmes, conducting public works and granting subsidies for wages to stimulate the employment of disabled persons.

6. International environment

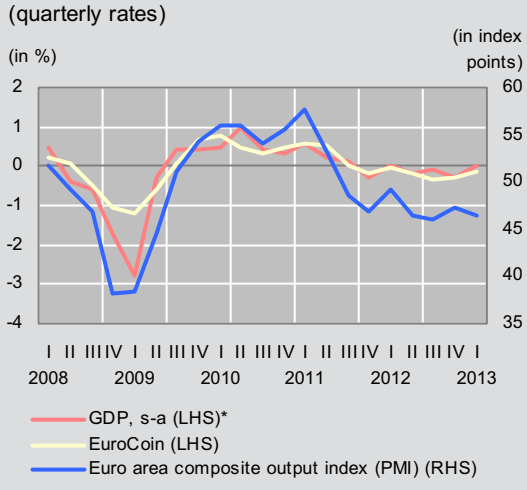
Mild economic recovery in the euro area is not expected earlier than H2 2013. Inflationary pressures have subsided enabling additional monetary policy easing in early May.

GDP drop in the euro area accelerated in Q4 2012 (0.6%), driven by weaker domestic demand and, for the first time in three years, by a fall in exports. Early economic activity indicators, PMI and Eurocoin, point to a probable decline in Q1 as well, while gradual recovery is expected in H2 at the earliest. Economic downturn spilled over onto the labour market, causing unemployment in March to reach an all-time high of 12.1%.

As indicated by the Consensus Forecast, the euro area's growth projection for 2013 has been revised down to -0.4%, which is close to the IMF's forecast (-0.3%). Low domestic demand will continue to hobble recovery due to adverse labour market developments and the implementation of the fiscal consolidation measures in most of the countries. By contrast, decelerated inflation will ease the pressure on domestic demand, which will reflect favourably on disposable household income. Moreover, expansionary monetary policy measures taken in the prior period should encourage a quicker recovery of net exports. An additional push to net exports will arise from the anticipated economic recovery in emerging markets.

Reflecting lower exports, Germany also recorded a GDP drop in Q4 (0.6% s-a). However, the drop has been assessed as temporary and the economy is forecast to pick up in Q1. The IMF's latest assessments for Germany indicate a 0.6% GDP growth in 2013, up by 0.1 pp on the previous forecast. Italy slid deeper into recession in Q4,

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

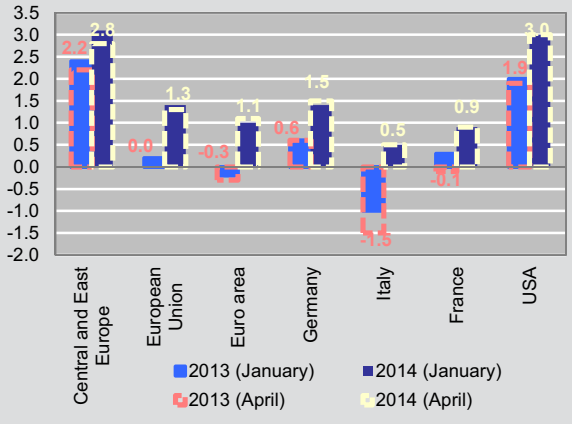


* Consensus Forecast estimate for Q4 2012.

Sources: Eurostat, Markit Group and Banca d'Italia.

Economy in the euro area is likely to continue sliding in Q1, while mild recovery is expected in 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 (January 2013).

* Revision relative to January WEO Update.

The IMF revised down the 2013 economic growth prospects of the euro area and Italy, while the forecast for Germany remained unchanged.

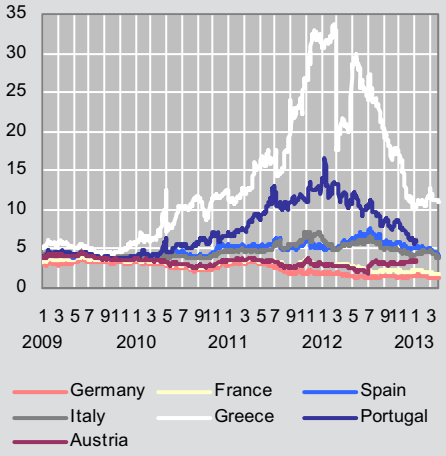
with uncertainty additionally spurred by the failure to form a new government following parliamentary elections at end-February. Hence the IMF trimmed Italy's 2013 GDP growth forecast by 0.4 pp, to -1.5%.

