



National Bank of Serbia

2013
February

INFLATION REPORT

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NATIONAL BANK OF SERBIA

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Number of copies: 55

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 February *Inflation Report* was considered and adopted by the NBS Executive Board in its meeting of 5 February 2013.

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

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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.

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I. Overview

Though at a slower pace, year-on-year inflation continued to rise above the upper bound of the target tolerance band in the fourth quarter.

Though at a slower pace, year-on-year inflation continued to rise in the fourth quarter, settling by the end of the year at 12.2%. Quarterly inflation of 2.3% was lower than in the third quarter. Consumer prices rose 2.8% in October, reflecting a one-off increase in prices of large number of products and services triggered by the upward revision of excise duties and the VAT rate. Consumer prices recorded nil growth in November, only to head down in December, driven by the cheapening of fresh meat, petroleum products, and fruit and vegetables. At the same time, the last quarter was marked by a strong growth in administered prices.

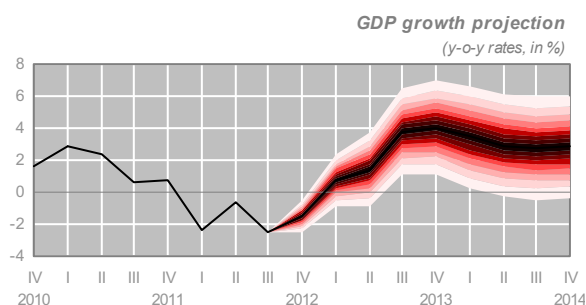
Stable in the fourth quarter, inflation expectations declined in January.

The rise in inflation expectations was halted in the fourth quarter despite the upward trend of year-on-year inflation. January saw the one year-ahead inflation expectations decline, which could indicate increased credibility of the economic policy. The percentage of enterprises that anticipate an increase in the prices of their inputs and their products and services in the coming three and/or six months is lower than in the prior period.

According to the latest Consensus Forecast and the International Monetary Fund's projection, the euro area economy will contract in 2013.

In the fourth quarter, the euro area experienced continued recessionary pressures and a rise in unemployment. According to the latest Consensus Forecast and the International Monetary Fund's projection, the euro area economy will contract in 2013. Still, some positive signals are coming from the financial markets. The ECB's debt purchase programme, steps towards stronger fiscal integration and the agreement on a single banking supervisor in the euro area have had a soothing effect on the financial markets and have helped reduce the yields on peripheral sovereign bonds. The Fed's continuing accommodative policy stance will prop up high liquidity in the international money market in 2013 as well.

GDP growth projection for 2013 is kept at around 2.5% despite bleak prospects for the recovery of the euro area.



Unfavourable trends in the euro area have spilled over to Central and South East Europe, weighing down on export opportunities and slowing economic growth. However, despite some signs that the euro area growth for 2013 will be revised down (from 0.2% to -0.1%), we have decided to keep our GDP growth projection unchanged from the November Report at around 2.5%. This decision is based on the assessment that the negative effects of deteriorating economic activity of Serbia's key trade partners will be counterbalanced by the positive contributions of agriculture, automobile industry, and oil

industry owing to the increased production capacity of the Pančevo Oil Refinery.

Impetus to GDP growth in 2013 may be expected from net exports and private investments, while headwinds are likely from government and household consumption.

The fall in economic activity slowed down in the fourth quarter year-on-year, while an uptick was registered quarter-on-quarter.

Economic activity in Serbia showed some signs of recovery in the last quarter – the estimated year-on-year drop in real GDP was much smaller than in the previous quarters, while an uptick was registered quarter-on-quarter. Positive results were recorded in manufacturing, notably production of motor vehicles and petroleum products. Robust growth in the automobile industry extended to exports, making motor vehicles Serbia's top export product.

All domestic demand components, save government consumption, gave a negative contribution to economic activity in the fourth quarter.

The disinflationary pressures from aggregate demand remained unchanged from the third quarter. Economic activity was dampened by domestic demand. The strongest drag came from household consumption as the increase in excise duties and the VAT rate placed additional pressures on the already low purchasing power of households. Liquidity problems and uncertainty about the pace of future economic recovery continue to weigh down the recovery of private investments.

The strengthening of the dinar, in place since September, extended to the fourth quarter.

Movements of the exchange rate also played a role in easing inflationary pressures in the last quarter of 2012. The dinar strengthened against the euro by 3.2% in nominal terms, reflecting tighter monetary policy implemented by the National Bank of Serbia, increased liquidity in the international money market, Government measures towards fiscal consolidation and the implementation of the subsidised loan programme. Foreign capital inflow was much higher than in the previous quarters. At the same time, a significant decrease in the current account deficit was recorded in November. Quite untypical for the end of the year, corporate demand for foreign exchange was low.

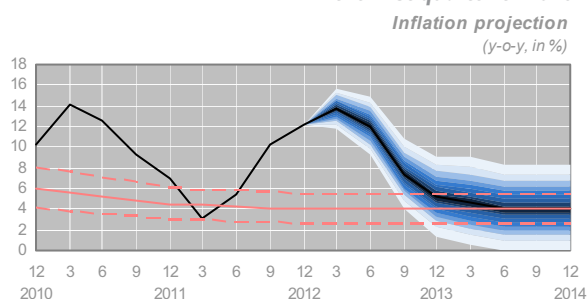
The 2012 fiscal deficit was lower than envisaged by the supplementary budget.

Government financing in the fourth quarter was heavily reliant on foreign exchange deposits, which bolstered dinar liquidity of the banking sector. The fiscal deficit amounted to 6.4% of GDP in 2012, which is below the level envisaged by the supplementary budget.

The National Bank of Serbia continued tightening its monetary policy stance. By changing the direction of its main open market operations, the National Bank ensured the withdrawal of excess dinar liquidity.

To prevent the spillover of the growth in food prices and the anticipated increase in administered prices across the price pattern, the National Bank of Serbia proceeded with monetary tightening in the last three months. Central bank measures should help stabilise the

The anticipated rise in administered prices will be the main determinant of consumer price growth in the first quarter of 2013.



Year-on-year inflation is expected to fall as of the second quarter and to return within the target tolerance band by the end of the year.

Looking ahead, the Executive Board of the National Bank of Serbia will consider the possibility of easing the monetary policy stance.

medium-term inflation around the target and contribute to overall macroeconomic stability. In an environment of increased liquidity, the National Bank of Serbia has changed the direction of its main open market operations towards liquidity absorption, which also contributed to the stabilisation of movements in the foreign exchange market.

Year-on-year inflation will most probably continue to rise in the first quarter of 2013 on account of the low monthly inflation rates in the same period last year and the anticipated upward revision of administered prices. Higher than in the fourth quarter of 2012, quarterly inflation growth will be driven mainly by administered prices, notably prices of energy, cigarettes and utilities, and by the expected rise in fruit and vegetable prices since some agricultural products will no longer be classified as seasonal.

As of the second quarter, inflation will gradually decline and return within the target tolerance band by the end of the year. In addition to the monetary policy measures taken thus far, inflation will decline in response to low aggregate demand and the expected fall in food prices once the new agricultural season kicks in. Over the medium term, inflation should move within the target band. The risks to the projected inflation path are equally possible in either direction and relate primarily to future movements of international and domestic prices of primary commodities and developments in the real sector and financial markets abroad. We believe that the fiscal risks have subsided significantly following the adoption of the fiscal consolidation programme and that the credibility of our economic policy programme would be supported still further by the continuation of the arrangement with the International Monetary Fund.

With the waning of the inflationary shock caused by the food and administered prices, the Executive Board of the National Bank of Serbia will consider the possibility of easing its monetary policy stance in the coming months. However, as unexpected changes in the impact of some factors on the above inflation projection remain possible, the expectations with regard to the character of monetary policy in the coming period are in no way binding on the National Bank of Serbia.

II. Monetary policy since the November *Inflation Report*

The NBS tightened its monetary grip further and changed the direction of the main open market operations in order to mop up excess liquidity from the system.

The NBS Executive Board proceeded with monetary tightening through policy rate hikes. Given the nature of the factors driving inflation up (supply-side shocks), policy rate hikes aimed to prevent the second-round effects, i.e. the spillover of food price growth and the announced increases in administered prices across the price pattern.

The key policy rate was **raised by 30 bp in December and by 25 bp in January, to the total of 11.5%**. And though inflationary pressures fell short of the outcome projected in the November *Report*, the Executive Board assessed them sufficiently pronounced to require a monetary policy response. There was no doubt that the y-o-y inflation growth, which slowed temporarily in November, would continue in the months ahead and that inflation would be running high above the upper bound of the target tolerance band. The outlook for inflation was dimmed further by the announced revision of administered prices.

On the other hand, the extent of the policy rate increases was limited by the softening of inflationary pressures in response to the lower risk premium, relative stability of the dinar and the falling prices of petroleum products. Other factors contributing to the quelling of inflation expectations in Q4 were the restrictive monetary policy measures taken in the prior period and the adoption of a fiscal consolidation plan. Low aggregate demand is expected to remain the key disinflationary factor and food prices to cheapen with the start of the next agricultural

season. Further, the Executive Board expects the fiscal consolidation programme to yield more tangible results this year and to give its full contribution to the process of disinflation in the period ahead.

In addition to raising the key policy rate in December, the Executive Board has **changed the direction of the main open market operations** so that elevated dinar liquidity would not give rise to inflationary pressures and stress in the foreign exchange market.

As inflation moved above the upper bound of the target tolerance band for six consecutive months (July–December), **the NBS sent an open letter to the Government** in accordance with the Inflation Targeting Agreement. The NBS cited food prices, depreciation of the dinar and the increase in VAT and excise duties as the key reasons behind inflation growth in the period observed. To contain inflationary pressures and ensure medium-term price stability, the NBS responded by tightening its monetary grip. The full effect of the restrictive monetary measures is yet to unfold. At the same time, the NBS highlighted the need for determining and implementing systemic measures that will help stabilise the food market. The NBS further noted that the Government should set a medium-term plan of administered price revisions and adhere to the planned pension and public sector wage policy.¹

At its meeting in **February**, the Executive Board **raised the key policy rate by 25 bp, to 11.75%**, with a view to preventing the spillover of administered price growth to other prices. The Executive Board highlighted the importance of the adoption of the annual plan of administered price revisions and of the consistent implementation of the fiscal consolidation programme.

¹ See Appendix 1, p. 51.

On the other hand, the Executive Board noted that the foreign exchange market has stabilised, that inflation expectations have moderated, and that aggregate demand will continue to generate strong

disinflationary pressures in the coming period. Economic activity also recovered slightly, with the first effects of the recovery showing in the last quarter of 2012.

III. Inflation developments

Moving above the upper bound of the target tolerance band since July, y-o-y inflation continued up in Q4.

Inflation is likely to rise further in Q1, chiefly on the back of expected administered price growth.

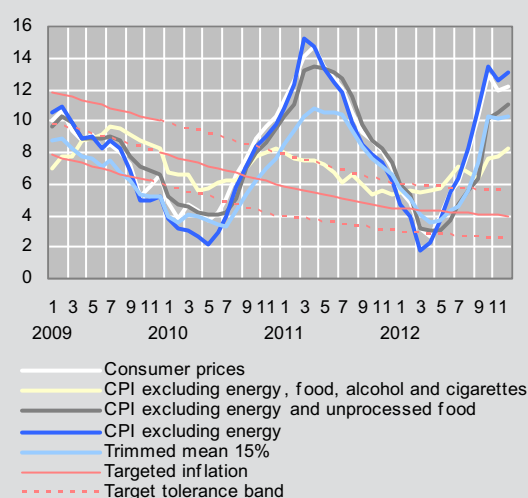
Inflation developments in Q4

As unprocessed food prices went down, quarterly inflation declined in Q4 relative to the previous quarter.

Consistent with expectations presented in the November Report, y-o-y inflation continued up in Q4 and reached 12.2% in December. The reasons were cost-push pressures on food prices, past depreciation of the dinar,

the effects of VAT and excise increases, and administered price growth. After inflation trended above the upper bound of the target tolerance band for six consecutive months (July–December), the NBS addressed the Government in January explaining why inflation had moved away from the band, describing the measures taken and those to be taken in order to ensure low and stable inflation in the medium run, and setting out the period within which it expects inflation to return within the target tolerance band.²

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



Sources: SORS and NBS.

Y-o-y inflation continued up in Q4. It has moved above the upper bound of the target tolerance band since July.

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

	2011		2012		
	IV	I	II	III	IV
Consumer prices (CPI)	0.6	2.0	3.1	4.2	2.3
Unprocessed food	0.7	7.5	14.7	9.1	-7.8
Processed food	-0.5	-0.7	1.0	4.2	6.3
Industrial products excluding food and energy	1.1	2.1	1.7	3.6	4.8
Energy	1.1	2.9	0.5	3.5	1.1
Services	1.0	1.2	2.4	1.4	3.3
Core inflation indicators					
CPI excluding energy	0.5	1.8	3.7	4.3	2.6
CPI excluding energy and unprocessed food	0.5	0.8	1.6	3.3	5.0
CPI excluding energy, food, alcohol and cigarettes	1.4	1.3	2.2	1.5	3.1
Administered prices	0.9	1.3	0.1	2.9	5.2

Sources: SORS and NBS.

² See Appendix 1, p. 51.

Consumer prices gained 2.3% in Q4. Following a 2.8% October rise and the one-off increase in prices of a number of products and services (driven by higher VAT and excises), consumer prices stayed flat in November. They, however, dropped in December as fresh meat, fruit, vegetables and petroleum products cheapened. Driven by the larger than expected downturn in unprocessed food prices, y-o-y inflation hovered throughout Q4 on the lower bound of the short-term inflation projection published in the November *Report*.

Prices of food and non-alcoholic beverages rose substantially less (0.9%) than in Q3. **Unprocessed food prices** slid 7.8%, adding 1.2 pp to the slowdown in inflation. The main impetus came from lower prices of fresh meat and fruits. Prices of all fresh meat categories declined in November and December. Fresh meat cheapened partly on account of elevated meat supply prompted by past rises in animal feed prices and partly reflecting adjustments for low demand and receding purchasing power. However, lower fresh meat prices have not yet weighed down on processed meat prices. Thanks to good weather and solid green market supply, no seasonal increase in vegetable prices was recorded. They dropped in December, mainly owing to products subject to the imputation method (pepper, cucumbers, tomatoes).

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

	III 2012 III 2011	VI 2012 VI 2011	IX 2012 IX 2011	XII 2012 XII 2011
Consumer prices	3.2	5.5	10.3	12.2
Domestic industrial producer prices	5.9	3.4	7.0	6.4
Agricultural producer prices	0.9	15.4	39.0	35.0*
Prices of elements and materials incorporated in construction	0.8	2.3	7.1	5.1

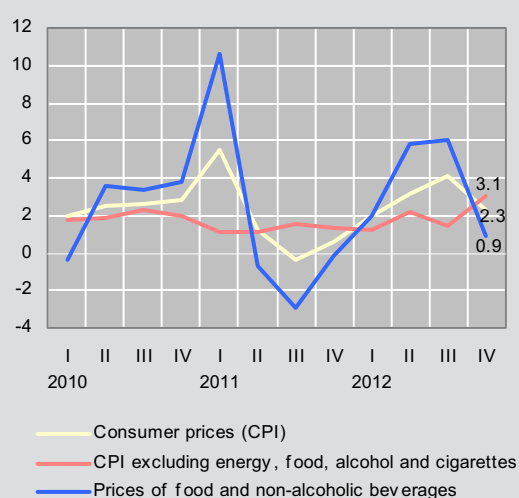
* November on November.

Sources: SORS and NBS.

Fruit prices edged down more than expected. In contrast, **processed food** prices continued up, adding 1.5 pp to headline inflation. The major contribution arrived from prices of milk and dairy products, bread, cereals, and non-alcoholic beverages.

Industrial product prices excluding food and energy rose 4.8%. The strongest impetus (2.4 pp) came from

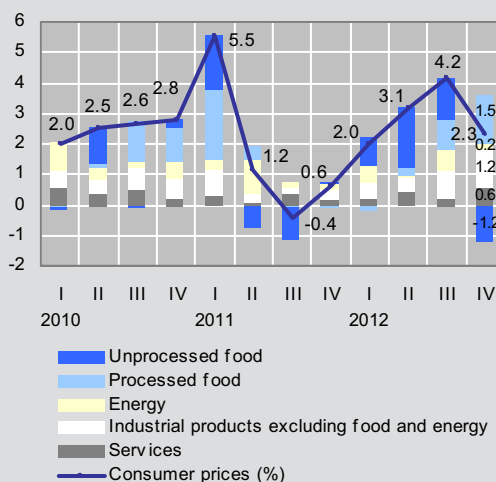
Chart III.0.2 Price movements
(quarterly rates, in %)



Sources: SORS and NBS.

In Q4, food prices rose less than in Q3, in response to falling unprocessed food prices.

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



Sources: SORS and NBS.

Processed food gave the main contribution to CPI growth.

cigarette prices which sped up by 14.2% on the back of excise increases.

Though propped up by higher heating prices (15.7%), **energy** prices rose less than in Q3. Driven by dinar's appreciation against the dollar, petroleum product prices lost 4.3% and added 0.2 pp to headline inflation in Q4.

Services prices were up 3.3%, mirroring an upturn of around 16% (0.1 pp) in prices of mobile telephony and cable TV services, travel package deals and public transportation.

Core inflation (CPI excluding energy, food, alcohol and cigarette prices) picked up 3.1% in Q4. The sharpest increase came about in October in response to a higher VAT and waning effects of past depreciation of the dinar. Broken down by category, the strongest price hikes were observed for household chemicals, medicaments, public transportation and mobile telephony services, and travel package deals.

Administered price growth (5.2%) outstripped its Q3 figure on account of rising cigarette prices to a greater and prices of utility and transportation services to a lesser degree. The growth planned for 2012 (6%±2 pp) was

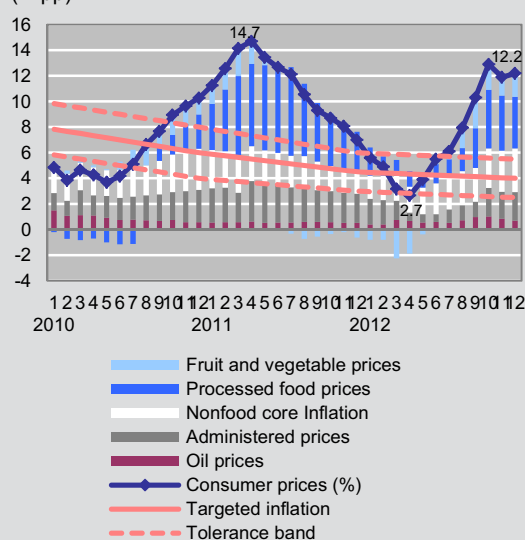
overshot and reached 9.7%, even though the prices of electricity and natural gas were unchanged.

Domestic industrial producer prices edged down a tad (0.1%) in Q4. They slid to 6.4% in December in y-o-y terms as well and induced inflationary pressures to weaken as a result. The decline was spurred by prices in the petroleum products production which went down once the dinar started to appreciate. Prices were cut also in the production of chemicals and chemical products. In contrast, prices in the processed food production continued up (12.8% y-o-y) because of a bad agricultural season and rising global prices of primary agricultural commodities in the past period.

Agricultural producer prices³ lost 1.4% in November relative to September, reflecting a 4.2% drop in cattle breeding prices. The steepest fall was noted for live pigs and cattle. Seasonal corn prices also declined, though much less than in the same period last year because of a bad agricultural year.

Prices of elements and materials incorporated in construction shed 1.0% in Q4. Their y-o-y rise slowed to 5.1% in December.

