National Bank of Serbia

2012 February

INFLATION REPORT

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Introductory note

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

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

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

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

The February *Inflation Report* was adopted by the NBS Executive Board in its meeting of 9 February 2012.

Earlier issues of the *Inflation Report* are available on the NBS website (http://www.nbs.rs).

ABBREVIATIONS

bln – billion
bp – basis point
CEFTA – Central European Free Trade Agreement
CPI – Consumer Price Index
ECB – European Central Bank
EFSF – European Financial Stability Facility
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
NPLs – non-performing loans
OPEC – Organisation of the Petroleum Exporting Countries
pp – percentage point
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

Inflation continued to fall.

Inflation continued to fall in the fourth quarter of 2011 and came down in December near the upper bound of the target tolerance band, measuring 7.0% (target: 4.5±1.5%). A decline in inflation was somewhat faster than forecast by the central projection published in the previous *Inflation Report*, mainly due to a steep (calculated) drop in fruit and vegetable prices in December.

Inflation expectations declined further.

Weakening inflationary pressures pushed down inflation expectations by 2 percentage points during the fourth quarter. As a result, one-year ahead inflation expectations came close to the upper bound of the target tolerance band.

Economic activity picked up mildly.

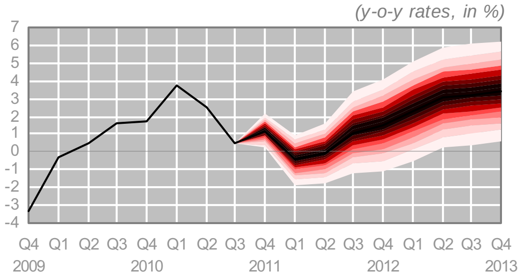
According to our estimates, economic activity recorded modest growth in the fourth quarter on account of rising domestic demand, notably investment activity. In contrast, net external demand declined in response to a faster rise in imports than exports.

Instability in financial markets continues to weigh on euro area economic activity…

Forecasts of euro area economic growth were revised down. Under the projection of the International Monetary Fund, the euro area will go into a mild recession in 2012 (-0.5%), which will adversely affect the growth outlook of countries in the region which are also our important export markets. The latest indicators show that the euro area downturn may be more moderate, though deviations are possible in both directions.

...which will slow the pace of economic recovery in Serbia in 2012

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



As economic growth of our major foreign trade partners was revised down, we lowered our estimate of gross domestic product growth to around 0.5% in 2012. It is however estimated that net exports will give a boost to gross domestic product, due to implementation of investments made in earlier period, notably in the automotive industry. Assuming that our export markets recover, higher economic growth is expected as of 2013, with net exports and final household and government spending providing a positive contribution.

The exchange rate was relatively stable.

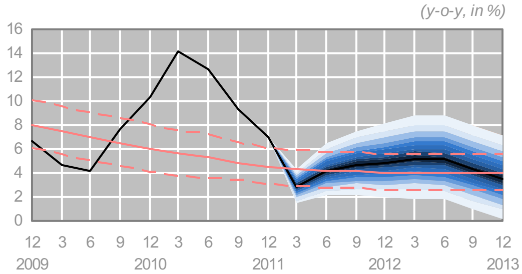
The second wave of the global crisis affected the risk premiums and currencies across the region. Thanks to capital inflows in the fourth quarter, notably foreign direct investments, the dinar was on average more stable compared to regional peers under a similar exchange rate regime.

Implementation of the arrangement with the International Monetary Fund would contribute to macroeconomic stability.

From the aspect of the balance of payments, there is no need to draw on resources under the precautionary stand-by arrangement with the International Monetary Fund. Nonetheless, a positive review of the arrangement is exceptionally important, as it impacts on the level of country risk premium and the volume of foreign investment.

Inflation is returning within the target tolerance band.

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



Consistent with our projections from last year's *Reports*, inflation is certain to return within the target tolerance band in the first quarter of 2012. In late first and early second quarter of the year, inflation is expected to revolve around the lower bound of the target tolerance band. After that, it is likely to rise gradually, moving within the target tolerance band, and peak close to the upper bound of the band in the first half of 2013.

The greatest uncertainties surrounding the projected outlook for inflation continue to be associated with the international environment and the fiscal policy stance at home.