Uncertainty in the financial market, previously mitigated by agreements on the formation of a banking and fiscal union, once again flared up at the onset of 2013 following the outbreak of the banking crisis in Cyprus. In the face of an insolvent banking sector, Cyprus was forced to ask the ECB and the IMF for financial assistance. In return, however, the country had to agree to introduce a tax on bank deposits, thus shifting the major part of debt coverage onto bank clients. Tighter control of financial flows was also introduced on a temporary basis, but it only heightened the uncertainty in the financial market. Nevertheless, around the end of March, Cypriot authorities and international creditors reached an agreement on financial assistance, which helped ease the tensions.

Inflationary pressures in the euro area have largely abated. Y-o-y inflation undershot at 1.7% in March, falling even further in April (1.2%) as energy prices declined. The ECB did not change its main refinancing rate in Q1. However, low inflation and stronger recession pressures warranted an additional main rate decrease in May by 25 bp, to 0.5%, the lowest level on record.

Despite the deepening recession in the euro area, economic growth prospects in Central and Eastern Europe in Q1 are more encouraging. The Consensus Forecast predicts faster growth for the entire region in 2013 (2.7%) relative to 2012 (2.4%). Nevertheless, some of the countries that were in recession during 2012 (the Czech Republic and Hungary) will stagnate, whereas Slovenia and Croatia have been forecast a new fall in economic activity, albeit slower than last year. Poland, Russia and Slovakia will see sluggish growth, while Bulgaria and Romania will be the only countries in the region to experience somewhat speedier improvement. A similar

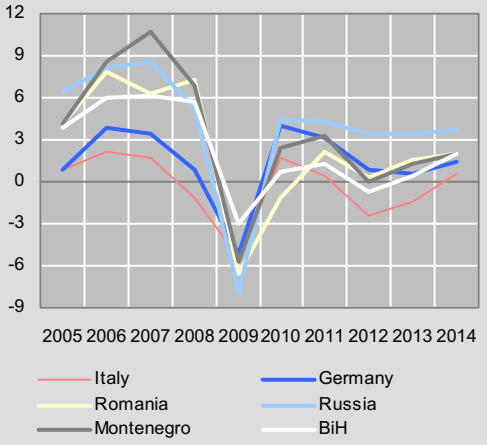
Chart IV.6.3 **Yield on 10-year bonds of euro area members**
(daily data, in %)



Source: Bloomberg.

The Cypriot crisis had no major effect on the increase in yields on securities of peripheral euro area countries .

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



Source: IMF WEO (latest available data).

All of Serbia's main foreign trade partners, save Italy, will record a mild increase in economic activity in 2013.

economic outlook for the region has been reiterated by the IMF in its latest forecast.

In almost all Central and Eastern European countries, inflationary pressures continued to recede in Q1 on account of low aggregate demand and lower prices of raw materials, notably oil. In turn, these countries loosened their monetary policies. Hungary revised its policy rate down by 75 bp in response to the recession, and Poland by 100 bp on account of decelerated growth. In April, the central banks of Hungary and Turkey further lowered their policy rates by 25 bp and 50 bp respectively, while the Polish central bank trimmed its rate by 25 bp in May.

The US economy's unexpected slowdown in Q4 (0.1% s-a) was mostly attributable to a drop in government consumption and exports. However, the downturn was only temporary and already in Q1 economic growth sped up to 0.6% s-a, prompted primarily by higher private consumption and investments. Yet, economic growth projection (1.9% according to the IMF) indicates slackened pace in 2013 on account of negative short-term effects of fiscal savings measures and poor economic performance in the euro area.

Similar to the euro area, inflationary pressures in the US are also receding, making it possible for the Fed to continue applying unconventional monetary policy measures (monthly purchase of USD 85 bln mortgage-backed and government securities). The first positive results of the measures include a decline in April unemployment rate to 7.5%, its lowest since end-2008, and signs of recovery of the property market. In addition, stock exchange indices Dow Jones and Standard & Poor's 500 got close to their all-time peaks; however, such trend is due to the excess liquidity in the financial system rather than a reflection of an improvement in the real sector.

Throughout January, the euro strengthened against the dollar in light of the uncertainties surrounding the "fiscal cliff"[21] in the US. February and March saw the euro weaken to the dollar in response to the lower-than-expected economic performance in the euro area in Q4, the outcome of Italian parliamentary elections and the outbreak of the banking crisis in Cyprus. An agreement reached between the Cypriot authorities and international creditors regarding the resolution of the problem of Cypriot banks has helped the euro recover as of early April. This was further supported by March data from the US labour market coming in lower than anticipated.