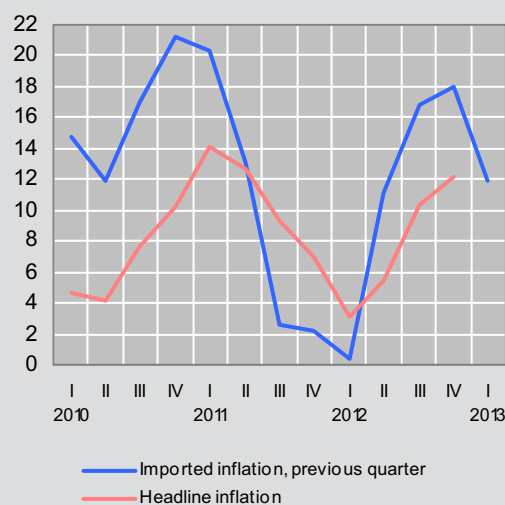
Chart III.0.4 Contribution to y-o-y consumer price growth (in pp)



Sources: SORS and NBS.

Y-o-y inflation continued to be led by food price growth.

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



Sources: NBS and Eurostat.

Y-o-y growth in import prices slowed in Q4, on the back of falling world food prices.

³ Prices of producers in agricultural and fishing sectors.

Import prices⁴ are estimated to have contracted by 3.8%⁵ in Q4, which is why y-o-y import inflation decelerated to 11.9%. Import prices declined chiefly in response to falling global prices of food and intermediate products,

while the rise in import prices of consumables had the opposite effect. As indicated by import price movements, no inflationary pressures are likely from this source in the coming period.

⁴ 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.

⁵ The ratio of averages for two consecutive quarters.

Text box 1: Changes in calculation of consumer price index in 2013

The Republic Statistical Office plans to change weights for CPI calculation in early 2013, in compliance with the Eurostat recommendations. The greatest methodological difference in CPI calculation between Serbia and other European countries lies in the choice of data source used for calculation of weights of specific groups of products and services. The calculation of CPI weights has so far been based on the Household Budget Survey (HBS) data, while the majority of European countries calculate weights using data from their national accounts, primarily those relating to household final monetary consumption expenditure. By switching to the new methodology, the calculation of Serbia's CPI will be harmonised, in terms of the data source, with the calculation of the harmonised Index of Consumer Prices (HICP) of the European Union. The harmonisation of methodology will ensure more reliable comparisons of the level and dynamics of inflation between Serbia and other European countries.

National accounts data provide a more comprehensive grasp of household consumption. For the purpose of calculation of CPI weights according to international standards, total personal consumption in the national accounts is divided into final monetary and non-monetary consumption. Household final monetary consumption expenditure is calculated by deducting from total consumption the owner occupied housing costs¹, own account production and in-kind expenditure (use of company cars, cell phones etc.). Serbia's national accounts data provide a more comprehensive grasp of household consumption compared to HBS, as specific items of consumption are better captured (alcohol and cigarettes, transport, recreation and culture). Since HBS is based on a sample, data from such source considerably underestimate personal consumption. National accounts' and HBS data also differ by the underlying concept of consumption data coverage. HBS contains data on resident consumption at home and abroad (national concept), while household final monetary consumption expenditure captures resident and non-resident consumption at home (domestic concept).

The neighbouring countries that joined the European Union, as well as those in the accession stage, have also harmonized their national indices with the Eurostat recommendations and methodology. The harmonisation brought changes to the structure of weights and shares of certain groups of products in CPI. In majority of countries, the most significant modification concerns the lower share of food and beverages in CPI (Table O.1.1). The lower share of this group of products most probably results from the larger coverage of total consumption within national accounts compared to HBS,

Table O.1.1 Shares of product and service groups in consumer price index by countries
(in %)

Product and service groups	Croatia		Montenegro		Slovenia		Bulgaria		Turkey		Serbia	
	CPI	HCPI	CPI	HCPI	CPI	HCPI	CPI	HCPI	CPI	HCPI	CPI	HCPI
Food and non-alcoholic beverages	29.3	25.2	37.6	31.3	16.6	17.1	37.2	22.5	26.2	26.2	38.8	
Alcoholic beverages, tobacco and narcotics	5.0	7.5	3.7	4.5	5.2	5.6	5.3	8.0	5.2	5.2	5.4	
Clothing and footwear	7.1	5.0	7.6	4.8	7.5	6.2	3.6	3.3	6.9	6.9	5.1	
Housing, water, electricity, gas and other fuels	15.7	13.2	12.9	7.0	14.0	10.6	17.1	8.4	16.4	16.4	16.5	
Furniture and household equipment	5.3	6.3	4.9	11.4	7.7	6.5	3.4	6.6	7.5	7.5	4.4	
Health care	3.6	3.6	2.8	2.3	4.9	4.4	6.9	6.1	2.3	2.3	4.3	
Transport	12.8	13.4	12.2	13.4	15.8	17.9	7.5	19.3	16.7	16.7	10.5	
Communications	4.8	3.7	5.6	5.7	4.8	3.5	5.6	6.7	4.6	4.6	4.1	
Recreation and culture	5.4	7.5	3.2	5.1	10.0	8.4	3.7	6.2	3.0	3.0	4.0	
Education	0.9	1.0	2.2	1.0	1.3	1.6	0.5	0.8	2.2	2.2	1.0	
Restaurants and hotels	3.0	4.8	3.0	11.0	5.1	7.2	4.9	5.0	5.6	5.1	2.0	
Other goods and services	7.3	6.2	4.4	2.5	7.1	8.9	4.2	5.1	3.4	3.4	4.0	

Sources: Eurostat, SORS, national statistical offices.

so while food and beverages consumption expenditure does not deviate much in absolute amounts, its share in total consumption is considerably smaller when using data on household final monetary consumption expenditure.

In accordance with changes to the weights structure, we expect that the application of the new methodology will also reduce the share of food prices in Serbia's CPI. Such change poses risk to the inflation projection, bearing in mind that food prices are highly volatile and represent the major factor in headline inflation oscillations.

¹ In accordance with international standards, the assessed rent for owner-occupied housing.

Short-term inflation projection

Driven by administered price adjustment and rising fruit and vegetable prices, inflation in Q1 2013 will overshoot its previous quarter's levels.

Y-o-y inflation will most probably continue up in Q1 2013. The reason is not only the low base effect, caused by low monthly inflation rates of Q1 2012, but also largely the expected administered price growth. In quarterly terms, price growth in Q1 will outpace that in the quarter earlier.

Q1 is likely to see a relatively vigorous rise in administered prices. The main driver of inflation will be the increase in prices of energy (electricity and natural gas), cigarettes, medicaments and utility services.

Food prices will give a positive contribution to inflation, with unprocessed food prices rising sharply because of hikes in fruit and vegetable prices and the fact that some agricultural products (tomatoes, cucumbers) will no longer be classified as seasonal products.⁶

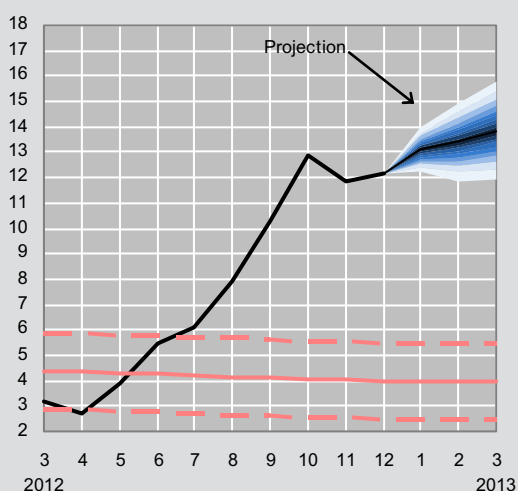
According to our estimates, prices of industrial products, excluding food and energy, will increase in Q1 as a result of rising prices of medicaments, cigarettes and alcohol (the latter two on account of excise hikes). Still, product prices from this group are likely to be lower than in the previous quarter as the effects of past depreciation have been largely exhausted with the dinar strengthening over the last months.

Within the group of energy, we expect prices to rise sharply compared to Q4. This will be the result of higher gas prices and the expected rise in electricity prices.

Further, services prices are also likely to rise on the back of rising prices of utility services, travel package deals and social welfare for children in kindergartens.

The main uncertainties surrounding the Q1 projection relate to food and global oil prices. Deviations from the projection may arise after the CPI weights structure changes – weights will no longer be calculated based on the Household Budget Survey, but based on data from national accounts.⁷

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



Source: NBS.

Y-o-y inflation will continue up in Q1.

Inflation expectations

One-year ahead inflation expectations stopped rising in Q4. They drifted down in January despite a further increase in y-o-y inflation.

According to results of the **Bloomberg** survey, **financial sector** expectations kept their level in December following an 8.0% increase in November. They fell to 7.0%, having lost 0.5 pp in both January and February and now exceed the upper bound of the target tolerance band by 1.5 pp.

As shown by the December **Ipsos** survey, one-year ahead expectations of the **financial sector** were also 8.0%, unchanged from September 2012. They remained flat in January as well. For the fifth consecutive month, **corporate** expectations equalled 10.0% in December, but moderated to 8.0% in January. Expectations of **households** were the highest. In Q4, they exceeded current inflation, even more so than the quarter before. After rising to 15.0% in November, they shifted back in December to the October level of 14.0%. They rose again in January to 15.0%.

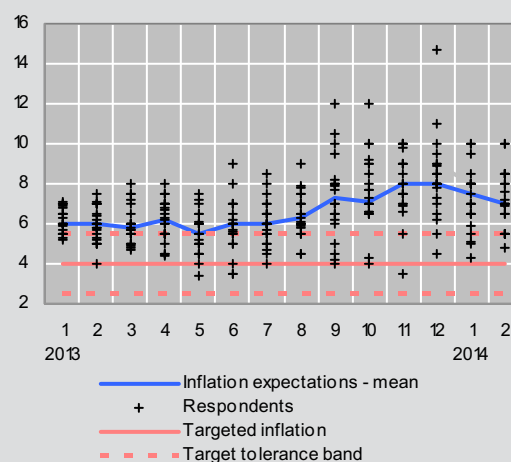
⁶ These products will no longer be subject to the imputation method.

⁷ See Text box on page 11.

Though inflation expectations stabilised, the dispersion of respondents' answers remains, which is indicative of uncertainty regarding future inflation. The dispersion was the most pronounced in the households sector. It has stood high since August last year, which can be linked to the agricultural shock and rising food prices. The disagreement among corporate respondents as to one-year ahead inflation is also high, while in the January *Ipsos* survey it was the record high. The disagreement was the least among financial sector respondents, though the largest on record in January. Under the *Bloomberg* survey, though still high, the dispersion of financial sector expectations has been shrinking since early-year.

Under the *Ipsos* survey, the October–December period saw a sharp decrease in the net percentage of enterprises⁸ expecting elevated cost-push pressures from input costs and the net percentage of enterprises expecting an increase in prices of their products and services over the next three months. Further, the share of enterprises expecting a decline in prices of their products and services over the next three months was

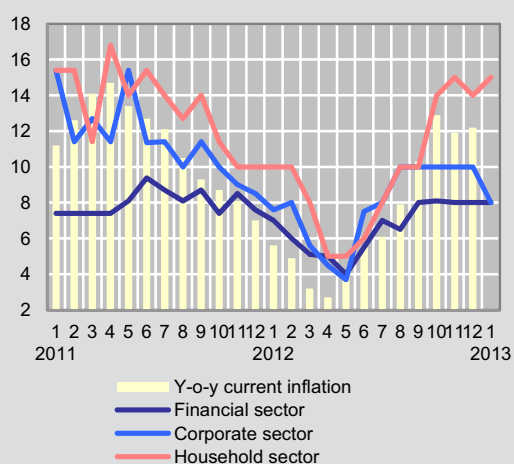
Chart III.0.8 One-year ahead expected and targeted inflation – financial sector
(y-o-y rates, in %)



Sources: Bloomberg and NBS.

The disagreement among financial sector respondents as to one-year ahead inflation remains high.

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

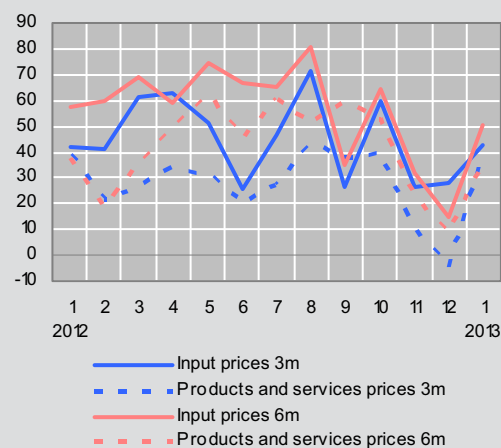


Sources: Gallup, Ipsos and NBS.

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

Though inflation was rising, inflation expectations stabilised in Q4.

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 over the next three and six months a rise in prices of their inputs and a rise in prices of products and services was lower than in the previous period.

⁸ The difference between the percentage of enterprises opting for an increase and the percentage of enterprises in favour of reducing the prices of their inputs,

products and services. To increase representation, data are weighted by operating revenue.

higher than the share of enterprises expecting an increase. In January, the net percentage of enterprises expecting higher prices of their inputs, products and services was greater, though remaining lower than in the past period. Another positive trend is that since November there has been the highest share of enterprises expecting stable input and product prices over the next three months.

The results of the *Ipsos* survey can be used to confirm the conclusion expressed in the previous *Inflation Report* – enterprise expectations about higher prices of products and services are determined by the expected increase in cost-push pressures generated by input prices rather than by inflation expectations. Namely, the net percentage of enterprises likely to raise prices of their products and services over the next three months was smaller than of those expecting a rise in input prices. The same holds for six-month ahead expectations.

IV. Inflation determinants

1. Money and capital market trends and bank lending

Interest rates

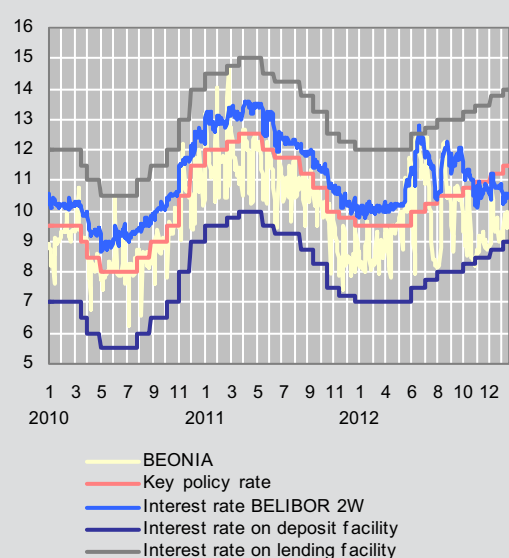
Excess liquidity of the banking sector and falling risk premium drove interest rates down for the major part of Q4. After the direction of main open market operations was reversed, excess liquidity contracted, whilst money market rates picked up slightly.

Monetary policy was tightened further. From October 2012 to January 2013, the key policy rate was raised four times, by total 100 bp, to 11.5%. In December, the NBS reversed the direction of its main open market operations

– from liquidity creation to withdrawal. The offer of NBS securities is limited and auctions are performed at variable, multiple interest rates.

For the major part of Q4, money market rates did not mirror the key policy rates owing to high bank liquidity which amplified chiefly because of monetisation of government FX deposits. As a result, bank demand in NBS repo auctions of liquidity provision was drastically reduced. Banks resorted rather to deposit facilities and money market rates moved much closer to the deposit facilities rate. After the direction of the main operations was reversed towards liquidity withdrawal, money market rates drove closer to the weighted average rate achieved at the repo auction. This rate came at 9.8% by the year-end.

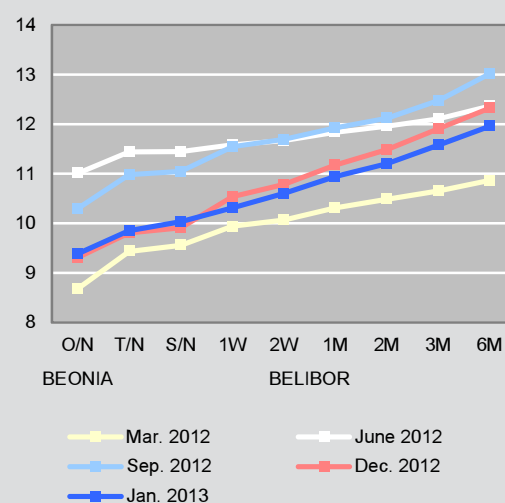
Chart IV.1.1 Interest rate movements
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

As banking sector liquidity increased, interest rates moved below the key policy rate throughout Q4.

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



Sources: Thomson Reuters and NBS.

A decline in money market rates was steeper for shorter maturities.

Average monthly BEONIA slid from 10.3% in September to 8.8% in November, only to rise to 9.3% in December after the direction of the main operations was reversed and the key policy rate increased. At the same time, average daily trading in the overnight interbank market contracted from RSD 9.1 bln in Q3 to RSD 6.5 bln in Q4. Trading was particularly weak in the first half of December.

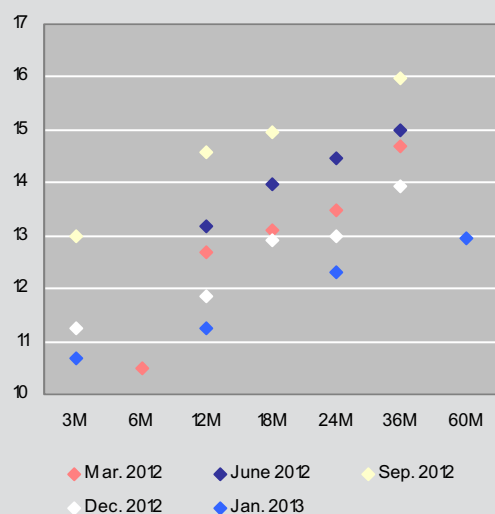
Short-term money market rates also declined in Q4, notably for shorter maturities. The deepest drop was recorded for the shortest-maturity BELIBOR T/N, from 11.0% in September to 9.4% in November. Three-month rates declined the least – from 12.5% to 11.9%. Average monthly rates of almost all maturities went up after the direction of main open market operations was reversed, with the increase being higher for shorter maturities.

In January, almost all money market rates slackened to a degree. Trading in the overnight money market shifted down.

Rates on the primary market of dinar government securities also declined and ranged by the year-end from 11.25% for three-month to 13.95% for three-year maturity. The largest drop was recorded for one-year rates (2.7 pp) and the smallest for six-month rates (0.6 pp). Rates declined as investor demand increased. After the adoption of the fiscal consolidation plan, investor interest in government securities, notably long-term, heightened. Rates also declined to reflect the sale of eurobonds in the international market, when the revenue exceeded the plan. In Q4, securities worth nominal RSD 77.1 bln were sold, while securities due for redemption totalled RSD 50.4 bln. Total debt increased by RSD 26.6 bln to RSD 354.6 bln by the year-end.

Four auctions of euro-denominated securities were organised in Q4, with lower accepted rates than in the prior period. At December auctions, rates were 5.05% for 18-month and 4.88% for two-year maturity. The rate achieved at the one-year bills auction (5.75%), held in early Q4, went down compared to previous auctions. At

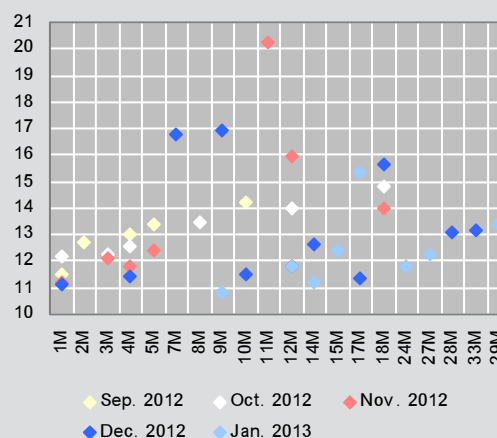
Chart IV.1.3 Interest rates in the primary market of government securities
(p.a., in %)



Source: Ministry of Finance and Economy.

The government borrowed in the securities market under more favourable terms in Q4.

Chart IV.1.4 Yield curve 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 also declined.

all auctions held in Q4 securities worth nominal EUR 193.2 mln were sold.