Monetary policy takes into account primarily those factors that have a medium-term impact on inflation.

Though inflation is forecast to decline and move temporarily around the lower bound of the target tolerance band, it should be borne in mind that the National Bank of Serbia's monetary policy decisions are based primarily on consideration of factors with a medium-term impact on inflation. Monetary policy does not respond to factors with a temporary effect.

The future path of the key policy rate continues to depend on movements in the international environment and the fiscal policy stance at home.

Taking into account the inflation projection and its underlying risks, the Executive Board of the National Bank of Serbia judges that the future path of the key policy rate depends on inflation factors, while developments in the international environment and the fiscal policy stance at home remain the key risks.

II. Monetary policy since the November *Report*

The key policy rate was cut in December and January, each time by 25 bp, whereas in February it was kept at 9.5%.

As set out in the November Report, inflation was projected to return within the target tolerance band in Q1 2012 and to stay within the band thereafter. Low aggregate demand was assumed to be the key disinflationary factor over the whole forecast period, while an additional contribution to the process of disinflation was expected from the drop in inflation expectations and the weakening of cost-push pressure on food prices. Operating under the same assumptions (plus economic stagnation in the euro area in 2012 and a fall in some of Serbia's major export partners), GDP growth was projected to slow down in 2012 to around 1.5%. The main risks to the projection were associated with international environment and expansionary fiscal policy at home. The Executive Board therefore judged that the key policy was more likely to be lowered further rather than raised or kept on hold.

International environment had deteriorated by the time of the Executive Board meeting in early December. Elusiveness of the solution to the euro area crisis had heightened uncertainty and instability in the global financial market. Prospects for the real sector worsened not only for the euro area, but worldwide as well. The process of disinflation in Serbia continued, consistent with the NBS expectations. November inflation fell to 8.1% y-o-y. Inflation expectations also declined. According to flash estimates of the Serbian Statistical Office, real y-o-y GDP growth slowed in Q3. The country risk premium increased in November, and so did the depreciation pressures.

After reviewing current economic developments and forward-looking estimates at its December meeting, the Executive Board voted to cut the key policy rate by 0.25 pp, citing weaker cost-push pressure on food prices, slower growth in administered prices, low aggregate demand and further drop in inflation expectations as the key disinflationary factors. The size of the rate cut was determined by the persistent global fiscal and financial uncertainty caused by the sovereign debt crisis in the euro area. The Executive Board also adopted a new Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items[1], which is expected to help lower the cost of bank lending.

December inflation of 7.0% y-o-y was slightly lower than expected by the NBS due to the one-off effects of methodological changes in the calculation of food and vegetable prices. At its January meeting, the Executive Board expressed expectations of inflation falling further and possibly slipping below the lower bound of the target tolerance band in late Q1 2012. A part of the fall would be short-lived, resulting from the above methodological changes and other effects such as that of the administrative cap on trade margins and the so-called base effect of high monthly inflation rates recorded in the same period last year. The inflation was therefore judged likely to stabilise around the target in the third quarter of the year. Taking into account the described inflation profile and the elevated global fiscal and financial uncertainty, sustained primarily by the ongoing crisis in the euro area, the Executive Board voted to lower the key policy rate by 25 bp.

At its February meeting, the Executive Board decided to keep the key policy rate at 9.5%. Consistent with its previous estimates, y-o-y inflation continued down,

[1] Entered into force on 31 December 2011.

driven primarily by the weakening of the cost-push pressure on food prices and low aggregate demand. The drop in year-on-year inflation rates will proceed over the coming months, due chiefly to the base effect of high monthly inflation rates recorded in early 2011.

The Executive Board also considered the February inflation projection which envisages inflation's return within the target tolerance band already in this quarter. After that, inflation is expected to temporarily fall back to around the lower bound of the target tolerance band, and to stabilise around the target mid-year. Inflation decline to near the lower bound of the target tolerance band in some months of H1 would be temporary and, as such, warrants no monetary policy response. Monetary policy decisions are based primarily on consideration of inflation factors that have a medium-term impact.

Under the NBS estimate, the global economic slowdown, together with the probable recession in the euro area, will slow the pace of Serbia's economic growth which is expected at around 0.5% in 2012.