The price of gold in Q1 fell by around 5%, mirroring the Q4 figure. Weakened inflationary pressures in developed countries precipitated a decline in the price of gold, as this commodity is traditionally used as a hedge against inflation. Another push to the fall came from the stronger dollar in February and March. The price of gold faced a sudden drop in April (over 15% in the first half of the month), triggered by the announced possibility that Cyprus might sell its gold reserves to secure the funds needed for the resolution of the banking crisis.

[21] This concerns the activation of an automatic mechanism to reduce government spending and increase taxes if public debt exceeds the legal limit of 16,400 bln dollars.

V. Inflation projection

Y-o-y inflation is expected to fall back within the target tolerance band by October. The key contribution to this fall will come from the lower food production costs, weak aggregate demand, stability of the exchange rate in the past several months, and the full effect of restrictive monetary policy measures taken since mid-last year. The risks to the projected inflation path relate to movements in primary agricultural commodity prices and the international environment, as well as to future fiscal developments at home.

As indicated by the Statistical Office data, the Serbian economy contracted by 1.7% in 2012 because of a very bad agricultural season. In 2013, it is expected to expand by around 2.0%, spurred by higher net exports and investments.

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

Y-o-y inflation peaked at 12.8% in January, only to start its way back towards the target tolerance band from February onwards. Y-o-y inflation declined faster than envisaged by the central projection from the previous *Report* as a consequence of a delay of the anticipated electricity price increases, lower-than-expected growth in unprocessed food prices and deferral of the increase in medicament prices. Inflation moved around the lower bound of the projection band in the first two months of the year and then slipped below it in March (11.2%).

At 1.1%, Q1 inflation was two times lower than a quarter earlier. In March, for instance, there was no price growth at all (0.0%). Even though CPI breakdown shows that food prices (processed and unprocessed food) contributed most to quarterly inflation, their contribution was significantly lower than expected. The pressure on food prices abated considerably thanks to the drop in primary agricultural commodity prices over the last several months. Administered prices also recorded a relatively small growth (2.9%) from the beginning of the year, compared to what was anticipated, due to the deferral of electricity price increases. Administered price growth was almost entirely driven by the increase in prices of cigarettes (higher excises) and medicaments.

Low monthly inflation rates since last November (0.2–0.3% on average) signal the easing of inflationary pressures. April inflation measured 0.8% (11.4% y-o-y) mainly due to the increase in some vegetable prices.

The inflation expectations reported by the financial sector in Q1 were lower, but still above the upper bound of the target tolerance band. According to the latest *Bloomberg* and *Ipsos* surveys, one year-ahead inflation expectations are 7.0% and 7.8%, respectively.

Exchange rate movements also played a role in assuaging inflationary pressures. The dinar continued to strengthen against the euro in Q1 (1.6%)[22], as a result of the interplay

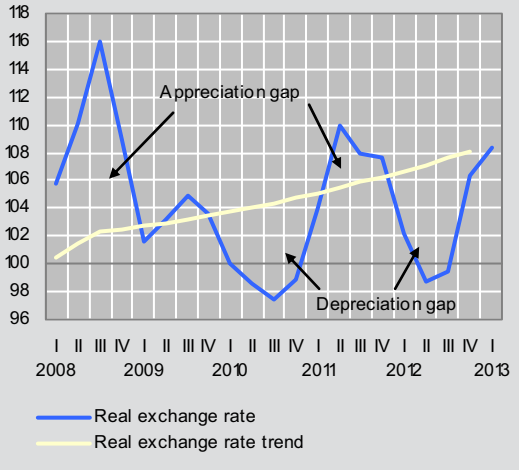
[22] Average nominal appreciation in the period observed.

of several factors: monetary policy tightening, higher non-resident investment into government securities and narrowing of the current account deficit. The dinar's strengthening proceeded in April. In the year to date, the NBS has intervened five times in the IFEM by buying a total of EUR 80.0 mln in order to ease excessive daily volatility of the exchange rate of the dinar. In addition to quarterly FX swap auctions, as of March the NBS holds two-week auctions to help banks in FX risk management and planning of dinar and foreign exchange liquidity.

As the real appreciation of the dinar outpaced the trend[23], the depreciation gap of the real exchange rate closed in Q1, implying that the import cost-push pressures on prices have lessened[24].