Trends in the secondary market displayed falling rates and trading volumes. In December⁹, yield to maturity rates moved from 11.1% for one-month to 13.1% for 29-month maturity. Total trading volumes came at RSD 39.9 bln in Q4. Excluding trading up to two business days from the primary settlement date, trading volumes were RSD 12.6 bln, down by 63.3% from Q3.

After September, another successful international auction, this time of five-year eurobonds, was held in November. Thanks to high investor interest, instead of the planned USD 500 mln, bonds were sold in the amount of USD 750 mln. The 5.45% auction rate is considered favourable.

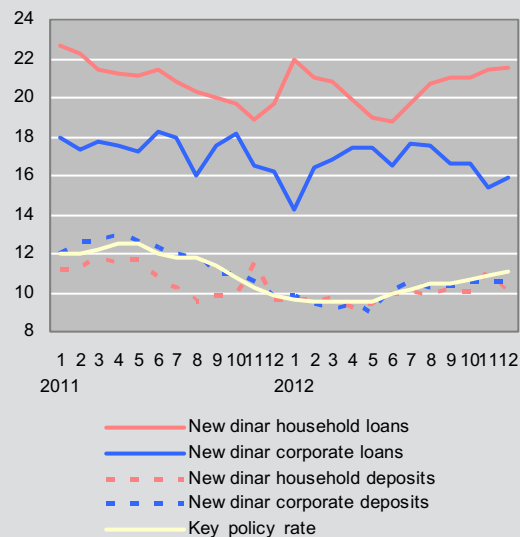
Rates on government securities continued down in January, both in primary and secondary markets.

The weighted average rate on new dinar corporate and household loans fell by 0.5 pp to 17.4%, on the back of declining rates on corporate loans.

Rates on all types of dinar household loans gained 0.5 pp in Q4. The rate on the most common, cash loans, went up 0.5 pp, while rates on consumer loans rose 0.1 pp. The cost of dinar housing loans was up 1.1 pp, but given the minimum share of these loans in the total, it had no major impact on the cost of household borrowing in dinars. Higher rates were probably the reason why demand for these loans diminished in Q4.

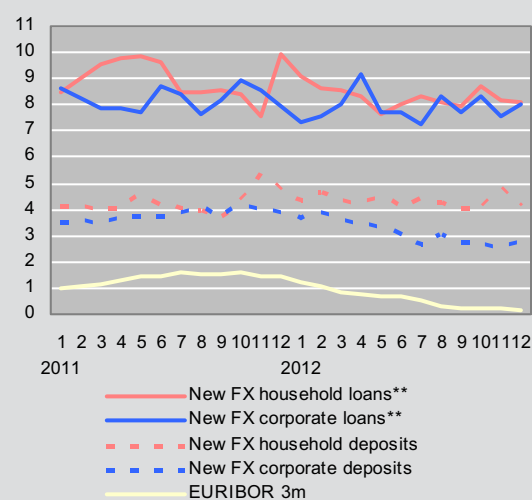
In the period observed, the price of dinar corporate loans was down by 0.7 pp to 15.9% in December. This can be associated with falling money market rates. The rates on the most popular, current assets loans, fell 1.1 pp to 15.5%. The sharpest decline (2.1 pp) was recorded for export loans, though their share in new loans is marginal. The rate on investment loans lost 0.5 pp, but it went up 0.1 pp on other types of loans.

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



The price of dinar corporate loans continued down in Q4, while rates on household loans went up.

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



Rates on FX household savings went up in November to a lesser extent than in earlier years.

⁹ For 97.4% of transactions.

At around 8.0%, rates on euro and euro-indexed dinar loans were up 0.3 pp. Rates on corporate loans moved up 0.4 pp to 8.0% in December. Rates on investment loans dropped 0.9 pp, while rates on current assets and export loans rose 0.6 pp and 0.1 pp, respectively. Household loan rates picked up 0.1 pp to 8.1%. The sharpest rise was recorded for rates on other loans (2.6 pp), while those on housing loans lost 0.3 pp.

Weighted average rates on new dinar household deposits declined slightly in Q4, while remaining broadly flat on euro deposits. In contrast to previous years, banks did not offer significantly more favourable terms on the World Savings Day this year. In November, the average rate was 4.8%¹⁰ on euro and 11.0% on dinar savings. In December, average savings rates declined to 4.0% for the euro and 9.9% for the dinar. Rates on corporate dinar deposits rose 0.3 pp to 10.6%, while rates on FX term deposits stayed flat at 2.8%.

Interest spread on dinar sources of bank funding rose in Q4 for households (0.7 pp) and declined for corporates (0.9 pp). In regard to FX sources, interest spread narrowed for households by 0.7 pp, but widened in the corporate sector (0.4 pp).

Stock exchange trends

Following several months of stagnation, Belgrade Stock Exchange indices went up, while trading volumes shrank relative to Q3. Growth in regional indices was weaker than in Belgrade.

Prices of Belgrade Stock Exchange (BSE) shares went up in Q4, notably in December. By end-December, BELEX15, the index of the most liquid shares, hit 523.9 points, up by 21.6% on end-Q3. The general BELEXline index rose somewhat less – by 17.1% to 1,005.6 points by end-December.

Share prices edged up as domestic investors had positive expectations about macroeconomic developments in 2013 – economic growth, lower inflation and rising exports. Investors' positive sentiment was aided further by the adoption of the fiscal consolidation plan.

Trading in shares amounted to RSD 3.0 bln in Q4. It matched its Q2 levels, but underperformed Q3 by 72.3%

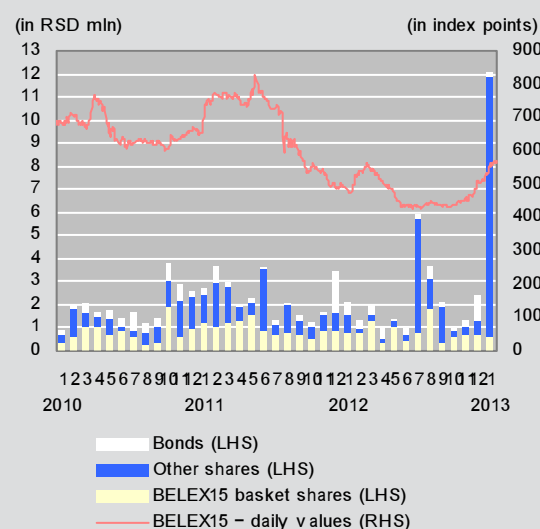
when trading volumes were particularly high owing to block trading and trading contracted earlier due to a change in ownership. Excluding these transactions from Q3 data, contraction in Q4 was smaller – 30.8% for BELEX15 and 29.5% for BELEXline.

Foreign investors were net sellers in Q4 because of one block transaction performed last day of the year, when shares worth RSD 383.1 mln were sold. But for this transaction, their quarterly position would be almost neutral.

Trading in frozen FX savings bonds doubled to RSD 1.5 bln from Q3. Mirroring reduced rates on the primary market of government euro securities (of similar maturity as bonds), the return on frozen FX savings bonds declined. Yield to maturity rates ranged from 4.5% for A2015-series to 4.9% for A2014-series.

The first primary sale of long-term dinar bonds of a bank was held in November through public offering on the BSE. This represents a step further in capital market development. The securities sold amounted to RSD 1.5 bln. Until end-Q4, secondary trading in these securities totalled RSD 0.2 bln.

Chart IV.1.7 BELEX15 and Belgrade Stock Exchange turnover



Source: Belgrade Stock Exchange.

In the course of Q4, Belgrade Stock exchange indices went up, while trading volumes contracted.

¹⁰ In 2011 and 2010 the rate equalled 5.2% and 6.0% respectively.

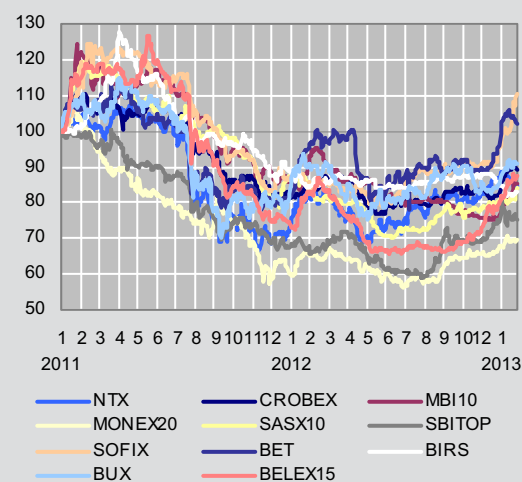
Rising prices of shares boosted the BSE capitalisation by RSD 29.9 bln in Q4 to RSD 776.2 bln by the year's end. Regulated market capitalisation was up RSD 50.4 bln to RSD 455.7 bln, consistent with rising share prices. By contrast, MTP¹¹ capitalisation went down RSD 20.5 bln to RSD 320.5 bln. The share of market capitalisation in estimated GDP rose 0.3 pp in Q4 to 22.9% by end-December.

Indices across regional stock exchanges generally increased, though less than on the BSE. The sharpest rise was recorded in Montenegro and Bucharest, with MONEX20 and BET up by 10.2% and 9.0% respectively. Indices on Skopje (5.0%), Banja Luka (2.5%) and Budapest (2.2%) stock exchanges tumbled down.

BSE share prices continued up in January, with BELEX15 rising by 8.8%. Trading in the most liquid shares remained flat (BELEX15), with an increase noted for shares excluded from this index due to one block transaction of ownership change.

Chart IV.1.8 Stock exchange indices across the region

(in index points, normalised, 31. 12. 2010 = 100)



Sources: BSE and regional stock exchanges.

Of all stock exchanges in the region, the sharpest rise in indices was recorded on the Belgrade Stock Exchange.

Monetary aggregates

Money supply expanded in real terms in Q4, but declined y-o-y.

Reserve money gained 3.1% (RSD 18.7 bln) in nominal or 0.7% in real terms. Dinar reserve money picked up 4.2% (RSD 12.5 bln) nominally and 1.9% in real terms.

Dinar reserve money was created primarily through increased government spending and withdrawn through open market operations. Borrowing by additional issuance of eurobonds worth EUR 1.4 bln propped up the holdings in government's FX account with the NBS and hence the stock of net FX reserves. Throughout Q4, notably in October and December, the government converted a part of its FX holdings into dinars to cover its spending needs. This lent a strong impetus to banking sector liquidity. A portion of dinar funds was retained in its dinar account with the NBS. In mid-December, the NBS reversed the direction of its main open market operations towards liquidity withdrawal, and by end-2012 withdrew RSD 39.8 bln.

In the structure of dinar reserve money, banks' excess reserves rose RSD 14.2 bln, mainly on account of more intensive use of deposit facilities. After the switch to reverse repo operations in December, funds kept by banks in the deposit facility account declined, but remained above the end-Q3 level. Despite the seasonal increase in December, cash in circulation remained broadly unchanged from end-Q3. Required reserves allocated in dinars fell RSD 2.4 bln.

In Q4, dinar monetary aggregates M1 and M2 rose by quarterly 4.0% and 0.5% in real terms respectively. The broadest aggregate, M3, dropped by real 0.2%. Money supply contracted in y-o-y terms. The sharpest drop was recorded for M2 (12.2%). M1 and M3 lost 6.3% and 2.5% in real terms respectively.

The government continued to borrow in the domestic market in Q4, while at the same time monetising a part of its FX holdings with the NBS originating from the sale of eurobonds, thus contributing to the creation of money supply. However, the level of government deposits in the account with the NBS remained higher than at end-September, and drove up the country's FX reserves.

¹¹ MTP is the multilateral trading platform, organised by the Belgrade Stock Exchange and incorporating currently listed shares of companies not eligible for regulated market listing.

Growth in M3 was negatively affected by foreign liabilities growing faster than banks' foreign claims. After a longer time, lending activity failed to spur M3 creation.

Broken down by M3 components, the highest increase was noted for demand deposits (RSD 18.9 bln) – corporate deposits to a greater and household deposits to a lesser extent. Cash in circulation contracted marginally (RSD 0.5 bln), while savings and term deposits fell by RSD 5.3 bln. A drop was observed for funds in accounts of all sectors, most notably of local authorities, apart from other financial organisations. The economic downturn dragged down corporate savings. FX deposits rose largely on account of household savings.

FX household savings picked up by EUR 257.7 mln, generally in November. Though banks did not offer as attractive terms during the World Savings Day as was the case in earlier years, citizens placed more money on deposit than in the previous quarters. Traditionally, clients continue to favour saving in foreign currencies

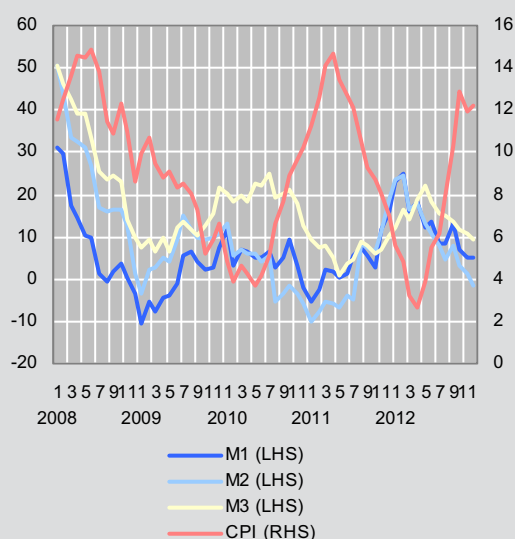
due to mature in one and in five years. Dinar deposits of up to three months and one year went up. Still, total dinar savings contracted as deposits of other maturities declined.

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

	2012				Share in M3 Dec. 2012 (%)
	March	June	Sep.	Dec.	
M3	10.5	12.0	3.2	-2.5	100.0
FX deposits	9.6	15.1	5.7	2.2	70.7
M2	12.7	4.9	-2.3	-12.2	29.3
Time and savings dinar deposits	13.4	0.8	-9.4	-21.1	10.5
M1	12.2	7.7	2.6	-6.3	18.8
Demand deposit	4.0	1.7	0.1	-1.6	12.1
Currency in circulation	27.3	18.5	6.9	-13.7	6.7

Source: NBS.

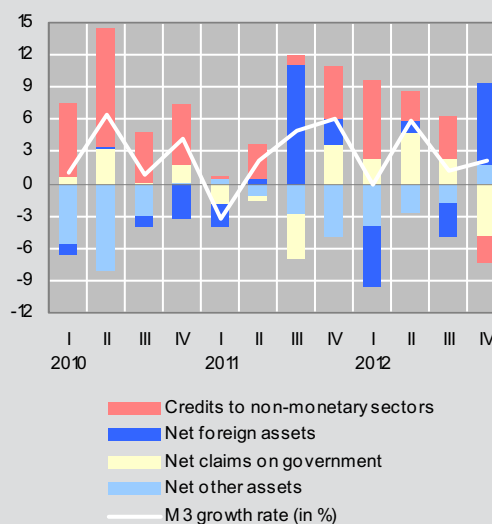
Chart IV.1.9 Monetary aggregates and CPI
(y-o-y rates, in %)



Sources: SORS and NBS.

Money supply recorded a real y-o-y drop in Q4.

Chart IV.1.10 Contribution to M3 quarterly growth rate
(in percentage points)



Source: NBS.

After a longer time, lending activity failed to spur M3 creation.

The dinar monetary multiplier kept its Q3 level, but declined negligibly in case of M3. The velocity of circulation of M2 and M3 remained unchanged from Q3.

As cash in circulation and all deposit categories contracted, all monetary aggregates declined in January, which is usual early in the year.

Bank lending

Bank lending rose less than in Q3, despite a strong impetus from subsidised loans.

Under the composite measure¹², y-o-y growth in total lending slowed markedly compared to Q3. Excluding the exchange rate effect¹³, growth was 1.5% in Q4, down by 2.7 pp on Q3. Domestic lending rose 3.6% y-o-y in December, excluding the exchange rate effect. This was partly due to license revocation and institution of bankruptcy proceedings over Nova Agrobanka.

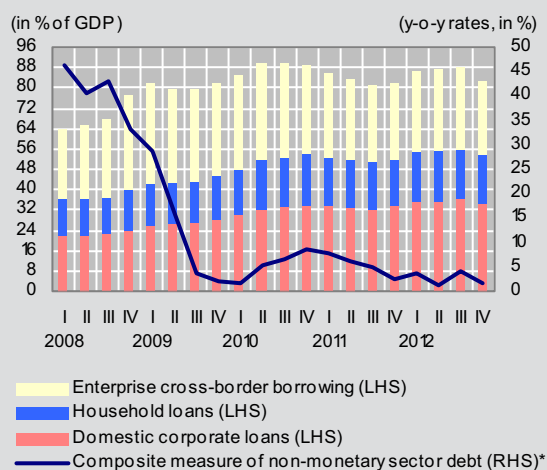
At the year-level, domestic loans expanded RSD 58.1 bln, excluding the exchange rate effect, which is only half of the increase recorded in 2011. Of this, corporate loans were up RSD 43.1 bln and household loans RSD 13.6 bln.

At the quarterly level, domestic lending fell 1.0% excluding the exchange rate effect. Its share in estimated GDP also declined – 55.8% at end-December.

Domestic loan receivables of banks dropped RSD 32.8 bln nominally, or RSD 16.7 bln excluding the exchange rate effect. The decline was due primarily to license revocation and opening of bankruptcy over Nova Agrobanka. The majority of receivables in respect of loans were transferred to the Deposit Insurance Agency, i.e. they were stricken off from the banking sector balance sheet. The remainder of the banking sector experienced an upturn in lending, though much lesser than in Q3.

Lending was financed chiefly from rising FX deposits. An uptick in dinar deposits provided a positive, though weaker, contribution. As the amounts transferred by

Chart IV.1.11 Loans to GDP and lending activity growth*

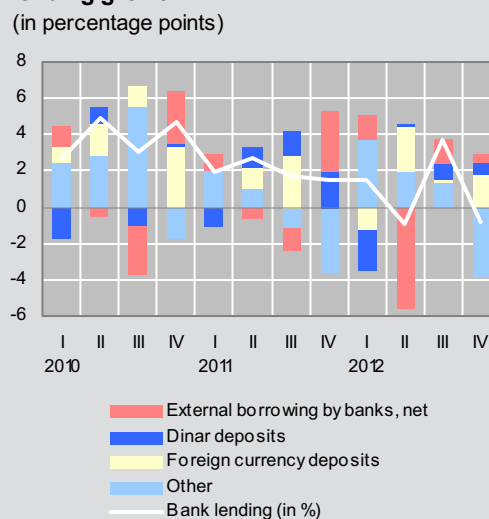


Source: NBS.

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

Despite intensive subsidised lending, banks' overall lending activity slowed down.

Chart IV.1.12 Contributions to quarterly rate of lending growth*



Source: NBS.

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

Banks funded their lending activity chiefly from rising FX deposits.

¹² As an indicator of total borrowing, it covers domestic lending to the private sector, public enterprises and local levels of government, including enterprise cross-border borrowing.

¹³ Calculated at the RSD/EUR exchange rate on 31 August 2008, assuming that all FX and FX-indexed loans were extended in euros.

banks to their accounts abroad were smaller than their total borrowing, a change in banks' net position abroad gave a positive contribution to lending. However, financing of lending from this source is limited as banks' external borrowing was generally short-term. On the other hand, by purchasing NBS repo securities, banks decided to invest a part of funds in non-risk assets.

Corporate lending fell 1.3%, excluding the exchange rate effect, or RSD 11.7 bln in absolute terms, mostly on the back of institution of bankruptcy proceedings over Nova Agrobanka. Corporate lending was under the strongest sway of subsidised loans.