The key risks to inflation projection stem from the international environment due to the still unresolved crisis in the euro area, as well as from fiscal policy at home. Keeping the budget deficit within the framework earlier agreed with the IMF would serve as an additional safeguard of macroeconomic stability and leave more scope for future relaxation of monetary policy.

III. Inflation developments

Y-o-y inflation continued back towards the target and came down near the upper bound of the target tolerance band by end-Q4. This was mainly due to deceleration in y-o-y food price growth.

Under our estimates, y-o-y inflation will return within the target tolerance band in Q1 2012. Affected by temporary factors, inflation may temporarily move around the lower bound of the target tolerance band by the quarter-end.

Inflation developments in Q4

Inflation came at 0.6% in Q4, mainly in response to the further rise in market-determined prices of non-food products and services.

Y-o-y inflation continued down throughout Q4 and reached 7.0% by the year-end (December target: 4.5±1.5%). Reflecting the unusually steep drop in fruit and vegetable prices in December, the end-Q4 decline in inflation was somewhat faster relative to the central projection published in the previous *Inflation Report.*

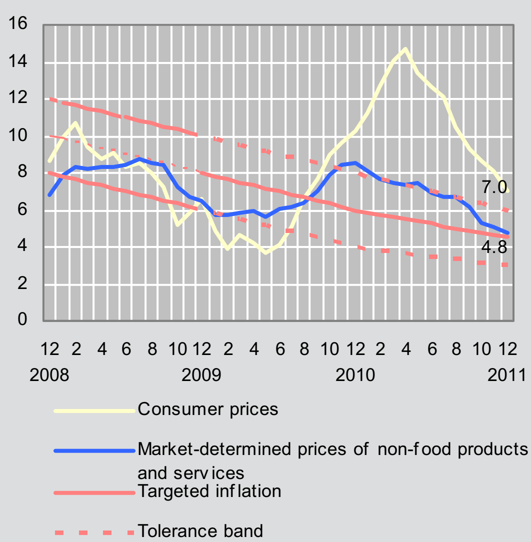
Consumer prices picked up 0.6% in Q4, mainly in response to the further rise in market-determined prices of non-food products and services. The impact of food prices, which was disinflationary over the past two quarters, turned neutral in Q4 (0.0 pp).

CPI inflation excluding fruit and vegetable prices, administered and petroleum product prices decelerated in Q4 (0.5%; contribution of 0.3 pp)[2], chiefly on the back of falling processed food prices (0.4%; contribution of -0.1 pp). As cost-push pressures dissipated, processed food prices declined for the first

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

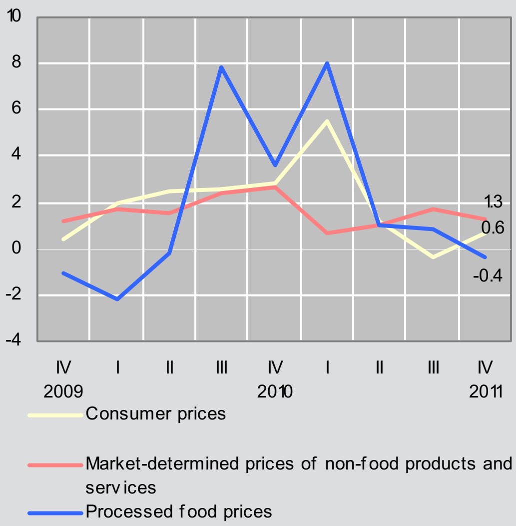
	2010	2011			
	Q4	Q1	Q2	Q3	Q4
Consumer prices	2.8	5.5	1.2	-0.4	0.6
Processed food products	3.8	8.0	1.0	0.8	-0.4
Market-determined prices of non-food products and services	2.6	0.7	1.0	1.7	1.3
Fruit and vegetables	3.7	25.3	-9.1	-23.4	2.0
Administered prices	1.8	4.7	4.1	0.4	0.9
Electricity	0.0	0.0	13.5	0.0	0.0
Gas for households	0.0	0.0	0.0	0.0	10.3
Utility-housing services	9.9	3.3	1.8	0.1	4.6
Social welfare services	2.5	0.0	0.3	0.6	0.0
Transport services (regulated)	0.1	13.1	0.5	0.5	3.4
Postal and telecommunications services	0.0	0.0	0.0	9.2	0.0
Cigarettes	0.0	19.1	-2.6	-1.3	-1.6
Medications	3.0	3.8	2.5	-2.2	-0.1
Other	0.2	0.2	0.0	0.1	0.7
Petroleum products	1.3	5.1	5.6	2.0	0.1