The risk premium, measured by EMBI, increased across the region relative to end-2012. The increase registered for Serbia was one of the smallest (25 bp), though. This is consistent with the conspicuously high non-residents' interest in government dinar securities, and may also be correlated with the fiscal consolidation measures taken thus far. April saw a decrease in EMBI values for all countries in the region. At the end of that month, EMBI for Serbia equalled 355 bp.

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.

Depreciation gap of the real exchange rate closed in Q1.

In the first three months of the year, consolidated budget deficit amounted to 4.5% of GDP, whereas the Fiscal Strategy envisages a deficit of 3.6% for the year as a whole. The government financed a part of the deficit by dipping into its foreign exchange deposits, thereby boosting the dinar liquidity of banks. The NBS drained most of the increased liquidity through open market operations.

According to NBS estimates, GDP grew 1.5% s-a in Q1 (1.9% y-o-y). Growth was powered by net exports and private investments, while government investment worked in the opposite direction. As in Q4, export growth was led mainly by the automobile industry exports.

The negative output gap[25] was more or less as wide as in Q4. Even though the last two quarters saw an increase in non-agricultural value added, potential product also rose as a result of increased production capacities in the automobile and oil industry, which is why the output gap narrowed only negligibly. The negative output gap indicates further demand-side disinflationary pressures in the coming period.

Recessionary pressures continue to sweep through the euro area. *PMI* and *Eurocoin* readings for Q1 signal another quarterly fall in the bloc's GDP. Even though the ECB had kept the main rate on hold throughout Q1, low inflation and further build-up of recessionary pressures made it possible to revise the rate down in May by 25 bp to the historical low of 0.5%.

Overall in Q1, international crude oil prices stagnated. Led by buoyed market optimism regarding the global economic outlook and eased uncertainties over fiscal problems in the United States, oil prices were on the rise rose until mid-February, only to reverse from the end of that month on the news of disappointingly slow growth in advanced economies. As the dinar strengthened against the dollar in Q1, domestic prices of petroleum products plummeted by 2.6%.

[23] Real exchange rate trend estimated by applying the Kalman filter.
[24] Net importers' marginal costs.

[25] Output gap is calculated based on NAVA (GDP less agricultural production and net taxes).

Projection assumptions

External assumptions

The assumption for the euro area's GDP growth in 2013 (-0.4%) has been revised down by 0.3 pp relative to the February projection. High unemployment rate and fiscal consolidation in some of the area's members continue to narrow the scope for a domestic demand-driven economic recovery, which is expected to start in the second half of this year. In 2014, the euro area economy should grow 0.9%.[26].

Euro area inflation measured 1.7% y-o-y in March. Inflation expectations for 2013 and 2014 remain firmly anchored below 2.0%. The projection assumes there will be no further lowering of the ECB's main rate that currently stands at 0.5%.

The movements of primary agricultural commodity prices internationally have a decisive impact on the movements of these prices locally. Commodity futures signal a sharper-than-expected fall in the prices of these products in 2013.[27] The projection assumes that they will stay in 2014 at approximately the same level as in 2013.

The projection operates on the assumption that the end-2013 price of oil will be around USD 100.0 per barrel. The pricing of oil futures indicates that oil price will be at a similar level at the end of 2014 as well.

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)	1.6%	(-0.1)	1.7%	(+0.1)
ECB policy rate (year-end)	0.5%	(-0.25)	0.5%	(-0.25)
Euro area GDP growth	-0.4%	(-0.3)	0.9%	(-)
International prices of primary agricult. commodities (Q4 to Q4)*	-22.0%	(-8.0)	3.5%	(-)
Ural oil price per barrel (year-end, USD)	100	(-5)	100	(-)
Internal assumptions				
Administered prices (Dec to Dec)	9.7%	(-1.0)	8.0%	(-)
Trends				
Appreciation trend of the real exchange rate (average)	1.9%	(-0.1)	2.0%	(-0.3)
Real interest rate trend (average)	2.6%	(+0.1)	2.5%	(-)

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

Internal assumptions

The current medium-term inflation projection is based on the assumption that administered price growth in 2013 will be the same as in 2012 (9.7%). This upward revision from the February Report is due primarily to the reduced share of electricity prices in the CPI basket applied since the beginning of the year. Broken down by quarter, most of the administered price growth will take place in Q3 (around 4.0%), chiefly as a result of the anticipated increase in electricity prices.