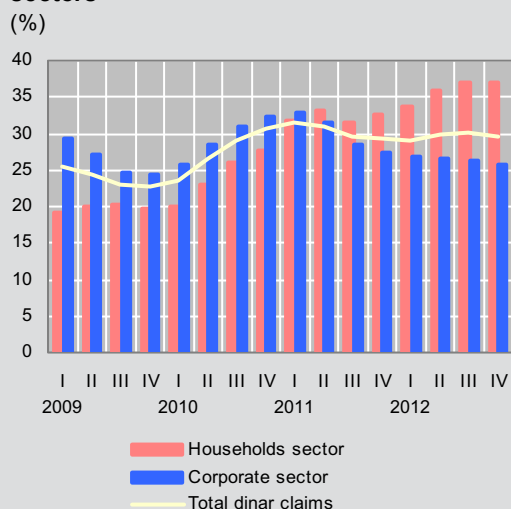
In terms of purpose, most loans were approved for current assets. Investment loans were approved to a somewhat greater and export loans to a similar extent as in Q3.

Household lending also declined in Q4 – by RSD 2.3 bln or 0.3% excluding the exchange rate effect. New housing loans prevailed, though they were fewer than in Q3. Consumer and cash lending receded, while the most expensive form of borrowing – use of credit cards and current account overdrafts, continued at a similar pace.

As corporate subsidised lending intensified, the activity in the subsidised segment was double the amount in Q3. In the course of Q4, government-subsidised loans were worth RSD 86.1 bln, of which the major part (RSD 83.3 bln) related to the corporate sector. Most loans were extended in October after additional funds were allocated from the budget. In early December, funds for subsidised corporate lending were depleted. The most popular were liquidity and current assets loans which made up 69.7% of total extended loans. Refinancing loans accounted for 22.8% and export loans for 7.5%. The programme of subsidising housing loans will continue in 2013. Funds have also been allocated for the new liquidity subsidised lending programme intended for SMEs.

The share of dinar in total corporate and household loans fell 0.2 pp relative to September and reached 28.0% in December. The share of household dinar loans went up and that of the corporate sector declined. A drop in the share of corporate dinar loans can be accounted for by intensive subsidised lending in Q4 as almost 80% of loans approved were euro-indexed. Excluding the exchange rate effect¹⁴, the share of dinar in total loans shifted down by 0.5 pp (to 29.6% in December).

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

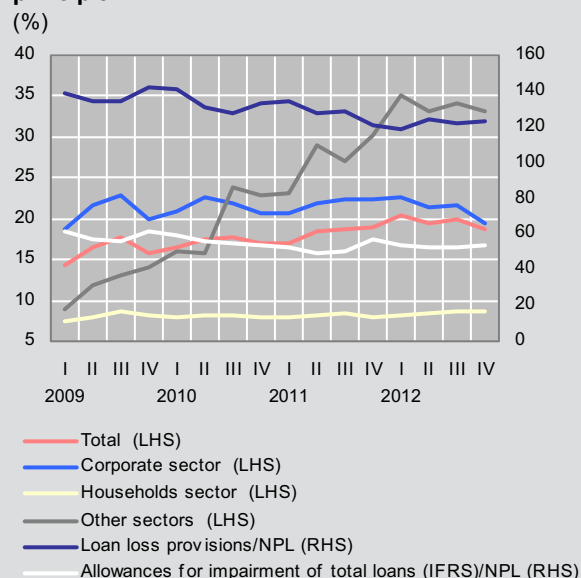


Source: NBS.

* Excluding the exchange rate effect.

Contraction in dinar loans in the total was partly the result of extension of FX-indexed subsidised loans.

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



Source: NBS.

The share of corporate NPLs declined in Q4 largely due to the revocation of license of Nova Agrobanka.

¹⁴ Calculated at the RSD/EUR exchange rate on 31 December 2011.

Under the gross principle, the NPLs share in total loans amounted to 18.6% in December, down by 1.3 pp on end-Q3. The reason was the revocation of Nova Agrobanka's license and exclusion of a major part of the bank's receivables from total banking sector receivables. The share of corporate NPLs was 19.5% in December, down by 2.2 pp on end-Q3. The share of household NPLs stayed flat at 8.6%.¹⁵ Since the early year, the NPLs share in total loans went down by 0.3 pp, falling by 2.8 pp in the corporate and rising by 0.7 pp in the household sector.

Despite a high share of NPLs, the capital adequacy ratio of 16.4% in September is indicative of unimpaired stability of the domestic banking sector. Allowances for impairment amounted to around 54% of NPLs in December, and loan loss provisions to 123.3%.

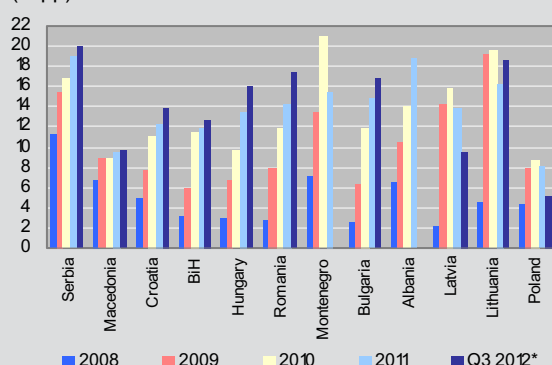
¹⁵ Including entrepreneurs, loan arrears fell 0.1 pp to 10.0%.

Text box 2: NPL trends and the recent mitigation measures of the National Bank of Serbia

In December 2012, gross total NPLs (according to bank data submitted to the National Bank of Serbia prior to pre-closing entries) accounted for RSD 367.1 bln, making up 18.6% of total loans. Despite the high share of NPLs, stability of the Serbian banking sector was not at threat at any point, given the high bank loan provisioning, both according to international standards and domestic regulations.¹ The NPLs in Serbia were actually more fully covered by loan loss reserves than in any other country in the region. Another specificity of Serbia was that the level of NPLs was already high at the beginning of the crisis, and amounted to 11.3% in gross terms at end-2008, compared to 2.1% - 7.2% in other observed countries of the Central and South-Eastern Europe. Though continuing to rise during the crisis, NPLs in Serbia grew less than in most other countries observed (only Poland and Macedonia recorded lower growth). However, any comparison should be taken with caution, as there is no single internationally accepted standard for NPL measurement, and the methodologies used vary greatly from one country to the next.

The acceleration of NPL growth across Central and South-Eastern Europe stems mainly from deterioration in borrowers' capacity to timely service their debt obligations. The volume of NPLs rose particularly strongly in countries which experienced a credit boom and a subsequent deep economic downturn during the crisis (Montenegro, Lithuania and Latvia). On the other hand, countries which managed to avoid recession, such as Poland, quickly resolved the NPL problem. The recent trend of parent banks' deleveraging from their subsidiaries affected the Central and Eastern Europe region most severely. Lower LTD ratios and shrinking of parent bank cross-border financing of subsidiaries led to a stagnation or even a decline in lending in host countries, especially in Bulgaria, Hungary and Romania, which resulted in increased share of non-collectible receivables in the total.

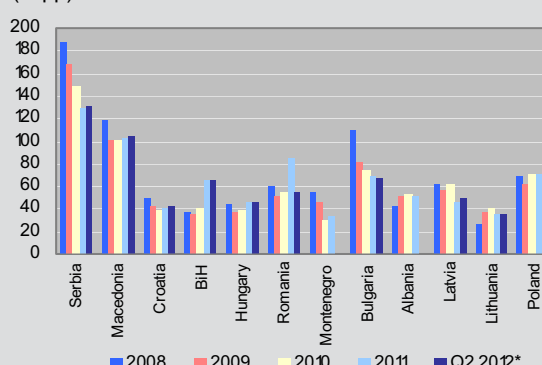
Chart O.2.1 Gross NPLs to total gross loans
(in pp)



* Q2 2012 for Macedonia and Bulgaria.

Sources: IMF and NBS.

Chart O.2.2 Coverage of NPLs by total loan loss reserves
(in pp)



* Q1 2012 for Latvia.

Sources: IMF and NBS.

The key source of NPL growth in Serbia are corporates, recording a rise in gross NPL ratio from 14.5% at end-2008 to 19.5% in December 2012. Sector-wise, the key NPL drivers were the mining, manufacturing, trade and construction. On the other hand, household share in past due loans moved considerably below the aggregate sector average. Since end-2008 it increased by mere 1.3 pp to 8.6% in December 2012. Most of the growth was registered in 2009. Households

¹ Loan loss reserves in December remained sufficient to fully cover gross NPLs. At the month's end the coverage was 123.3%, while allowances for impairment of total loans (under IFRS) stood at 54.3% of gross NPLs.

struggle most with the repayment of consumer loans and current account overdrafts, while housing and car loans are repaid most regularly.

In March 2012 the National Bank of Serbia introduced new reporting forms, including those on NPLs. From March to December 2012, banks transferred an average of RSD 17.8 mln per month to NPL status. The NPLs were mainly resolved through collection of receivables and to a lesser extent through transfer to third parties, restructuring and write-off.

At end-2012 the National Bank of Serbia amended regulations in order to create preconditions for lowering the volume of NPLs in the Serbian banking sector. Certain limitations were removed concerning the transfer of receivables from legal entities. Contrary to what had previously been stipulated, a legal entity to which a receivable is assigned no longer has to be headquartered in Serbia or to be primarily engaged in a financial activity and may be related to the bank. The amendments are in line with the international practice and standards which, instead to banks, entrust NPL resolution to specialised institutions. Also, banks are additionally encouraged to restructure receivables from legal entities using the existing legal framework – the Law on Consensual Financial Restructuring of Companies and the Bankruptcy Law. Namely, they were allowed to perform a second restructuring of the receivables of companies with a viable chance of recovery. At the same time, mortgage was accepted as adequate collateral for 720 days past due debt (past due period was previously limited to 360 days). Criteria for classification of receivables from natural persons based on their creditworthiness have also been changed. Previously the National Bank of Serbia stipulated methods for determining creditworthiness and specific limits, based on debt to income ratio, but now banks are allowed to determine a borrower's creditworthiness using their internal procedures. This way, banks will be able to assess risks more flexibly, taking into account client differences.

Such regulatory amendments create preconditions for resolving NPLs whose accumulation over a number of years has burdened banks' balance sheets and diminished their lending growth potentials. Reduction in NPL levels will also push down the amount of funds which are necessarily allocated for loan loss provisioning. This will open up room for growth in lending but the actual realisation will depend on the existence of good quality projects and clients.

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

Set in motion in September, appreciation of the dinar continued into Q4, gaining most ground in October. The NBS intervened in the IFEM only once – to buy foreign exchange.

In Q4, movements in the FX market were marked by the dinar's appreciation in October and a stable exchange rate trend until the year-end, with short-term oscillations in both directions. On average, the dinar strengthened against the euro by 3.1%, ending the period with the appreciation of 1.2%. From the beginning of the year, the dinar lost 8.0% against the euro.

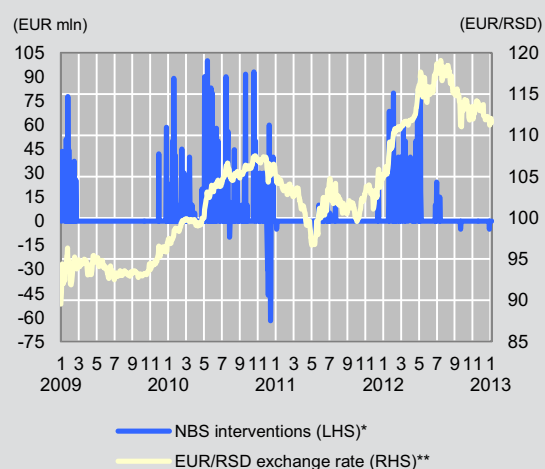
The dinar's strengthening against the euro, parallel with the euro's mild advancing against the dollar, meant a gain of 7.0% on average against the dollar. The dinar's quarterly appreciation against the dollar came at 3.2%. Since the beginning of the year, the domestic currency weakened by 6.2% against the dollar.

Consistent with such trends, the nominal effective exchange rate of the dinar appreciated on average by 3.8% in Q4, ending the period 1.6% stronger relative to Q3. Due to the nominal currency appreciation and domestic inflation rates trending above the foreign ones, the real effective exchange rate of the dinar recorded the average appreciation of 8.0%, while end-of period figure reached 3.8%.

The dinar's appreciation in Q4 resulted from several factors: tight monetary policy measures, a decline in the country risk premium, narrowing of the current account deficit in November and subsidised lending.

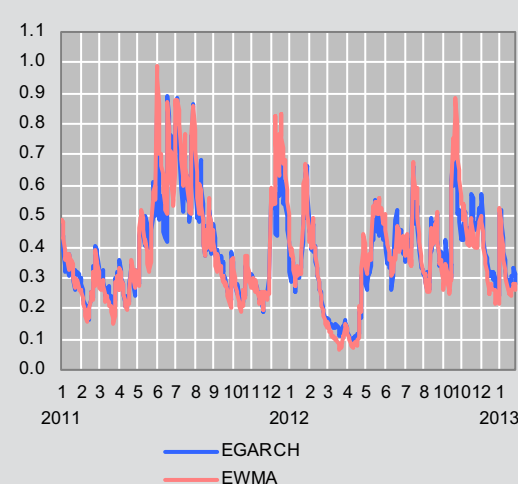
The dinar gained ground also on the back of growing foreign investor interest in dinar government securities, prompted mainly by the drop of the risk premium – around 200 bp since end of August. Q4 saw a larger FDI and remittances inflow compared to Q3, which also buoyed the foreign exchange supply. Buying of foreign currency, typical of the year end, was another factor boosting the supply. On the other hand, domestic corporate demand for foreign exchange in December was unusually low for the end of the year, partly owing to

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



Strengthening of the dinar, in place since end-Q3, continued during Q4 and the beginning of 2013.

Chart IV.2.2 Short-term volatility of the RSD/EUR exchange rate



Daily volatility of RSD/EUR exchange rate increased in Q4.

advance purchases in the preceding months to provide for foreign payments. Continuation of subsidised lending, primarily FX-indexed, increased the foreign exchange supply in the market. With their FX-indexed lending rising, banks sold foreign exchange in the market in order to avoid FX risk exposure. Higher dinar liquidity arising from monetisation of government FX deposits in October and December was withdrawn mainly through open market operations, so depreciation pressures on this account were avoided.

In Q4, the average daily turnover in the IFEM stood at EUR 73.9 mln, up by 11.0% from Q3 and by 6.2% from Q4 2011. The turnover peaked in October, only to shrink gradually through November and December. Exchange rate volatility, measured by EWMA¹⁶ and EGARCH¹⁷ methods, expanded in Q4 which saw the largest average daily volatility in 2012.

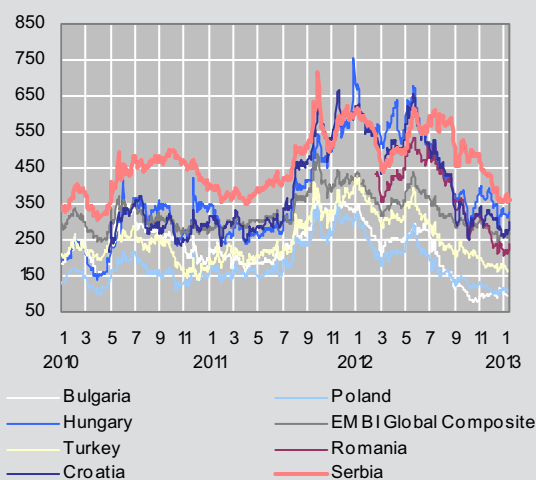
After selling EUR 1.3 bln in H1 and EUR 59.5 mln in Q3, in Q4 the NBS intervened in the IFEM only once – it bought EUR 5.0 mln in an effort to ease the excessive daily volatility of the dinar exchange rate. The NBS continued to set up regular quarterly swap auctions in

order to stimulate the development of the interbank FX swap market, selling EUR 36.0 mln and buying the same amount in Q4.

The dinar continued to strengthen in January 2013. The FX market saw a large foreign exchange supply by non-residents, stemming from increased interest in government securities. The average daily turnover in the IFEM was similar to the one in December. The NBS intervened once, buying EUR 5.00 mln to calm the excessive daily volatility of the dinar exchange rate. Through FX swap auctions in January, the NBS sold EUR 13.00 mln and bought an equal amount.

Risk premiums measured by EMBI fell across the region, but most markedly in Serbia (132 bp in Q4), which is attributed to the recently announced and implemented fiscal consolidation measures. Romania saw a similar premium decline, while composite EMBI and EMBI for majority of other countries was close to 40 bp. In late 2012, EMBI for Serbia came at 391 bp, down by 210 bp from end-2011. The index continued down into 2013, reaching 361 bp at end-January and nearing its pre-crisis level.

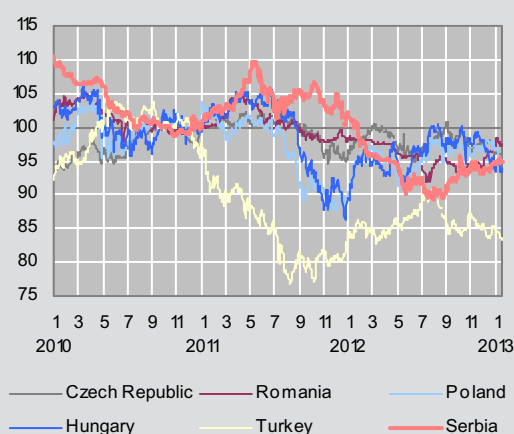
Chart IV.2.3 Risk premium indicator – EMBI by country
(daily data, in bp)



Source: JP Morgan.

In Q4, EMBI decline continued in all countries observed, most markedly in Serbia.

Chart IV.2.4 Movements in exchange rates of national currencies against the euro
(daily data, September 30, 2010 = 100)



Sources: NBS and websites of central banks.

* Growth indicates appreciation.

In Q4, the dinar was in the group of appreciating currencies.

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

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

Apart from the dinar, the Polish zlot and Romanian leu also advanced against the euro in Q4 (by 1.0% and 2.4%, respectively, observed at the end of period). Currencies of other regional peers running similar exchange regimes lost ground against the euro.

Foreign capital inflow

Q4 saw net foreign capital inflow, mainly from portfolio investments and, to a lesser extent, from FDIs. In the same period, residents recorded net foreign borrowing.

Net capital inflow in Q4 was considerably higher than in earlier quarters, exceeding current foreign payment liabilities and boosting FX reserves. Such trends stabilised the dinar exchange rate.

Capital inflow stemmed from portfolio investments and FDIs, and resident liabilities under financial loans also edged up. Trade loans disbursement stepped up as well. Non-resident deposits placed in bank accounts were another source of inflow.

Total net FDI inflow in Q4 increased from Q3, reaching EUR 253.1 mln. The annual net inflow boiled down to only EUR 231.9 mln, mainly due to large outflows in telecommunications in early 2012.

Sector-wise, the largest direct investments in Q4 were recorded for financial services (24.1%), wholesale trade (20.9%), professional, scientific and technical activities (11.5%), manufacturing (6.7%), and construction (5.2%). Within manufacturing, the production of tobacco and metal products attracted the bulk of investments.

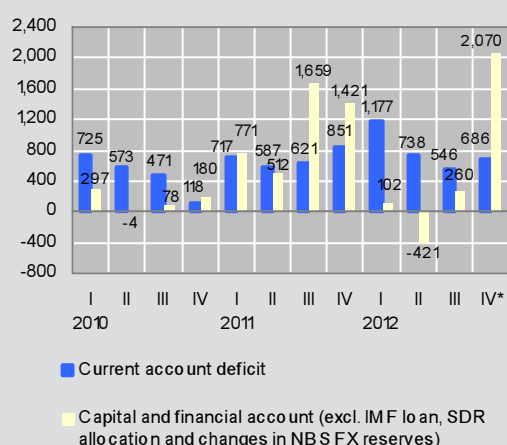
The major part of the inflow, over EUR 1.6 bln, originated from portfolio investments. Owing to SRB 21 eurobond reopening in late September, October saw an inflow of USD 1 bln. The new 5-year eurobond issue worth USD 750 mln was also successfully sold in November. Risk premium decline, in place since September, invigorated non-resident interest in dinar government securities.