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



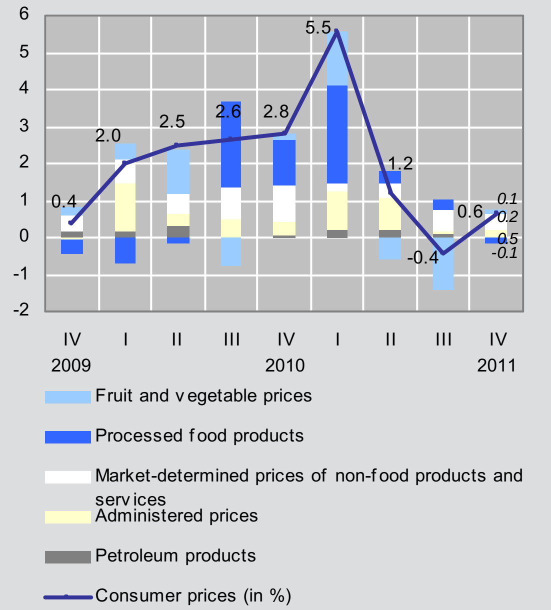
Y-o-y inflation continued down to 7.0% in December.

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



Growth in prices of non-food products and services decelerated in Q4, while processed food prices declined.

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



The major boost to consumer prices in Q4 came from market-determined prices of non-food products and services.

time over the last year and a half, after recording a continuous slowdown in the first three quarters of 2011. Inflation decelerated also partly on account of a slower rise in market-determined prices of non-food products and services. However, remaining relatively high (1.3%), such rise added 0.5 pp to overall consumer price growth. The major contributors to price growth were household chemicals, clothes and footwear, alcoholic beverages and craftwork. At the year-end, y-o-y CPI inflation excluding fruit and vegetable prices, administered and petroleum product prices came at 7.0%.

Fruit and vegetable prices rose 2.0% (contribution: 0.1 pp). The rise was lower than expected[3], which is why inflation departed from the trajectory published in the previous *Inflation Report*, i.e. y-o-y inflation declined somewhat faster at end-Q4. The lower than expected quarterly rise in fruit and vegetable prices was due to the unusually steep drop in these prices in December (12.0%). Such drop did not reflect real market movements, but the specific calculation method

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

	III 2011 / III 2010	VI 2011 / VI 2010	IX 2011 / IX 2010	XII 2011 / XII 2010
Consumer prices	14.1	12.7	9.3	7.0
Domestic industrial producer prices	17.1	15.8	12.3	9.7
Agricultural producer prices	39.1	28.6	11.6	8,1*

* November on november.

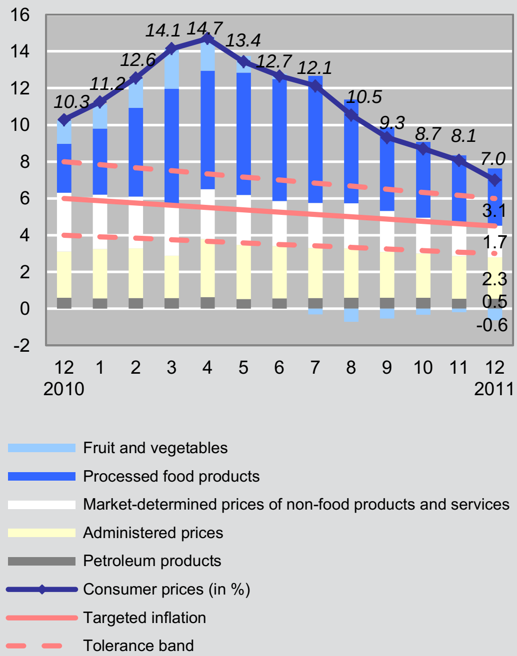
(imputation) applied to prices of fruits and vegetables that are out-of-season.[4]

Administered prices recorded a modest rise in Q4 (0.9%; contribution of 0.2 pp). Growth within this group was noted primarily for natural gas and utilities-housing

[2] It equalled 1.2% in Q3.