The projection envisages that administered prices will grow somewhat faster in 2014 than total CPI due to the gradual removal of price disparities. Nonetheless, this growth should be lower than in 2013.

Inflation projection

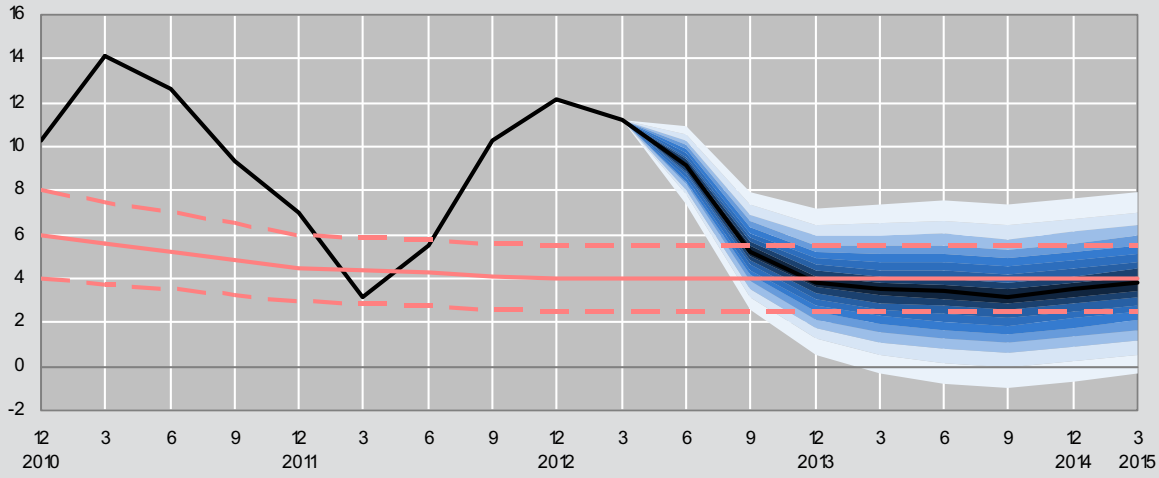
Y-o-y inflation will continue down, going back to single digits at the end of Q2 and retreating within the target tolerance band by October. In 2014, inflation should stabilise around the target (4.0±1.5%).

The inflation fall in Q2 will be led primarily by the processed food prices, thanks to the cheapening of primary agricultural commodities over the past several months, i.e. weakening of the cost-push pressure. Looking at the projected quarterly figures, price growth should be slightly higher in Q2 than in Q1, mainly as a result of the anticipated seasonal rise in fruit and vegetable prices.

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

[27] See text box 2: Projection of primary agricultural commodity prices, p. 11.

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. The risks to the projected inflation path are judged to be 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%.

In the coming months, the key disinflationary factor driving inflation towards the target tolerance band will be the lower costs of food production. The factors working in the same direction include recent stabilisation of the exchange rate, past monetary policy measures, low domestic demand and high last year's base (i.e. high monthly inflation rates in 2012).

Assuming average agricultural yields this year[28], the prices of primary commodities, that is, fruit and vegetables, should fall further with the start of the season, and thus alleviate the cost push pressure on food prices.

Besides, restrictive monetary policy measures taken by the NBS from mid-2012 until early 2013 are expected to exert their full effect on inflation in the course of this year. These measures have also contributed to the stabilisation of the exchange rate of the dinar in recent months. A stable exchange rate and the closing of the depreciation gap of the real exchange rate in Q1 will also help reduce inflationary pressures in the period ahead, while low aggregate demand will continue to play the most important role in slowing the domestic price growth in the medium term.

By contrast to the above disinflationary factors, administered prices will produce inflationary pressures because of their further alignment with market prices.

Highly volatile inflation in Serbia in the prior period was driven primarily by the volatility of domestic food prices. As a result of changes in CPI weights for 2013, inflation volatility should lessen in the coming period by around 10.0%. The liberalisation of foreign trade flows towards the EU under the Interim Trade Agreement is also likely to help alleviate inflation volatility.[29]

Given the weakening of inflationary pressures, the NBS Executive Board will consider the possibility of further easing its monetary policy stance in the coming period. However, as unexpected changes in the impact of some factors on the above inflation projection remain possible, the expectation stated with regard to the character of monetary policy in the period ahead is in no way binding on the NBS.

According to the NBS projection, after contracting in 2012, GDP should expand by around 2.0% in 2013. This projection is based on the expected increase in

[28] Average for the period 2001–2010.