According to NBS estimate for Q4, residents were net foreign borrowers under financial loans totalling EUR 73.1 mln. Banks' foreign liabilities went up by EUR 86.4 mln, largely short-term loans. Government net borrowing under financial loans edged up by EUR 13.4 mln. Corporate net foreign borrowing under financial loans dropped, overall by EUR 26.7 mln.

The repayment of the IMF loan accounted for EUR 104.9 mln outflow.

In Q4, corporate net borrowing under trade loans stood at EUR 120.0 mln.

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

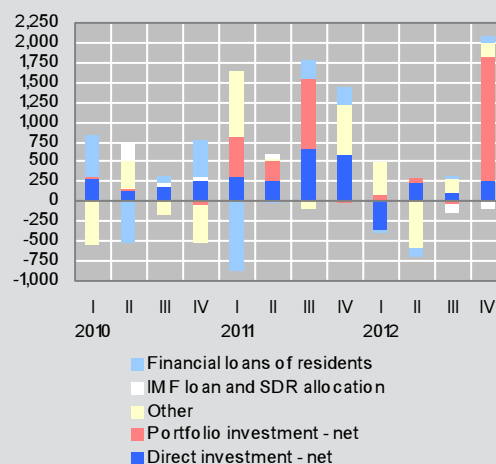


Sources: SORS and NBS.

* NBS estimate.

Net capital inflow in Q4 by far exceeded external financing needs.

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



Sources: SORS and NBS.

* NBS estimate.

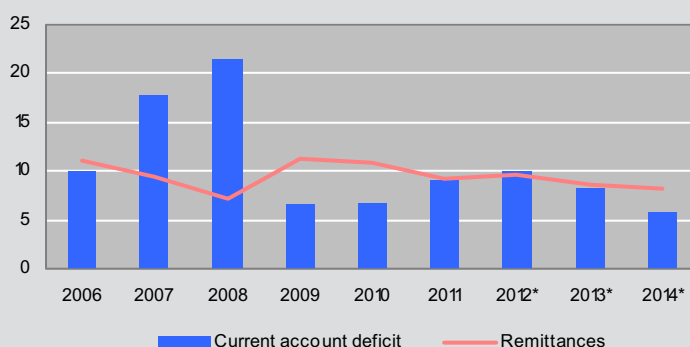
High net capital inflow in Q4 originated mainly from the sale of RS eurobonds in the international market.

Text box 3: Current account determinants

Current account balance is an important indicator of the economy's condition. Important in itself, the analysis of current account determinants gains even more weight at high levels of current account deficit, stemming from domestic imbalances or external shocks. The results of such analysis are also valuable for economic policy makers. A deficit driven by spending growth is far riskier than the one driven by investments, as investments can underpin economic growth and the country's capacity to repay accumulated debt.

In the pre-crisis period, foreign inflows were a source of financing of high domestic spending in Serbia which translated into high levels of current account deficit. The 2008 deficit reached a record high of 21.6% of GDP (Chart O.3.1.). The spill-over of the global financial crisis since Q4 2008, followed by a contraction in capital inflows, pushed the deficit down to one third of its pre-crisis level. In the past two years, current account deficit expanded, reaching 8.9% of GDP in 2011. This was aided by the growth of investments in export-oriented industries (primarily automobile industry), which gave a positive impetus to equipment imports. In 2012, the current account deficit climbed to 10.0% of GDP, mainly owing to growth of imports in the first half of the year, spurred by fiscal expansion. The deficit also increased as remittances somewhat dwindled compared to previous years, while the outflow on account of interest payments went up. However, thanks to automobile exports rebound and fiscal consolidation measures, the current account deficit eased in H2 2012. Owing to the same factors, the current account deficit share in GDP is expected to shrink further in 2013.

Chart O.3.1. Current account deficit and remittances
(in % of GDP)



* NBS estimate.

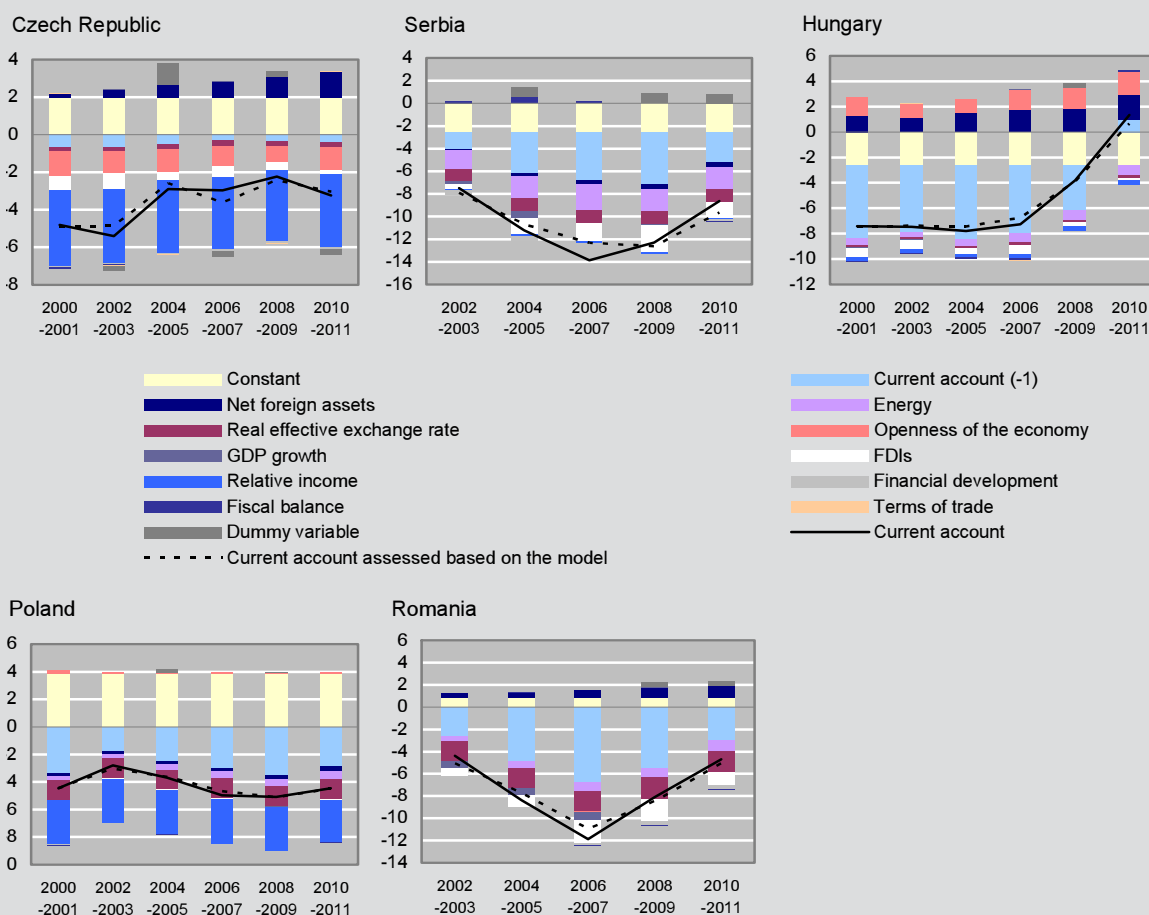
The analysis of macroeconomic variables which are the key determinants of the current account trends in Serbia and Central and Eastern Europe countries running inflation targeting regime (Romania, the Czech Republic, Poland and Hungary) highlights the importance of the savings and investments channel.¹ This follows from the impact of fiscal balance, relative income and GDP growth on the current account deficit in all countries observed (see the Chart). Bearing this in mind, it can be concluded that measures conducive to economic growth and institutional development should have a positive bearing on private savings and, consequently, on the current account.

Wider energy deficit, FDI and real appreciation were the key determinants of Serbia's deficit. Similarly, Romania's current account was under the influence of FDI and real effective exchange rate. On the other hand, current account deficit in other countries was determined by different factors. In the Czech Republic and Poland deficits soared mainly on the back of convergence of real income, while the improvement in Hungary's current account is attributed primarily to trade integration and net foreign assets. Large revenue outflows based on the repatriation of profits from investments

¹ The assessment was based on the jackknife model averaging method. For a detailed account see: Nedeljković, M, Urošević, B. and Zildžović, E, "Jackknife Model Averaging of the Current Account Determinants", working paper of the National Bank of Serbia, No 23, 2012.

which poured in in the previous period, evident in other countries observed, point to a potential future cause of deterioration in Serbia's current account. This further indicates the importance of structural policies for boosting productivity and competitiveness, since deficit will most likely have to be narrowed through improvement in the trade balance.

Chart O.3.2 Current account, current account assessed based on the jackknife model and contributions to current account balance
(two-year averages, in % of GDP)



Sources: Eurostat and NBS.

Tailored structural measures (e.g. improvement of business environment, education, market regulation and labour market) are one of the ways to improve productivity and competitiveness. However, as these measures will yield fruit in the long run, near-term deficit reduction can be achieved via fiscal policy. Apart from cutting down the deficit, it is also important that structure of expenditures favours export-oriented sectors and that revenues originate from consumption rather than from labour taxation. In the short run, current account deficit could also be influenced through the exchange rate. Nevertheless, it should be borne in mind that the exchange rate depreciation affects the current account deficit with a certain time lag. Given the exchange rate impact on the financial stability of highly euroised countries, exchange rate adjustments should only complement structural measures. The more efficient structural reforms and fiscal policy measures, the lesser the need for exchange rate adjustments.

3. Aggregate demand

Domestic demand continued down into Q4, while net exports grew on the back of automobile industry production and export rebound.

In Q4, aggregate demand edged up by 0.3% owing to the rise in net exports. Y-o-y, the decline in aggregate demand decelerated from 2.5% in Q3 to 1.5% in Q4. The key factor extending its fall into Q4 was domestic demand (-3.1 pp), while net exports made a positive contribution.

The estimated drop in domestic demand in Q4 came at 0.3% (contributing by -0.3 pp to aggregate demand), reflecting the shrinking of private consumption and private investments.

On the other hand, despite slowing down to 3.1%, net exports positively contributed (0.6 pp) to the growth of aggregate demand. Net exports also picked up in y-o-y terms (7.5%).

GDP contraction in 2012 is estimated at around 2.0%. Observing the structure of aggregate demand, the key headwinds came from private investments (-1.6 pp), and to a lesser extent private consumption (-1.0 pp), while positive contribution originated from government consumption and investments (0.7 pp). On an annual

basis, net exports had a neutral impact on GDP – negative in H1 and positive in H2, mainly owing to the automobile production gaining steam. Fiscal expansion in H1 resulted in a positive contribution by government consumption and investments on an annual basis.

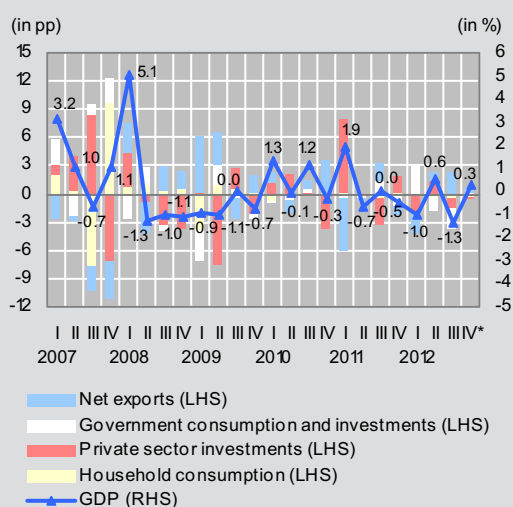
Aggregate demand, driven by net exports, is likely to grow at around 2.5% in 2013 (contribution of 2.0 pp). Such estimate is based on the expected rise in automobile industry and oil derivatives exports. Positive impetus is also expected from private (1.5 pp) and government (0.2 pp) investments. Final household consumption will give a negative contribution (-0.6 pp), though milder than the year before, and government consumption will work in the same direction (-0.6 pp), due to announced fiscal consolidation measures.

Domestic demand

All components of domestic demand, save government consumption, fell from the quarter before. Y-o-y growth was recorded for government consumption and investments.

Household consumption is estimated to have accelerated its y-o-y fall to 2.0% in Q4 (contribution of -1.5 pp), moving in the negative zone for the sixth consecutive quarter. On a quarterly basis, household consumption

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

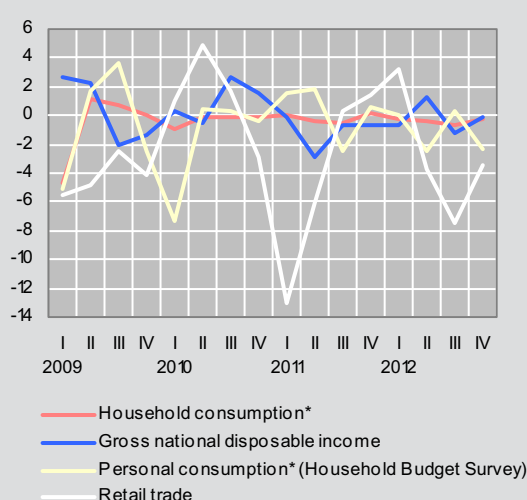


Sources: SORS and NBS.

* NBS estimate.

GDP expanded in Q4, driven by the growth of net exports and government consumption.

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

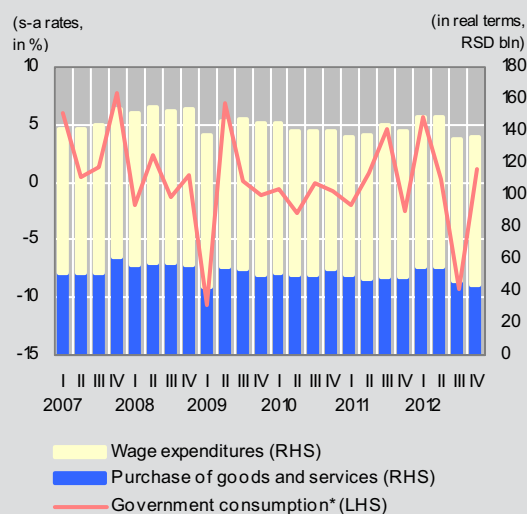


Source: NBS.

* NBS estimates for Q4 2012.

Since the beginning of 2012, household consumption has been constantly on decline.

Chart IV.3.3 Government consumption



Source: NBS.

* NBS estimate for Q4 2012.

Government consumption increased in Q4 on the back of wage expenditure growth.

dropped by 0.3%, giving a negative contribution to GDP of 0.2 pp.

A contraction in household consumption reflected the weakened purchasing power of households, additionally aggravated by the increase in VAT and excise duties. This is confirmed by a 11.1% y-o-y drop in retail trade in Q4, as well as by lower VAT collection.

Overall, sources of household consumption plunged by 1.1% s-a in Q4. Social transfers depleted the most, followed by the wage bill. Household consumer lending also shrunk.

In Q4, **private investments** are estimated to have shrunk by 5.4% y-o-y and 1.1% q-o-q, pulling down aggregate demand (-1.1 pp and -0.2 pp, respectively). Unfavourable terms of long-term lending, illiquidity and uncertainty regarding the future pace of economic recovery continue to weigh down on investments rebound.

A drop of investments in industry is signalled by lower equipment imports at 16.6%. The number of building permits issued and shrinking of effective work hours in construction indicates that construction investments have contracted.

Table IV.3.1 Investment indicators

	2011	2012			
	Q4	Q1	Q2	Q3	Q4
Real indicators (seasonally-adjusted, quarterly, growth, in %)					
Construction	0.3	-1.7	-1.2	-4.3	-0.4*
Industrial production of capital goods (physical volume)	9.9	9.1	-5.6	1.8	-1.4
Exports of capital goods**	-11.5	9.9	18.1	-1.9	0.2
Imports of capital goods**	5.1	-1.3	-1.2	-5.6	-16.6
Stocks of capital goods	-12.9	-8.0	-11.9	2.6	4.7
Industrial production of intermediate goods (physical volume)	-3.8	-4.9	6.0	-9.0	-1.3
Exports of intermediate goods**	2.9	-9.3	2.2	-4.3	7.6
Imports of intermediate goods**	-0.6	9.5	-2.7	-4.9	1.5
Stocks of intermediate goods	-3.2	-1.4	3.0	-4.3	2.3
Industrial production of construction materials (physical volume)	1.3	-7.2	1.6	-2.3	-0.7
Inventories of construction materials	-6.2	-7.4	-5.0	1.1	1.7
Government investment***	-23.0	70.3	-31.3	-6.3	-3.5

* NBS estimate.

** Exports and imports are denominated in euros.

*** Government investment spending is deflated by the industrial producer price index.

Government consumption and investments are estimated to have fallen y-o-y in Q4. Q-o-q, government consumption went up, while government investments dwindled.

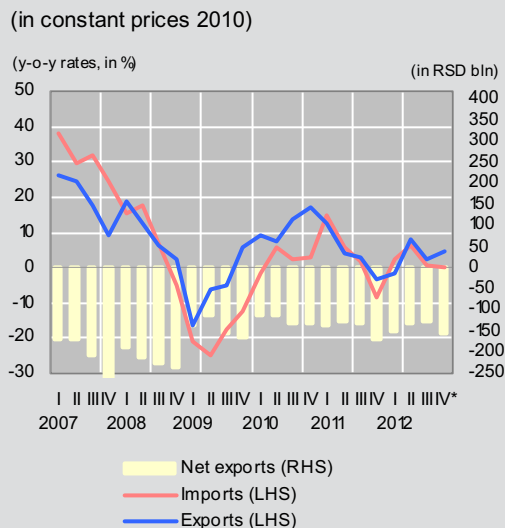
In Q4, final government consumption fell by 3.6% y-o-y (contribution of -0.7 pp), while rising at 1.2% q-o-q (0.2 pp). Quarterly growth in Q4 was prompted by higher public sector wage expenditures, while the outlays for the purchase of goods and services fell relative to Q3.

Government investments rose by 5.3% y-o-y (contribution of 0.2 pp), and slumped by 3.5% q-o-q (contribution of -0.1 pp). The shrinking of government investments is signalled by a contraction in consolidated capital expenditures.

Net external demand

In Q4, net external demand continued to positively contribute to aggregate demand, mainly owing to positive effects of automobile industry exports.

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



In Q4, exports grew at a faster pace, owing to positive trends in the automobile industry.

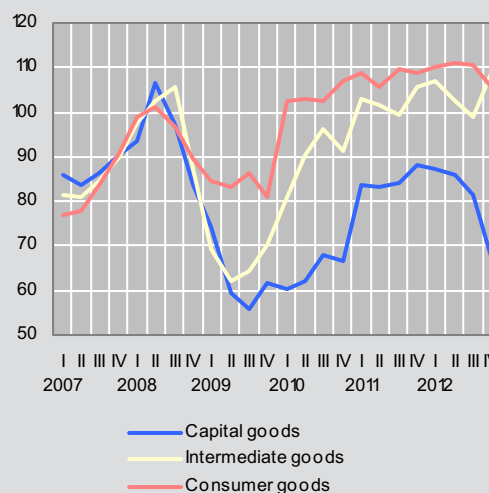
In Q4, net external demand increased by 3.1% in s-a terms (adding 0.6 pp to GDP), as a consequence of exports growing faster than imports (3.7% and 1.5%, respectively). Climbing also in y-o-y terms (by 7.3%), net external demand gave a positive impetus to GDP (1.6 pp).

Euro-denominated commodity exports grew by 7.4% in s-a terms with a sizeable impact on the narrowing of current account deficit in Q4. Manufacturing accounted for the bulk of this growth, with motor vehicles and trailers exports going up by 88.8%, owing to the continued expansion in automobile industry output. Positive trends were recorded also in exports of chemical products and electrical equipment.

On the other hand, the largest shortfall in terms of commodity exports targets was recorded for agricultural products (-37.8%), quite expectedly, given the 2012 agricultural underperformance.