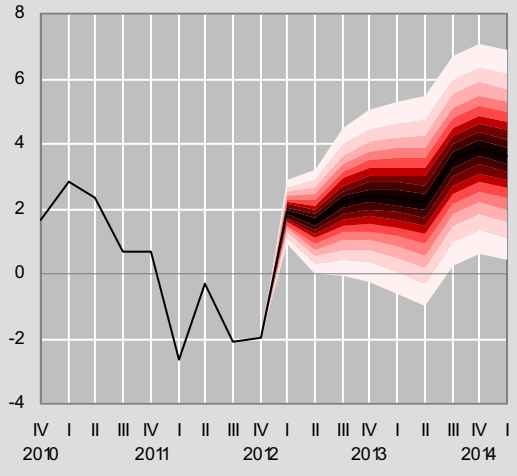
[29] See text box 1: Impact of new CPI structure on inflation volatility, p. 8.

agricultural production relative to the previous year (assuming average agricultural season) and on the upswing in 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. GDP growth will also be supported by investments, reflecting to a significant extent low last year's base. On the other hand, headwinds will be coming from private and government consumption due to low real wages and implementation of fiscal consolidation measures, respectively.

Private consumption is expected to pick up slightly in 2014, while government consumption will decline amid continuing fiscal consolidation. According to our projection which assumes the recovery of the countries Serbia trades most with, GDP will grow around 3.0% in 2014, propelled mainly by net exports.

The GDP growth projection band is symmetrical, i.e. deviations are equally possible in either direction. Uncertainties surrounding the projection relate mainly to the outcome of this year's agricultural season and performance of the automobile industry, as well as to the pace of economic recovery of our key foreign trade partners.

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



Source: NBS.

Economic activity should grow around 2.0% in 2013 and around 3.0% in 2014.

Risks to the projection

The risks to the projected inflation path relate primarily to future movements of international and domestic prices of primary commodities, developments in the international environment, and fiscal policy at home.

The current inflation projection operates on the assumption of an average agricultural season which should lead to a drop in domestic prices of primary agricultural commodities and, consequently, to the deceleration of growth in food prices. This assumption is supported by the fall in food prices and primary agricultural commodity prices in the international market registered during the last several months. However, if below-average agricultural year repeats itself and international food prices resume growth, the expected disinflationary effect of food prices would be diminished or even nil.

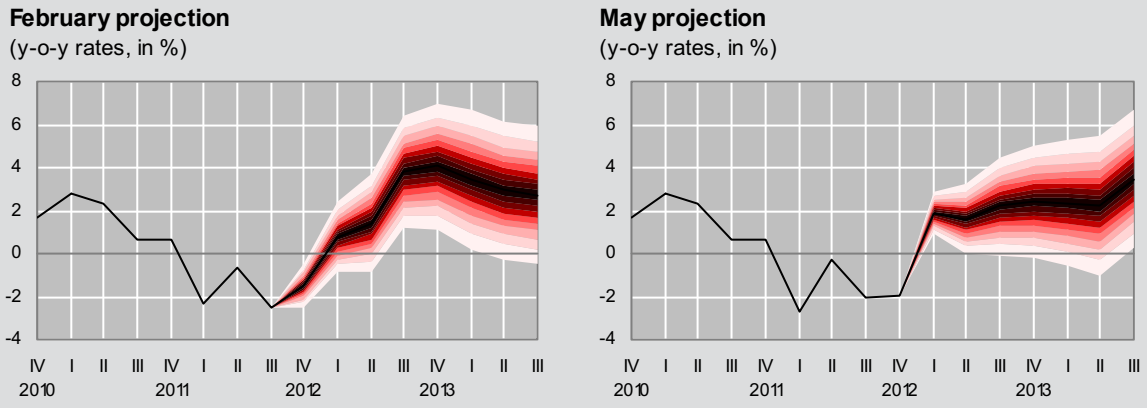
As for the assumed path for oil prices, deviations are possible in both directions. Potential rising of geopolitical tensions could send oil prices up, while a slower-than-expected economic growth globally could send them down.

Developments in the international environment could significantly affect the macroeconomic situation in Serbia. Their impact on inflation could be twofold. On the one hand, a sharper-than-expected GDP drop in 2013 in the euro area, and especially countries Serbia trades most with (Germany and Italy), could strain export opportunities and induce a deepening of the negative output gap, i.e. stronger disinflationary pressures from aggregate demand. On the other hand, a potential deterioration of the sovereign debt crisis in the euro area could feed through into higher risk premiums of emerging market economies, Serbia included, and lead to smaller capital inflows and depreciation pressures, which would reflect on inflation.

Risks to the projection are also associated with fiscal movements at home, i.e. a possibly greater deviation of the consolidated budget deficit from that envisaged by the Fiscal Strategy.

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

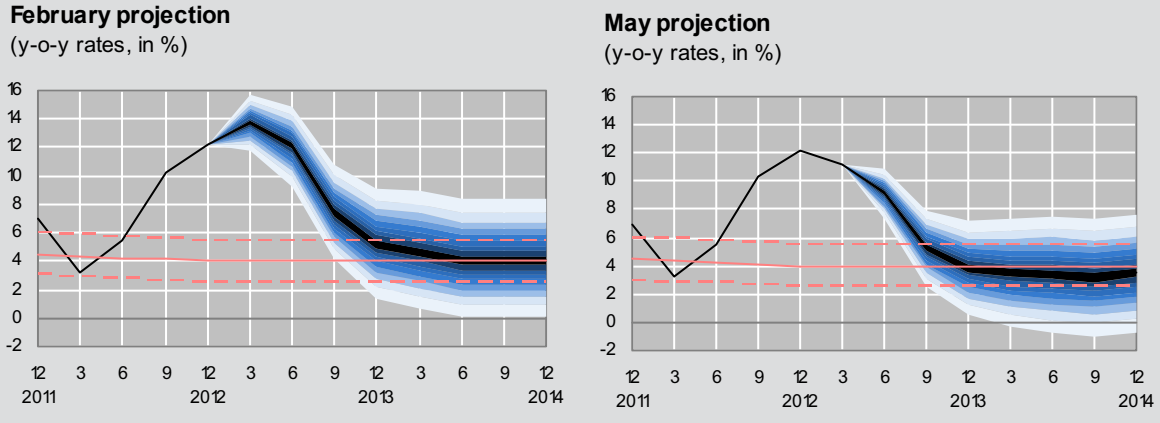
Chart V.0.4 **Current vs. previous GDP growth projection**



Source: NBS.

The new GDP growth projection for 2013 is lower than in the February Report, due above all to the anticipated weaker economic growth of the euro area.

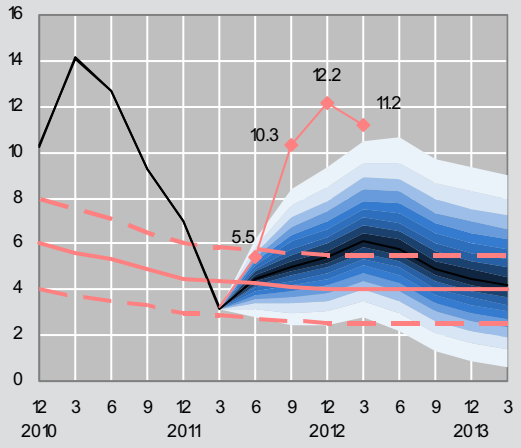
Chart V.0.5 **Current vs. previous inflation projection**



Source: NBS.

The new inflation projection is lower over the entire projection horizon than the one released in February 2013.

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



Source: NBS.

As of Q3 2012, y-o-y inflation has been moving outside the band projected in May 2012.

Comparison with the previous projection

The projected spread of inflation outcomes over the entire projection horizon is lower than in the February *Report*. Thanks to the slower-than-expected growth in food prices in Q1 (notably, fruit and vegetables, and non-food products and services) and the anticipated sharper decrease in prices of primary agricultural commodities relative to the February projection, inflation should return within the target tolerance band by October, i.e. earlier than projected in the last *Report*. The medium-term projection band has remained unchanged.

Since Q3 2012, y-o-y inflation has been moving above the upper bound of the band projected in May 2012, reflecting robust food price growth caused by the agricultural shock and a hefty rise in primary agricultural commodity prices. Such inflation outturn has also been underpinned by the higher-than-anticipated growth in administered prices and the October increase in VAT and excise duties.