In Q4, euro-denominated commodity imports grew by 5.4% in s-a terms. Imports of intermediate goods gained 10.3%, while a drop of 4.4% was recorded for consumer goods. A further decline in equipment imports of 16.6% signals a weakening of investment activity. Imports by economic destination increased for energy, intermediate

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



Equipment imports declined in Q4, which indicates a low level of private investments.

and capital goods, while falling for consumer goods (durable and non-durable).

With seasonally adjusted commodity exports growing faster than imports¹⁸ in Q4, exports to imports ratio edged up by 1.7 pp from September (61.7% relative to 60.0%). At end-2012, exports were 20.7% above, and imports 8.9% below, their pre-crisis levels¹⁹.

The heightening of geopolitical tensions in early Q4 triggered a rise in crude oil prices. From mid-October to mid-November the prices plummeted amid fiscal cliff uncertainty in the US and weakening of macroeconomic indicators in the euro area. As Middle East tensions eased, oil prices hiked again, nearing the end-Q3 level in December (around 110 \$/bbl).

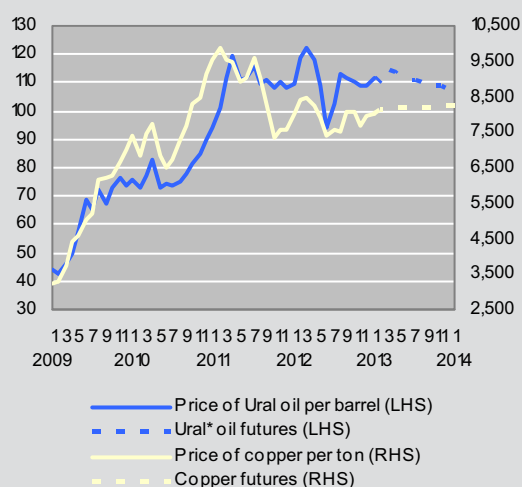
Global copper price edged down by 4.3% from Q3. October and November decreases were triggered by the shrinking of China's demand and the uncertain outcome of the US fiscal crisis. In December, copper price picked up, reflecting more optimistic growth prospects for China, the main consumer of this raw commodity.

After rising in Q3, food prices in international markets went down in Q4 and the global food price index in

¹⁸ 12-month moving average.

¹⁹ H1 2008.

Chart IV.3.6 Oil and copper price movements
(average monthly prices, in USD)

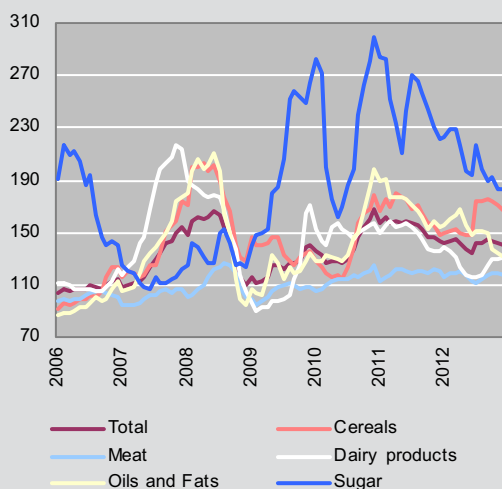


Sources: Bloomberg, futures market and NBS.

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

Oil price stagnated in Q4, while futures movements indicate a decline for the period ahead.

Chart IV.3.7 World food price index
(in real terms, 2002 - 2004 = 100)



Sources: FAO, UN.

Global food prices dropped in Q4, owing to lower prices of oils/fats and cereals.

December was 3.0% below its September level. The index declined 7.0% from 2011, with all components going down. Cereals and oils/fats experienced the greatest price decreases, owing to a good corn and soybean harvest in South America, which compensated for the US's poor agricultural performance. The price of sugar continued down amid growth expectations for the global production and the build-up of inventories. Prices of meat and dairy rose reflecting past increases in animal feed prices.

4. Economic activity

GDP drop in 2012 is estimated at around 2.0%, while the growth projection for 2013 remains at around 2.5%. The negative output gap narrowed slightly in Q4 relative to a quarter earlier.

Serbian economy is expected to contract by around 2.0% in 2012, mostly due to extremely poor results in agricultural production, whose real annual drop is estimated by the Statistical Office at around 17%.²⁰ On the other hand, positive movements were recorded in manufacturing, with the estimated annual growth of 1.2%.

A rebound in economic activity can be expected in 2013. The GDP growth projection for 2013 has been kept at around 2.5% despite signals that economic growth in the euro area will be revised down (from 0.2% to -0.1%). In our best judgement, the adverse effect of the euro area's revised growth of 0.5 pp on domestic economic activity will be counteracted by the anticipated positive contribution from higher production of petroleum products, owing to the increased capacity of the Pančevo Oil Refinery. The projection maintained the earlier assumptions about the positive contribution of agriculture (1.5 pp) and the automobile industry (1.0 pp).

Real GDP growth in Q4 is estimated to have grown 0.3% s-a, unlike in Q3 when a 1.3% drop was recorded. Economic activity measured by NAVA went up 0.4% s-a. In Q4, economic activity was below the pre-crisis level²¹ – GDP by 4.2% and NAVA by 2.6%.

In Q4, quarterly GDP performance will be positively affected by industrial production (0.4 pp), as indicated by the 2.1% s-a increase in its physical volume. Namely, the

²⁰ Full data on cattle breeding for 2012 are not yet available, therefore the estimate presumes an unchanged level of activity in this sector.

²¹ Level in H1 2008.

physical volume of manufacturing was up 2.1%, adding 1.0 pp to the physical volume of industrial production. The mining sector also swept upward (4.5% s-a, contribution 0.5 pp), as well as electricity, gas and steam supply (3.6% s-a, contribution 0.6 pp). The negative contribution to quarterly increase in real GDP stemmed from trade (-0.1 pp), as indicated by the s-a decline in Q4 retail trade.

The physical volume of production of petroleum products rose s-a by 139.6%, motor vehicles by 65.1%, computers, electronic and optical products by 82.1%, and pharmaceutical products by 47.0%, indicating that industrial production perked up in Q4. The sharpest quarterly drop was recorded in the production of food and beverages, tobacco products, machinery and equipment.

The largest boost to the increase in the physical volume of industrial production originated from the production of petroleum products (4.0 pp). The strong growth in this sector was prompted by the completion of the first stage of the investment cycle in the Pančevo Oil Refinery, which considerably improved the Refinery's production capacity. Apart from investments in the production and processing capacity, sizeable funds were invested to

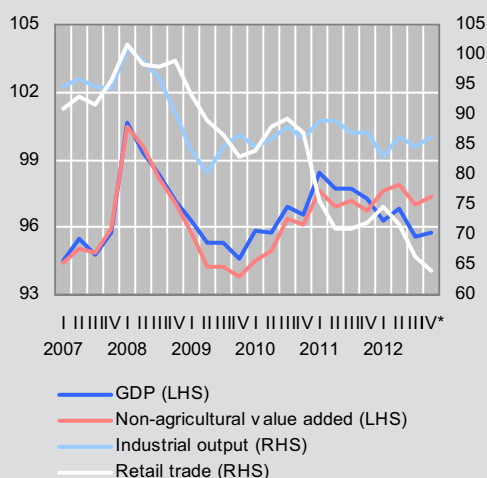
modernise and expand the retail network in Serbia and the region, which will positively reflect on the export of petroleum products. The GDP projection for 2013 therefore includes the 0.5 pp contribution from the production of petroleum products.

The automobile industry contributed 0.9 pp to the overall growth of the physical volume of industrial production. The robust production growth spilled over onto motor vehicle exports, which surged 88.8% s-a in Q4, helping motor vehicles top the export products list in Serbia. The continuation of production in Fiat Automobiles Serbia will for the major part induce a rise in GDP in 2013, with a 1.0 pp contribution.²²

Finding a strategic partner for launching production in the black metallurgy sector could also contribute to the healing of the economy.

The production of non-metallic mineral products, which may serve as an indicator of trends in the construction sector, stagnated in the past three quarters. At the same time, the South Stream project, to be launched on Serbia's territory in 2013, could have a favourable impact on this segment of the economy in the foreseeable future.

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

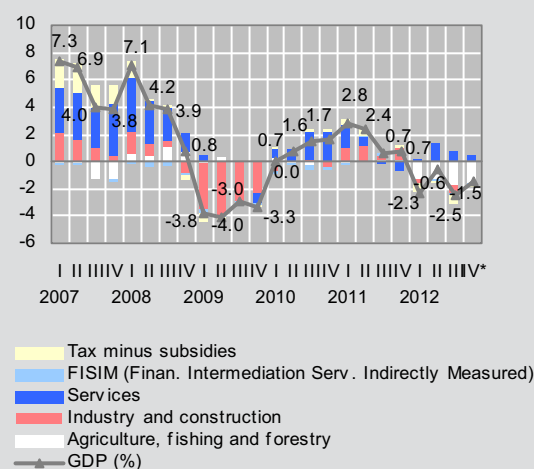


Sources: SORS and NBS.

* NBS estimate.

Growth in manufacturing helped boost economic activity in Q4.

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



Sources: SORS and NBS.

* NBS estimate.

Decline in agricultural production affected the y-o-y GDP drop in Q4, as it did throughout 2012.

²² Based on the assumption that 100,000 vehicles will be produced, with a 40% participation of the domestic component.

The estimated drop in real y-o-y GDP in Q4 (-1.5%) stalled relative to Q3 (-2.5%). The largest negative contribution to real y-o-y GDP growth in Q4 will most likely arise from the y-o-y slump in agricultural production (-1.6 pp). Electricity, gas and steam supply will also have a negative contribution (-0.2 pp) on account of the high base in Q4 2011, when the historical quarterly maximum in electricity production was reached. A y-o-y real drop was also recorded in the construction sector (contribution -0.3 pp). The fall in retail trade accelerated in y-o-y terms to 11.1%. However, due to increased wholesale turnover, the total activity in the trade sector reached a standstill. The positive contributions to y-o-y GDP movements in Q4 came from manufacturing and information and communications (0.5 pp and 0.2 pp respectively).

Y-o-y, the physical volume of industrial production in Q4 declined for the fourth consecutive quarter (-0.4%), though much more slowly compared to Q3 (-4.0%). The slower y-o-y slide was mostly influenced (1.2 pp) by a 1.8% rise in manufacturing, while the y-o-y 7.1% drop in electricity, gas and steam supply and a 3.7% fall in mining (-1.3 pp and -0.3 pp respectively) worked in the opposite direction.

As with quarterly growth rates, the largest contributor to y-o-y expansion of the physical volume of manufacturing was the production of petroleum products (1.7 pp) and automobiles (1.5 pp), along with a considerable increase in the production of pharmaceuticals. On the other hand, a y-o-y downturn in the physical volume was again registered in the production of chemical products (-24.4%) and base metals (-53.5%).

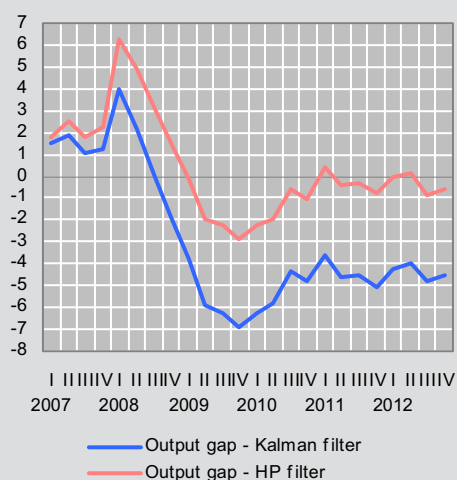
Q4 economic growth measured by NAVA helped narrow the output gap slightly compared to Q3. The negative output gap indicates the persistently low purchasing power of citizens, and by extension, continued disinflationary pressures. However, as the economy recovers, the disinflationary pressures on this account will gradually subside.

5. Labour market developments

Wages

Q4 saw a real drop in average net wages relative to the previous quarter. Industrial unit labour costs, most notably in manufacturing, recorded a decline.

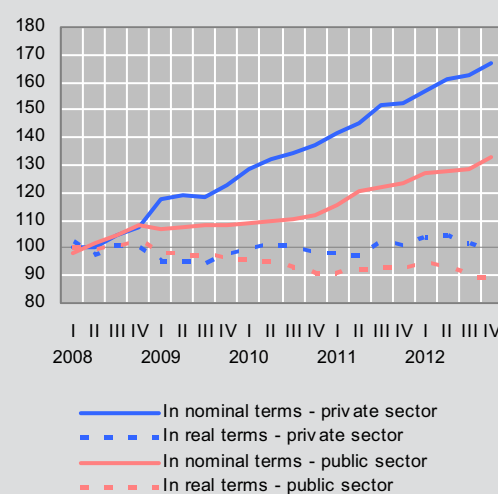
Chart IV.4.3 Output gap
(percentual deviation from the trend)



Source: NBS.

The negative output gap slightly narrowed on the back of stronger economic activity in Q4.

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



Source: SORS.

Average Q4 wages fell slightly faster in the private than in the public sector.

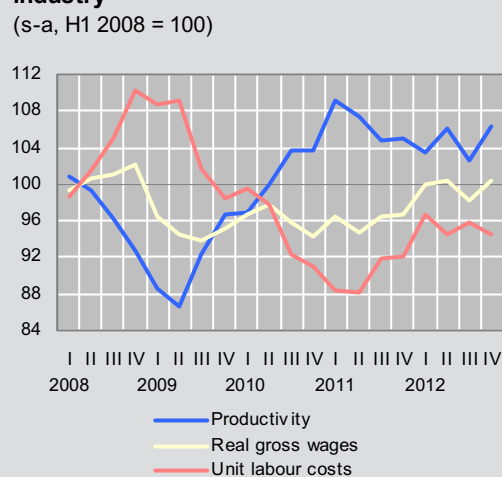
According to seasonally-adjusted data, average net wages in Q4 went up by 3.5% nominally q-o-q, while in real terms they receded by 1.2%. In real terms, average net wages shrank by 2.5% in the private and 1.5% in the public sector.

The largest real s-a drop was recorded in the real estate, financial and insurance sectors, as well as electricity, gas and steam supply. On the other hand, average net wages in agriculture had the highest real s-a growth.

In y-o-y terms, the deceleration of nominal growth in average net wages was halted for the first time since it began in early 2012. Average net wages rose nominally by 8.8%, but dropped by 3.2% in real terms from the same period last year. At the same time, the real decrease in average net wages was more pronounced in the public (-4.3%) than in the private sector (-2.7%). The movements in wages from the onset of the crisis onwards suggest that in the private sector, unlike the public, the adjustment was primarily a result of reduced employment.

The average net wage paid out in Serbia in Q4 equalled RSD 43,625.

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



Source: SORS.

Productivity increased slightly faster than real gross wages, leading to a decrease in industrial unit labour costs.

Industrial unit labour costs ebbed in Q4 compared to the previous quarter (-1.4% s-a), pushed down by productivity gains which rose faster than real gross wages. Industrial unit labour costs in manufacturing were largely reduced (-4.9% s-a), since the upswing in productivity was followed by a decrease in real gross wages.

Employment

According to the October Labour Force Survey, the labour market showed positive movements, which was unexpected bearing in mind the slump in economic activity in 2012.

Contrary to expectations stated in the previous *Inflation Report*, the October 2012 Labour Force Survey reported positive movements in the labour market – unemployment went down, and employment up, relative to both April 2012 and October 2011.

Unemployment, i.e. the percentage of the jobless in the total number of active population²³, edged down between April and October 2012 from 25.5% to 22.4%, as well as compared to October 2011 (23.7%). From April to October 2012, the number of the unemployed was reduced by 71,328. Some of the unemployed opted for “concealed employment” – informal employment rate²⁴ rose by 0.9 pp, reaching 17.9%.

However, the data show that between the two surveys, a much larger number of the unemployed succeeded in finding formal employment, wherefore total employment (in formal and informal economy) swelled by as many as 141,450. Consequently, the employment rate, i.e. the percentage of employed persons in total population above 15 years of age, rose from 34.3% to 36.7%. Observed by sectors, the highest employment increase was recorded in agriculture (55,192), manufacturing (30,755), public administration (15,365) and construction (16,612).

Relative to April, October self-employment figures went up by 85,731, employment rose by 56,181, while the number of “helping members” of the household fell by 462 persons. There was an increase in the number of persons employed for an indefinite period (29,643), definite period (18,984) and persons with temporary employment (8,628), while the number of seasonal workers fell by 1,074.

²³ Active population (workforce) comprises all employed and unemployed persons aged 15 and beyond.

²⁴ Informal (“concealed”) employment refers to persons employed in unregistered companies, or employees in registered companies working without a formal job contract or social and pension insurance, as well as to unpaid “helping members” of households.

The positive results of the October Labour Force Survey cannot be correlated with other movements in the economy. Bearing this in mind, along with certain methodological issues (representative samples, extrapolation of results based on population characteristics according to the 2002 census, etc.), we believe that they should be regarded with some reservations.

Unlike the Labour Force Survey, the Statistical Office's RAD research, monitoring the number of formally employed²⁵, registered a decrease of 8,924 persons in October compared to April. The continued decline in employment was recorded in the RAD statistical research during the course of Q4, albeit somewhat slower. Relative to September, December employment fell by 1,233 to 1,722,794 persons. Employment in the private sector went further down than in the public sector. At the same time, employment figures decreased across all sectors, most notably in manufacturing. Y-o-y, employment slumped slightly quicker (0.9%) than in the previous quarter (0.8%).

Similar to the Labour Force Survey, in the period April–October, the National Employment Service

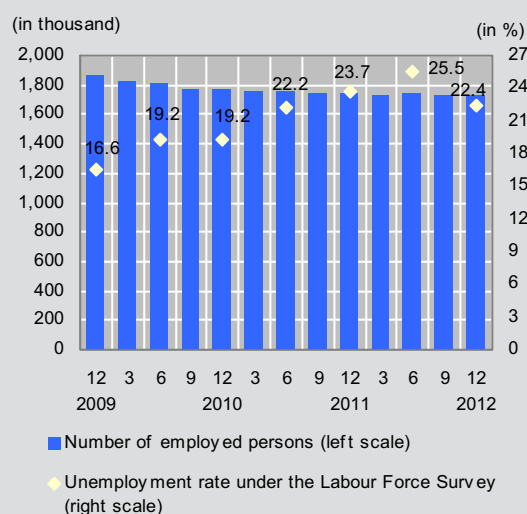
recorded a fall in the number of registered jobless persons actively seeking employment (by around 23,000). Nonetheless, we must bear in mind that the definitions of unemployment can vary – according to the survey, the actual number of jobless persons is lower than the number of the unemployed registered with the National Employment Service, primarily because those in “concealed employment” are perceived by the survey as employed. During Q4, the National Employment Service registered another 10,000 jobless persons.

6. International environment

In Q4, international environment was characterised by prolonged recession pressures in the euro area, though there is a hint of optimism that the end of the recession is near. Inflationary pressures in the euro area and the region have abated.

In Q3, GDP in the euro area recorded the third straight no-growth quarter, while leading economic activity indicators, PMI and Eurocoin, point to a probable decline

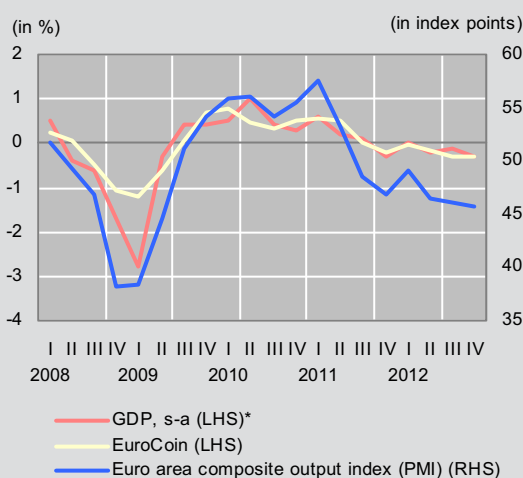
Chart IV.5.3 Employment figures and unemployment rate



Source: SORS.

October Labour Force Survey registered an unexpected decline in unemployment.