Table A
Indicators of Serbia's external position

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Q 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
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
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	38.7
Debt repayment/GDP	1.4	2.0	3.9	4.7	7.0	10.1	10.6	11.4	12.6	13.0	13.5	12.9
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	34.0	33.0
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	87.3
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
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
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
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
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	92.8
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	7,592 [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
External debt servicing	218	348	736	945	1,635	2,885	3,453	3,314	3,542	4,084	4,051	980
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
Short-term debt	606	529	442	948	958	1,050	2,143	2,005	1,830	648	493	361
Current account balance	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-1,910	-1,887	-2,870	-3,155	-615

		2004	2005		2006		2007	2008	2009	2010	2011	2012
		Nov	May	July	Feb	Apr	Jun	Dec	Dec	Nov	Mar	Aug
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

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.
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 1 January 2010 Statistical Office, according to UN recommendations, applies general trade system which is a broader concept and includes all goods entering/exiting country's economic territory apart from goods in transit. Statistical Office has published comparable data for 2007, 2008 and 2009. Previous years are disseminated using 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	Q 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	1.9
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
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
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	2,968
- 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	17.8
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	-4,074
- 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	0.8
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	-615.24
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	-8.1
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	
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
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	-5.9
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	-4.5
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	62.2
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
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
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
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
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	7,592 [1]

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

[7] Government 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.

Notes:

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

Index of charts and tables

Charts

Tables

Charts in boxes

Tables in text 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 July		
8 August		
12 September		
17 October		
7 November		
12 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 12 March 2013

The Executive Board of the National Bank has decided in its meeting today to keep the key policy rate at 11.75%.

The Executive Board estimates that the present degree of monetary restrictiveness ensures, all other things unchanged, a return of inflation within the target tolerance band by the end of the year. Although year-on-year inflation is above the target, this estimate is underpinned by the low monthly rates of inflation during the last four months as a result of the monetary measures taken so far.

The Executive Board assesses that the decline in year-on-year inflation will also be supported by the consistent implementation of the fiscal consolidation programme, achievement of a precautionary arrangement with the IMF, expected stabilisation of agricultural prices, as well as implementation of the announced adjustments in administered prices.

The monetary policy measures taken so far acknowledge the strength and character of inflationary pressures and show strong commitment to bring inflation back within the target tolerance band. The Executive Board judges that besides NBS measures, a fall in inflation will also be aided by low aggregate demand, stable foreign exchange market, waning of the effects of one-off shocks like past food price increases, as well as by diminished pressures from the external environment.

The next rate-setting meeting of the Executive Board will be held on 11 April 2013.

Press release from Executive Board meeting held on 11 April 2013

At today's meeting, the NBS Executive Board decided to keep the key policy rate at 11.75%.

The existing degree of monetary policy restrictiveness ensures that year-on-year inflation, which slowed down in the first quarter, will continue to fall and will return within the target tolerance band of 4±1.5% in the second half of the year. This is also confirmed by low monthly inflation rates over the past four months resulting from monetary policy measures.

Macroeconomic movements, abated inflationary pressures and the nascent economic recovery led by increased exports have received positive assessments. However, the Executive Board warns that in the period ahead, monetary policy restrictiveness will be affected by consistent implementation of fiscal consolidation, as well as by international developments in terms of the present situation in financial markets and the growth prospects of our key foreign trade partners.

The next rate-setting meeting of the Executive Board will be held on 13 May 2013.

Press release from Executive Board meeting held on 14 May 2013

In its meeting today, the Executive Board of the National Bank of Serbia decided to trim the key policy rate by half a percentage point, to 11.25%.

In making the above decision, the Executive Board was guided by the significantly lower inflationary pressures, which receded owing to past monetary policy measures. The weakening of inflationary pressures is confirmed by the monthly inflation rates, which, despite somewhat higher inflation in April, averaged 0.25% in the last six-month period.

The disinflationary impact came from the easing of the cost-push pressure on food prices and lowered inflation expectations. Low aggregate demand, stable developments in the foreign exchange market and falling risk premium of the country, together with the expected full-blown effect of past monetary policy measures, will contribute to a further

fall in year-on-year inflation. As estimated by the Executive Board, year-on-year inflation will return within the target tolerance band of 4±1.5% in the last quarter this year.

Monetary policy measures in the coming period will be largely determined by international developments, fiscal movements and the impact of the new agricultural season on food prices.

The Executive Board gave a positive assessment of the economic recovery, which supports the expectations of economic growth of 2% this year, driven mainly by exports.

The next rate-setting meeting will be held on 6 June 2013.

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

336.71(497.11)

INFLATION Report / National Bank of Serbia. - 2006- . - Belgrade (Kralja Petra 12) : National Bank of Serbia, 2006- (Beograd : Zavod za izradu novčanica i kovanog novca "Topčider") . - 30 cm

Tromesečno
ISSN 1820-9394 = Inflation Report (National Bank of Serbia)
COBISS.SR-ID 155775244