Chart IV.6.1 Movements in GDP and economic activity indicators of the euro area



* Consensus Forecast estimate for Q4 2012.

Sources: Eurostat, Markit Group and Banca d'Italia

In 2012, GDP in the euro area is estimated to have declined by 0.5%, with indicators pointing to stagnation or mild fall in 2013.

²⁵ Employees that have entered into contracts of employment with the employer (legal entities and private entrepreneurs). Employed persons are not persons working under a Special Services Contract or a Contract of Temporary and Periodic Work.

in Q4 as well, which would leave total GDP drop in 2012 at 0.5%. The faltering economic activity comes hand in hand with a rise in unemployment, which reached its historic peak of 11.7% in December.

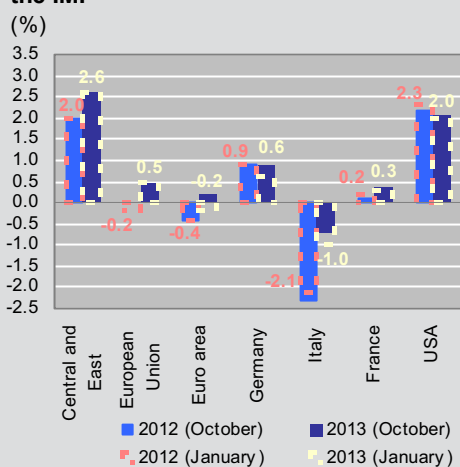
According to Consensus Forecast, the euro area's economic activity in 2013 will be slightly trimmed down (0.1%). The high unemployment rate, fiscal consolidation in some countries and the persistently tight lending conditions narrow the room for a domestic demand-driven economic recovery in the euro area. On the other hand, a positive contribution to economic activity may well come from foreign demand, where positive tendencies have been spotted – accelerated economic growth in the USA and the emerging markets. In 2013, economic activity is expected to continue weakening in Spain (-1.6%) and Italy (-0.9%), whereas Germany will uphold its 2012 growth rate of 0.7%.

The IMF's revised data for 2013 also suggest that the euro area economy will contract by 0.2%. As for our main foreign trade partners in the euro area, Germany's growth is set to slow by 0.3 pp and Italy's to decline by the same amount, relative to the previous projection.

Still, some positive signals with regard to the euro area recovery have been coming in from financial markets. The ECB's debt purchase programme, steps towards stronger fiscal integration and the finalised agreement over single banking supervision in the euro area have had a stabilising effect on financial markets and helped lower the yield on peripheral sovereign bonds. Reduced pressure from the financial market could bring about the realisation of long-postponed private sector investments and the creation of conditions for a faster economic growth in the forthcoming period. Risks are, however, still present regarding the political feasibility of the already defined measures, and even more so if we take into account this year's elections in Germany and Italy.

Economic slump in the euro area weighed down on aggregate demand. Together with the drop in the prices of energy and food, and the waning of the effects of the earlier VAT increase, this has helped reduce inflationary pressures. Y-o-y inflation stood at 2.2% in December, down 0.4 pp relative to Q3. According to preliminary estimates, it receded further in January to 2.0%. Inflation is expected to continue down and stay below 2% in 2013. Despite slackened inflationary pressures, the ECB did not

Chart IV.6.2 Revisions of real GDP growth forecasts for 2012 and 2013 by the IMF*

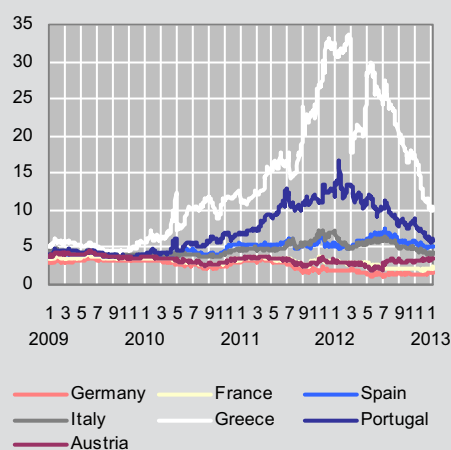


Sources: IMF WEO (October 2012) and IMF WEO Update (January 2012).

* Revision relative to the October World Economic Outlook Update.

The IMF forecast slower economic recovery for Germany and Italy in 2013.

Chart IV.6.3 Yield on sovereign bonds of euro area members
(daily data, in %)



Source: Bloomberg.

The ECB's announcements on possible government bond buyout and steps towards fiscal integration induced a fall in yield on government securities.

cut the key policy rate to accommodate market expectations, explaining that the financial market has stabilised since the previous Executive Board meeting and no new factors requiring such action have surfaced.

The euro area's decline in economic activity in 2012 spilled over to Central and Eastern Europe. Several countries (the Czech Republic, Hungary, Slovenia) slipped into recession. On the other hand, more favourable movements were recorded in Poland and Romania (GDP growth of 2.2% and 0.5% respectively). As for Serbia's main foreign trade partners in 2012, Russia achieved the highest economic growth (3.7%), while Bosnia and Herzegovina and Montenegro stagnated.

Economic growth has been forecast for most Central and Eastern European countries in 2013, though the speed of recovery is limited by stagnant economic activity in the euro area. According to IMF estimates, the highest economic growth is expected in Russia (3.8%), while Bosnia and Herzegovina and Montenegro will record a more moderate recovery (1.0% and 1.5% respectively).

In Q4, inflationary pressures loosened their grip in almost all Central and Eastern European countries, mostly in the

wake of falling food and energy prices. Weakened inflationary pressures facilitated a gradual relaxation of monetary policy, aimed at supporting economic recovery. Central banks in the region, i.e. in Poland, Hungary and the Czech Republic, brought their key policy rates down in Q4. Poland and Hungary additionally reduced their policy rates in January, while the Czech Republic announced it will ease its monetary policy through interventions in the FX market, given that its policy rate is already at 0.05%. Expansionary monetary policy is also expected in other countries across the region.

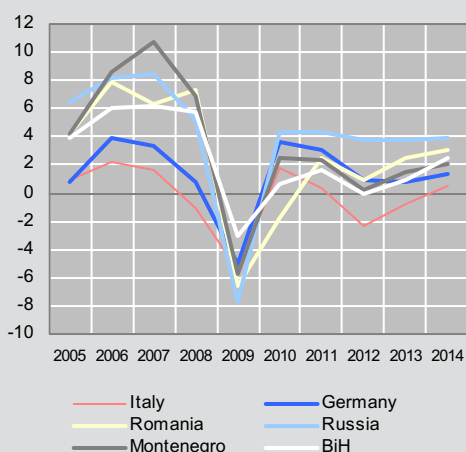
After growth in Q3, the US economy recorded a 0.1% y-o-y drop in Q4, but assessed it as temporary and largely attributable to reduced inventories. However, the Fed estimates that the downside risks to economic growth are still present, wherefore a decision has been made to carry on with expansionary policy measures. The purchase of mortgage-backed securities in the amount of 40 bln dollars a month continued, and a new programme for purchasing long-term government securities in the amount of 45 bln dollars a month was launched. These measures should help restore the property market and lead to a further decline in long-term interest rates.

Another point in favour of further monetary policy relaxation is the weakening of inflationary pressures. December inflation stood at 1.7% y-o-y, down 0.3 pp from Q3. Given that the medium-term inflation projection hovers around 2.0% and that long-term inflationary expectations are stable, the forthcoming period will most likely see continued expansionary monetary policy measures directed at the recovery of the labour market and household consumption.

During Q4, the USA struggled with heightened recession risks triggered by the looming threat of the "fiscal cliff".²⁶ Experts estimated that such a scenario would drag the US economy into recession, sending unemployment above 10.0%. Nonetheless, a political agreement was reached in January regarding a meagre tax increase, cuts in government spending and raising the debt ceiling. The risks of crossing the public debt limit and the emergence of a new recession will thus be temporarily held at bay.

The exchange rate of the euro against the dollar was quite volatile in Q4. First, the dollar weakened in October on expectations of an agreement on the purchase of Greek debt, only to pick up in November due to a grim growth outlook for the euro area. Speculations regarding the

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



Source: IMF WEO (latest available data).

The majority of Serbia's foreign trade partners will most likely see economic growth in 2013.

²⁶ 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.

resolution of the “fiscal cliff” intensified in December. Coupled with the Fed’s statement on the continuation of expansionary monetary policy, this led to the euro gaining on the dollar. The euro continued to strengthen against the dollar in January, in response to the improved liquidity of banks in the euro area and the ECB’s decision to keep the main refinancing rate on hold.

The price of gold in Q4 fell by around 5%, driven for the most part by investors’ abated aversion towards other forms of investments, as well as by the more favourable macroeconomic indicators in the USA and China, and weakened inflationary pressures in the most developed countries.

V. Inflation projection

After rising in Q1 on the back of the anticipated high growth in administered prices and the effect of the rather low last year's base, y-o-y inflation is expected to start falling from Q2 onwards and return within the target tolerance band by the end of the year. The process of disinflation will be aided for the most part by the new agricultural season, low aggregate demand, stabilisation of the exchange rate of the dinar and the full-blown effect of past monetary policy measures. Assuming fiscal consolidation is implemented in accordance with the Fiscal Strategy, the risks to the projected inflation path relate primarily to the prices of primary commodities and developments in the international environment.

As estimated by the NBS, the Serbian economy contracted by around 2.0% in 2012 because of a bad agricultural season. In 2013, it is expected to expand by around 2.5%, 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

In line with the expectations stated in the November *Report*, y-o-y inflation continued to rise in Q4. However, due to the fall in unprocessed food prices, the implementation of only a part of the planned revision of medicament prices, and the lowering of petroleum product prices, year-end inflation (12.2%) settled at the lower bound of the November projection band.

At 2.3%, quarterly inflation was much lower than in Q3. Observed by month, the strongest price growth was registered in October (2.8%), when excise duties were increased and the VAT rate raised from 18% to 20%. Growth was registered for all CPI components except for unprocessed food prices, which declined on account of cheapening of fresh meat and fruit. Administered prices recorded the highest quarterly rise (5.2%) since the start of the year, nearly half of the rise being attributable to cigarettes (higher excise duties).

Though food price growth slowed significantly in Q4, food production input costs remain relatively high. In the

coming period, however, these costs are likely to go down once the new agricultural season kicks in. This expectation is also supported by the current slide in international prices of primary agricultural commodities and by the 3.0% fall in global food prices (*FAO Food Price Index*).

Inflation expectations of the financial sector were relatively stable in Q4, i.e. their rise was halted, and they even declined in January and February²⁷. However, they continue to run 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 8.0%, respectively.

Exchange rate movements also played a role in assuaging inflationary pressures. In Q4, the dinar appreciated against the euro by a nominal 3.2%²⁸, as a result of the interplay of several factors: a fall in the country risk premium, restrictive monetary policy measures, low current account deficit in November and the granting of subsidised loans. During Q4, the NBS intervened in the IFEM only once – by buying EUR 5.0

²⁷ According to Bloomberg survey.

²⁸ Average appreciation during the period.

mln in order to ease excessive daily strengthening of the national currency.

As the real appreciation of the dinar²⁹ outpaced the trend, the depreciation gap of the real exchange rate almost closed up in Q4, which means that the import cost-push pressures on prices have lessened³⁰.

Serbia's risk premium, measured by EMBI, recorded a much sharper decline (by around 130 bp) in Q4 than that of other countries in the region. Accommodative measures of the Fed and ECB helped the risk premiums of our regional peers (and emerging market economies in general) to head down already in Q3. On the other hand, EMBI for Serbia was sustained at a relatively high level due to the country's credit rating downgrade. It started falling from September following the adoption of the fiscal consolidation programme. Foreign investor confidence and interest in the Serbian government securities increased, reflecting in the successful sale of the second issue of eurobonds (USD 750.0 mln) in the international financial market, as well as in the buoyant non-residents' demand in the auctions of dinar securities. At end-January, EMBI for Serbia equalled 361 bp.

Government financing in Q4 was heavily reliant on converting foreign exchange deposits into dinars, which bolstered dinar liquidity of the banking sector. The fiscal deficit amounted to 6.4% of GDP in 2012, which is below the level envisaged by the supplementary budget.

The NBS continued tightening its monetary policy stance. The key policy rate was raised by a total of 0.75 pp in Q4, and then again in January by 0.25 pp to 11.5%. Furthermore, as the dinar liquidity of the banking sector increased significantly over the past several months, the NBS has changed the direction of its main open market operations towards liquidity-absorption.

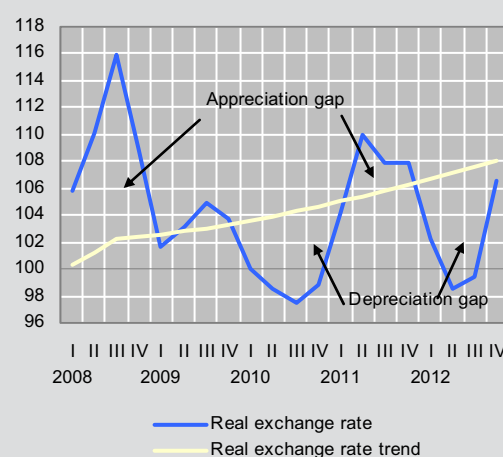
GDP is estimated to have grown by 0.3% s-a and its decline to have slowed down to 1.5% y-o-y in Q4. The largest drag on GDP came from the falling private consumption and investments. Export growth was led primarily by the automobile industry exports. Looking on the production side, manufacturing provided a positive contribution to GDP thanks to the expanding production of motor vehicles and petroleum products.

Negative output gap contracted only slightly from Q3, heralding further demand-side disinflationary pressures in the coming period.³¹

Recessionary pressures in the euro area persisted. The unemployment rate hit its historical high, while *PMI* and *Eurocoin* readings signal another quarterly fall in the bloc's GDP (Q4). Still, the ECB's debt purchase programme, steps towards stronger fiscal integration and agreement to place euro area banks under a single supervisor had a soothing effect on the jittery financial markets and led to a decrease in the yields on peripheral sovereign bonds. Contrary to market expectations, the ECB did not cut its main refinancing rate in Q4, but rather kept it unchanged explaining that the financial markets had stabilised and that there were no other factors warranting such action.

The price of crude oil in the international markets was broadly stable in the course of Q4. This was a result of several factors with a mutually neutralising effect: geopolitical tensions in the Middle East, uncertainty surrounding the US "fiscal cliff" and weaker macroeconomic indicators for the euro area. As the dinar

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 almost closed up in Q4.

²⁹ The dinar appreciated against the euro in real terms as a result of nominal appreciation and a higher inflation rate in Serbia than in the euro area.

³⁰ Net importers' marginal costs.

³¹ Negative output gap has opened at the end of 2008. Over the last two and a half years, its level has been broadly unchanged.

strengthened against the dollar, domestic prices of petroleum products plummeted by 4.3% in Q4.

Projection assumptions

External assumptions

The assumption for the euro area's GDP growth in 2013 (-0.1%) has been revised down by 0.3 pp relative to the November projection. High unemployment rate, fiscal consolidation in some of the area's members and persistently tight terms of lending are narrowing the scope for a domestic demand-driven economic recovery in 2013. The recovery is not expected before 2014, when the euro area economy should grow 0.9%.³²

As inflationary pressures in the euro area are expected to weaken in response to the falling prices of primary commodities and energy, y-o-y inflation in the euro area could decline further to below 2.0% by the end of 2013. However, the markets expect that the ECB's main rate will be kept on hold throughout the year.

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

Given the outlook for global demand, the projection anticipates a decline in oil prices by the end of 2013, as well as in 2014. This is also indicated by the pricing of oil futures.

Internal assumptions

The current medium-term inflation projection is based on the assumption that administered prices will grow more in 2013 (10.7%) than in 2012. This upward revision from the November Report is due primarily to the higher-than-expected increase in medicament prices in part because a portion of their increase has been moved forward from Q4 2012 to Q1 2013.

Broken down by quarter, most of the administered price growth will take place in Q1 (around 7.0%) as a result of the announced increases in prices of electricity, medicaments, cigarettes and natural gas.

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

Inflation projection

Y-o-y inflation will continue to rise in Q1 2013 as a result of the marked growth in administered prices and a rather low base in Q1 2012. Within administered prices, increases are expected primarily for electricity and natural gas, which failed to take place in 2012, as well as for medicaments and cigarettes (on account of the increase of the minimum excise duty). From Q2, however, the trend will reverse and inflation should fall back and return within the target tolerance band by the end of 2013.

A drop in y-o-y inflation from Q2 onwards is expected to be brought about by several factors: new agricultural season, relatively stable movements of the dinar exchange

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)	1.7% (-0.1)	1.6%
ECB policy rate (year-end)	0.75% (+0.25)	0.75%
Euro area GDP growth	-0.1% (-0.3)	0.9%
International prices of primary agricult. commodities (Q4 to Q4)	-14.0% (+3.3)	3.5%
Ural oil price per barrel (year-end, USD)	105 (-)	100
Internal assumptions		
Administered prices (Dec to Dec)	10.7% (+2.3)	8.0%
Trends		
Appreciation trend of the real exchange rate (average)	2.0% (-0.1)	2.3%
Real interest rate trend (average)	2.5% (-0.7)	2.5%

Source: NBS.

³² The assumption for the euro area's GDP growth is consistent with the latest Consensus Forecast.

rate in recent months, past monetary policy measures, rather low domestic demand, and a high last year's base (i.e. high monthly inflation rates in 2012).

Extremely bad weather has made the 2012 agricultural season one of the worst in the last several decades. Even though the growth in food prices slackened significantly in Q4 2012, the costs of food production inputs remain relatively high. However, assuming an average agricultural season (globally) this year, the prices of primary commodities, that is, fruit and vegetables, should fall once the season kicks in, and thus alleviate the cost push pressure on food prices. This expectation of reduced pressure is supported by the nascent decline in international prices of food and primary agricultural commodities.

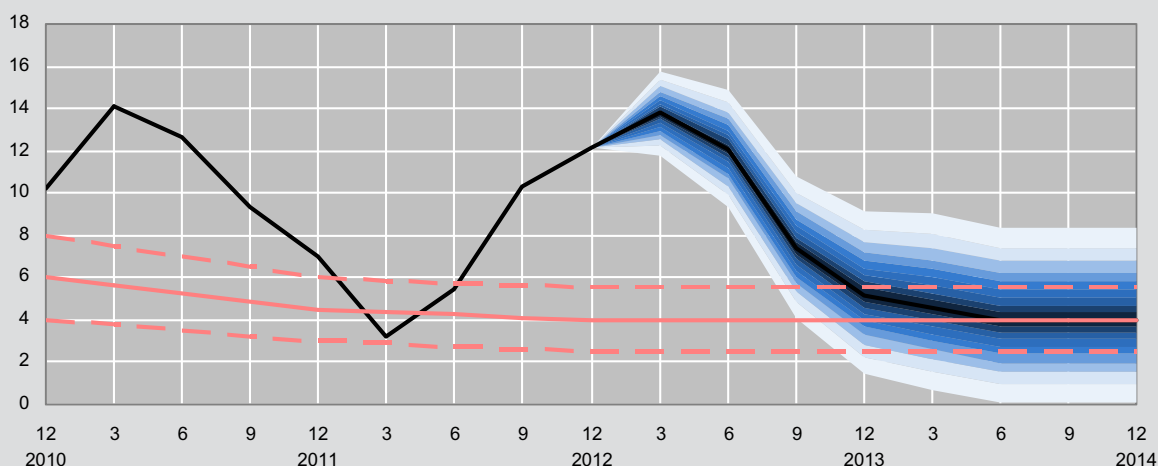
In addition, last year's restrictive monetary policy measures are expected to yield their full effect on inflation in the course of 2013. These measures have also contributed to the stabilisation of the exchange rate of the dinar in recent months. A stable exchange rate and the closing of the depreciation gap of the real exchange rate, expected 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 over the medium run.

By contrast to the above disinflationary factors, administered prices will produce inflationary pressures.

With the waning of the inflationary shock caused by the food and administered prices, the NBS Executive Board will consider the possibility of easing its monetary policy stance in the coming months. However, as unexpected changes in the impact of some factors on the above inflation projection remain possible, the expectations with regard to the character of monetary policy in the coming period are in no way binding on the NBS.

After contracting in 2012, GDP should expand by around 2.5% in 2013. This projection is based on the expected increase in agricultural production relative to the previous year (assuming average agricultural season) and on the upswing in the automobile and oil industries. On the expenditure side, GDP growth will be led by net exports and private investments. Headwinds will be coming from government consumption, which will record a decline as a result of the implementation of fiscal consolidation measures. Private consumption should also go down, reflecting a drop in real household income in the second half of last year and early this year. A moderate recovery of government consumption and investments as well as of private consumption is likely from 2014 onwards. According to our projection, GDP will grow by around 3.0% in 2014, driven mainly by net exports.

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

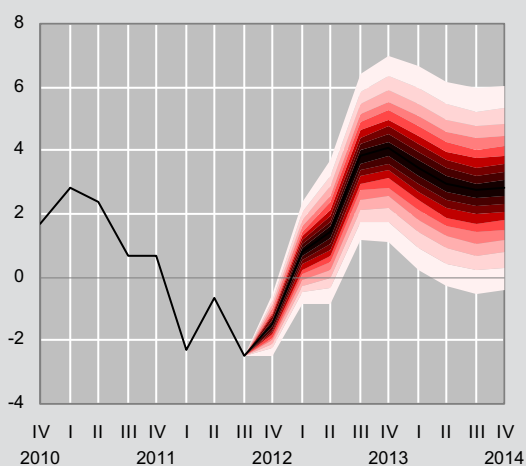


Source: NBS.

After peaking in Q2, inflation will gradually go down and return within the target tolerance band by the end of 2013. The risks to inflation projection 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%.

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



Source: NBS.

Economic activity should grow 2.5% in 2013 and 3.0% in 2014.

The risks to GDP growth projection are judged to be balanced, i.e. equally possible in either direction. Upside risks relate to the possibly better performance of agricultural production and automobile industry, whereas downside risks relate to the possibly slower economic recovery of Serbia's key trade partners, which could dampen export demand and domestic investments.

Risks to the projection

Assuming fiscal consolidation is implemented in accordance with the Fiscal Strategy, the risks to the projected inflation path relate primarily to future movements of international and domestic prices of primary commodities and developments in the international environment.

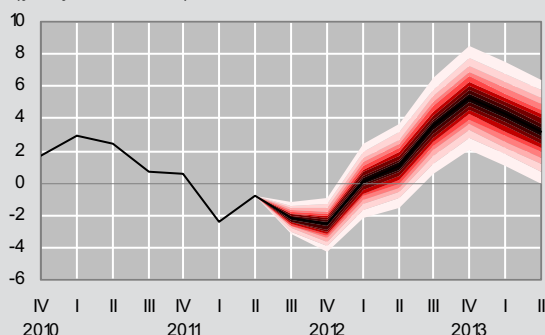
The current inflation projection operates on the assumption of an average agricultural season which should lead to a drop in domestic prices of primary agricultural commodities and, consequently, to the deceleration of growth in food prices. This assumption is supported by the fall in international food prices registered in Q4 2012. However, if below-average agricultural year is repeated and if international food prices resume growth, the expected disinflationary effect of food prices would be diminished or fail to take place at all.

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 oil prices 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 that Serbia

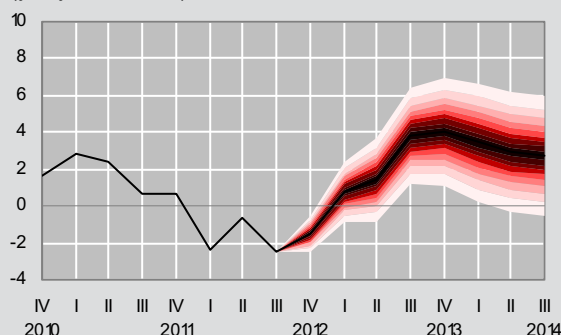
Chart V.0.4 Current vs. previous GDP growth projection

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



Source: NBS.

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

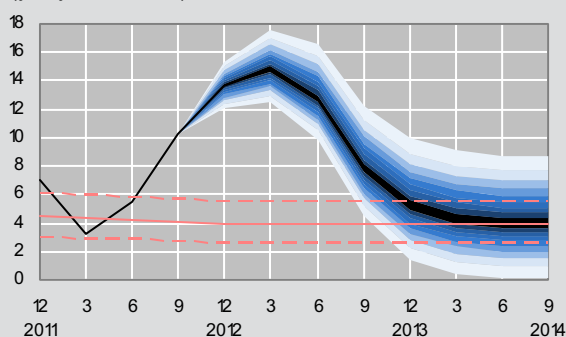


At annual level, the current GDP growth projection remained unchanged from November, while quarterly y-o-y growth rates differ due to the smaller-than-expected y-o-y drop in GDP in Q4 2012.

Chart V.0.5 Current vs. previous projection

November projection

(y-o-y rates, in %)

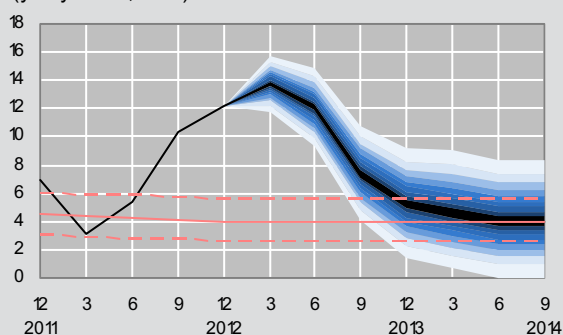


Source: NBS.

The projected spread of inflation outcomes in the first three quarters of 2013 is lower than in the November projection.

February projection

(y-o-y rates, in %)



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.

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

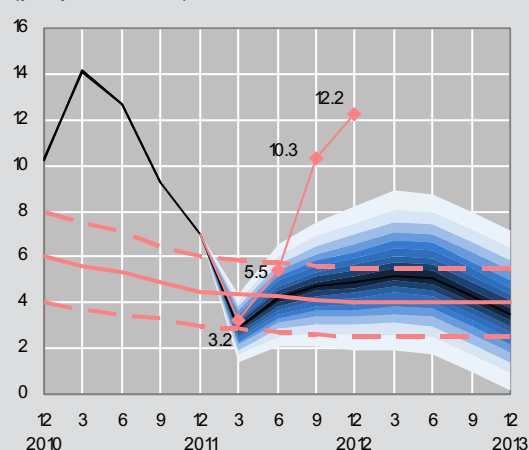
Comparison with the previous projection

The projected spread of inflation outcomes in the first three quarters of 2013 is lower than in the November Report, mainly due to the smaller-than-expected increase in food prices and the absence of the anticipated rise in fruit and vegetable prices in Q4. The medium-term projection band has remained unchanged.

Until Q3, y-o-y inflation had moved within the band projected in February 2012, but subsequently overshot its upper bound, reflecting food price growth caused by the

Chart V.0.6 Inflation outturn vs. February 2012 inflation projection

(y-o-y rates, in %)



Source: NBS.

In H2 2012, y-o-y inflation was out of the band projected in February 2012.

agricultural shock and a hefty rise in primary agricultural commodity prices. Such inflation outturn was also 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	Q1 2012	Q2 2012	Q3 2012	Q4 2012
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	7.9	7.1	6.9	7.6 ¹⁾
Forex reserves/short-term debt	360.7	535.6	702.2	519.2	941.7	917.5	380.8	528.8	546.4	1,860.8	1,914.1	2,970.6	2,710.7	2,212.9
Forex reserves /GDP	13.6	16.4	16.3	24.2	38.7	33.8	25.0	36.6	35.7	38.7	35.5	33.3	32.7	36.3
Debt repayment/GDP	1.4	2.0	3.9	4.7	7.0	10.1	10.6	11.4	12.2	13.1	12.2	14.3	10.2	14.5 ¹⁾
Debt repayment/exports of goods and services	7.0	9.0	16.4	17.7	23.5	33.2	34.0	39.1	33.8	35.5	33.7	34.3	25.0	36.4 ¹⁾
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	77.5	77.3	78.8	82.5	85.6
Short-term debt/GDP	3.8	3.1	2.3	4.7	4.1	3.7	6.6	6.9	6.5	2.1	1.9	1.1	1.2	1.6
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	210.0	210.8	208.2	212.9	215.7 ¹⁾
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	462.9	437.4	389.8	402.1
Forex reserves/reserve money	131.9	167.8	165.5	169.8	179.5	173.8	140.7	190.5	196.4	207.6	219.4	192.2	184.7	196.6
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP	59.3	63.9	73.7	73.6	81.2	85.8	86.8	75.6	88.2	90.3	94.2	101.3	97.2	95.6 ¹⁾
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	31,140	6,966	7,261	7,528	8,279
External debt	9,402	9,678	9,466	12,196	14,182	17,139	21,088	22,487	23,786	24,125	24,068	24,086	24,832	25,721
External debt servicing	218	348	736	945	1,635	2,885	3,453	3,314	3,403	4,072	848	1,039	771	1,200 ¹⁾
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	11,073	10,161	9,833	10,914
Short-term debt	606	529	442	948	958	1,050	2,143	2,005	1,830	648	579	342	363	493
Current account balance	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-1,910	-1,887	-2,856	-1,177	-738	-546	-685.8 ¹⁾

		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

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

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

Debt repayment/GDP (in %) - ratio of debt repayment to GDP during period under review.

Debt repayment/exports (in %) - ratio of debt repayment to exports of goods and services during period under review.

Debt/GDP (in %) - ratio of outstanding debt at end-period to GDP.

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

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

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

¹⁾ NBS estimate.

Notes:

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

2. As of October 2006, the IMF publication "International Financial Statistics" features a page on monetary statistics of the Republic of Serbia. This required the NBS to bring its statistical reports in compliance with international statistical standards and methodology harmonised, at the level of the IMF, for all countries. We have adjusted our financial risk exposure indicators accordingly.

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

4. Foreign debt repayment does not include: short-term debt repayment and advanced debt repayment.

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

6. As of 01.01.2010 Statistical Office, according to UN recommendations, applies general trade system which is broader concept and includes all goods entering/exiting country's economic territory, apart from goods in transit. Statistical Office has published comparable data for 2007, 2008 and 2009. Previous years are disseminated using special trade system.

7. In September 2010, the methodology of external debt statistics was changed – public sector external debt includes liabilities under SDR allocation (EUR 443.5 mln) used in December 2009, as well as the capitalised interest to the Paris Club Creditors (EUR 86.4 mln). Private sector external debt excludes loans concluded before 20 December 2000 in respect of which no payments are made (EUR 875.4 mln, of which EUR 397 mln related to domestic banks and EUR 478.4 mln to domestic enterprises).

Table B
Key macroeconomic indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012
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	-2.3	-0.6	-2.5	-1.5
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	3.2	5.5	10.3	12.2
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	11,073	10,161	9,833	10,914
Exports (in EUR million) ³⁾	3,125	3,847	4,475	5,330	6,949	8,686	10,157	8,478	10,070	11,486	2,519	3,031	3,083	3,293,6 ⁹⁾
- 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	14.1	-2.6	5.2	3.2	8,7 ⁹⁾
Imports (in EUR million) ³⁾	-6,387	-7,206	-9,543	-9,613	-11,971	-16,016	-18,843	-13,404	-14,643	-16,627	-4,042	-4,323	-4,235	-4,620,7 ⁹⁾
- 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	5.5	6.3	1.3	1,6 ⁹⁾
Current account balance ⁴⁾														
(in EUR million)	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-1,910	-1,887	-2,856	-1,177	-738	-546	-685,8 ⁹⁾
as % of GDP	-4.2	-7.8	-13.8	-8.8	-10.1	-17.7	-21.6	-6.6	-6.7	-9.2	-16.9	-10.2	-7.3	-8,3 ⁹⁾
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	/	25.5	/	22.4
Wages (average for the period, in EUR)	152.1	176.9	194.6	210.4	259.5	347.6	402.42	337.9	330.1	372.5	357.6	363.2	351.8	385.3
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	-7.0	-7.1	-3.9	-5.0
Consolidated fiscal result (in % of GDP)	-1.8	-2.4	0.8	0.9	-1.9	-2.0	-2.6	-4.5	-4.7	-5.0	-7.3	-6.9	-4.1	-7.3
RS public debt, (external + internal, in % of GDP) ⁶⁾	72.9	66.9	55.3	52.2	37.7	31.5	29.2	34.7	44.5	48.7	52.0	56.0	55.1	59.2
RSD/USD exchange rate (average, in the period)	64.70	57.56	58.44	66.90	67.01	58.39	55.76	67.47	77.91	73.34	82.38	88.77	93.55	87.45
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	83.31	92.15	88.94	86.18
RSD/EUR exchange rate (average, in the period)	60.66	65.13	72.70	83.00	84.10	79.96	81.44	93.95	103.04	101.95	108.11	113.73	116.95	113.45
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	111.36	115.82	115.03	113.72
Memorandum														
GDP (in EUR million)	16,028	17,306	19,026	20,306	23,305	28,468	32,668	28,954	28,006	31,140	6,966	7,261	7,528	8,279

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.

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

Belgrade, 17 January 2013

GOVERNMENT OF THE REPUBLIC OF SERBIA

Ivica Dačić, Prime Minister

Dear Mr Dačić,

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

From April to December 2012, year-on-year inflation increased from 2.7% to 12.2%. In July, it reached 6.1%, exceeding for the first time the upper bound of the target tolerance band. The Executive Board of the National Bank of Serbia assesses that the inflation rise in the past six months was driven mainly by the exceptionally high growth in food prices, as well as by the depreciation of the dinar and the effects of higher VAT and excise duties.

Of the 9.5 percentage point increase in year-on-year inflation from April to December, food price hikes accounted for 6.6. Clearly, inflation in that period was under the decisive influence of food prices rising on the back of drought-induced agricultural downturn at home, a considerable upswing in global prices of primary agricultural commodities, and specificities of the Serbian food market. Given the high share of food prices in the consumer price index – 38.8%, Serbia's inflation rates are extremely sensitive to price shocks affecting this group of products. In addition, due to the inadequacy of inherited systemic solutions, food prices at home are much more volatile than in the neighbouring countries, as can be seen from the higher growth of Serbian food prices in the period observed.

Inflation growth was also fuelled by the dinar's weakening in the first half of 2012, which fed through into higher import prices. The depreciation stemmed mainly from high public spending which, coupled with unfavourable developments abroad and election uncertainties at home, drove the risk premium up.

Additionally, VAT and excise duties increases in October are estimated to have contributed 1.1 percentage points to the one-off increase in inflation.

In a bid to ease inflation pressures, the National Bank of Serbia tightened its monetary stance in the past seven months by raising the key policy rate from 9.5% to 11.25% and by withdrawing dinar liquidity through changes in the direction of its main operations and in the structure of bank required reserves. While already helping to stabilise the foreign exchange market, full-blown effects of these measures on inflation are yet to be realised in the current year. However, bearing in mind the temporariness of price shocks and the fact that the economy remains in recession, the monetary policy response has focused on achieving medium-term price stability.

The Executive Board of the National Bank of Serbia will take all actions under its remit to bring medium-term inflation within the target tolerance band. Provided no unexpected inflationary pressures emerge, we expect inflation to start falling as of the second quarter and to retreat within the target tolerance band by the end of the year (target for end-2013: $4\pm 1.5\%$). The projected inflation path assumes a positive impact of the planned fiscal consolidation measures on macroeconomic and financial stability.

The pace of inflation's return to the target will also largely depend on the outturn of the new agricultural season. If the season turns out to be average, inflation is expected to subside significantly already as of the second quarter, while a somewhat weaker than average agricultural performance could delay and slow down the process of disinflation.

As the current inflationary pressures are primarily attributable to volatility in the food market, we think that systemic measures should be developed and implemented without delay in order to help stabilise this market and ease food price volatility. In addition, it is critical that the Government determine a medium-term plan of administered price revisions. Adherence to this plan and implementation of the planned pension and public sector wage policy would increase the efficiency of monetary policy measures and prevent sudden shifts in the policy stance aimed at countering the fluctuations of inflation and containing inflation expectations. All of the above would contribute to macroeconomic stability, economic growth and employment.

As the full effect of past monetary policy measures is yet to be felt, taking into account all instruments on hand, the National Bank of Serbia will assess in due course whether further monetary tightening is needed to bring medium-term inflation back to the target.

Respectfully,

Dr Jorgovanka Tabaković

Cc: - Rasim Ljajić, Deputy Prime Minister and Minister of Foreign
and Internal Trade and Telecommunications
- Mladen Dinkić, Minister of Finance and Economy
- Goran Knežević, Minister of Agriculture, Forestry and Water Management

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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
7 March		
11 April		
13 May		
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 14 December 2012

At its meeting today, the NBS Executive Board decided to raise the key policy rate to 11.25 percent.

Consistent with the NBS projection, year-on-year inflation temporarily slowed in November, though it remains above the upper bound of the target tolerance band. In this regard, fiscal consolidation measures, which have already yielded initial effects, are yet to give their full contribution to the reduction in year-on-year inflation over the next year.

The NBS Executive Board also pointed to elevated dinar liquidity of the banking sector. It therefore decided to change the direction of its main open market operations towards the withdrawal of excess dinar liquidity so as not to encourage a rise in aggregate demand which could impact on inflation and the exchange rate.

Inflation movements over the foreseeable future will for their major part be influenced by food and administered prices, and by whether aggregate demand will remain the key disinflationary factor. According to the NBS projection, year-on-year inflation will return within the target tolerance band by end-2013.

The next rate-setting meeting of the Executive Board is scheduled for 17 January 2013.

Press release from Executive Board meeting held on 17 January 2013

In its meeting today, the Executive Board of the National Bank of Serbia voted to raise the key policy rate by 0.25 percentage points to 11.50 percent.

Following a one-month lapse, year-on-year inflation continued to rise in December, running above the upper bound of the target tolerance band and reaching 12.2 percent. Core inflation was also relatively high, measuring 8.2 percent in December. In addition, the earlier announced revisions of administered prices are yet to take place.

The response of monetary authorities aims to prevent the spill-over of the effects of growth in administered prices to other prices through the inflation expectations channel. The National Bank of Serbia's measures will also make sure that increased dinar liquidity does not give rise to inflationary pressures and stress in the foreign exchange market.

The Executive Board also expects that the fiscal consolidation programme will yield more tangible results and give a full contribution to the lowering of the year-on-year inflation rate.

Looking ahead, the strongest disinflationary effects will be coming from low aggregate demand. As the new agricultural season kicks in, a positive impact on inflation movements can also be expected from food prices. According to the National Bank of Serbia's projection, year-on-year inflation should fall from the second quarter onwards and return within the target band by the end of 2013.

The next rate-setting meeting of the Executive Board will be held on 7 February.

Press release from Executive Board meeting held on 5 February 2013

In its meeting today, the NBS Executive Board voted to raise the key policy rate by 0.25 percentage points to 11.75 percent.

The monetary policy response aims to prevent the spillover of growth in administered prices to other prices.

Establishing the annual dynamics of administered price adjustments will also help create conditions necessary for inflation to return and to stay within the target tolerance band. Another important factor in this regard is consistent implementation of the fiscal consolidation programme.

The Executive Board concluded that the stability of the foreign exchange market helped reduce inflation expectations. Furthermore, low aggregate demand will continue to generate strong disinflationary pressures.

The economy has recovered somewhat, with the first effects tangible already in the last quarter of 2012.

Over the period to come, inflation movements will be primarily affected by the low comparable base and increases in administered prices. With the onset of a new agricultural season and the effects of past monetary policy measures, year-on-year inflation will start declining and return within the target band by the year's end.

The next rate-setting meeting of the Executive Board will be held on 7 March 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