[3] Having recorded a higher than seasonal drop in Q3, fruit and vegetable prices were expected to experience a somewhat higher than seasonal rise in Q4.

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



Y-o-y inflation declined in Q4 mostly on account of falling domestic processed food prices.

services (0.1 pp each). In contrast, prices of cigarettes and medicines went down. In 2011, administered prices rose 10.5% vs. 7±2% growth agreed with the Government.

In Q4, **petroleum product prices** recorded the weakest quarterly growth since early 2011 (0.1%; contribution: 0.0 pp).

On the cost side, growth in **domestic industrial producer prices** accelerated to 0.4%[5] in Q4 and was driven, for the third consecutive quarter, by energy price movements. Broken down by activity, the strongest boost to price growth came from the electricity, gas and steam supply sector (1.3%). Y-o-y growth in domestic industrial producer prices continued to slow and reached 9.7% by the year-end.

Agricultural producer prices[6] rose also in the October-November period (0.9%). Cattle breeding prices, up by 1.9%, gave the strongest contribution to such growth. A rise was also recorded for prices in the sector of farming, fruit and wine growing. In y-o-y terms, agricultural producer prices slowed to 8.1% in November relative to end-Q3.

Inflation expectations

A decline in inflation expectations, initiated in October, continued.

All sectors revised down their inflation expectations in Q4, reflecting, among other factors, a continuous decline in inflation and its retreat towards the target. As a result, the difference between expected and targeted inflation narrowed – one-year ahead inflation expectations are very close to the upper bound of the target tolerance band.

Under the Bloomberg survey, one-year ahead inflation expectations of the financial sector went down in Q4 to 6.0% in December. Having revised their expectations down by 2 pp in Q4, financial sector representatives did not change in January 2012 their perception of the future path of inflation, though the dispersion in their expectations is markedly smaller compared to the December survey.

According to results of Gallup and Ipsos[7] surveys, inflation expectations show a downward tendency. Under the October Gallup survey, all sectors, apart from trade unions, reported a decline. Namely, expectations of the financial sector came at 7.4%, those of the corporate sector at 10.0%, households – 11.4%, and trade unions – 12.0%. In November, when the survey on inflation expectations was for the first time conducted by Ipsos, financial sector expectations stood at 8.5% and declined to 7.6% in December and 7.0% in January. Inflation expectations of the corporate sector drifted down as well – from 9.0% in November to 7.6% in January. Household expectations stayed flat at 10% since November. Trade union expectations equalled 10%, except for December (9.2%).

According to our expectations, inflation expectations will continue down, only to retreat within the target tolerance band once inflation returns within the target tolerance band in Q1 2012.

[4] See Text box 1, p. 10.

[5] Domestic industrial producer prices stood at 0.2% in Q3.

[6] Agricultural producer and fishing prices.

[7] Since November 2011, instead of Gallup, the Ipsos agency conducts the survey on inflation expectations for the NBS. The survey still covers the financial sector,

Inflation outlook for Q1

Y-o-y inflation will return within the target tolerance band in Q1 2012. It is expected to temporarily slide down to around the lower bound of the target band at the quarter-end.

Y-o-y inflation will return within the target tolerance band in Q1 2012 and move around the lower bound of the target band at the quarter-end. A decline in y-o-y inflation will be driven primarily by the effect of high last-year base (higher monthly inflation rates in Q1 2011). In terms of inflation components, processed food prices are expected to provide the greatest contribution to the decline.

On the other hand, quarterly inflation could be somewhat higher than in Q4 2011, reflecting primarily the seasonal rise in fruit and vegetable prices and administered prices.

Processed food prices are expected to fall in Q1. The fall will be prompted by dissipation of cost-push pressures due to falling prices of primary agricultural commodities, as well as by the Government's decree restricting trade margins on basic food products.[8] A rise in market-determined prices of non-food products and services will be moderate and similar to levels recorded in the previous quarter.

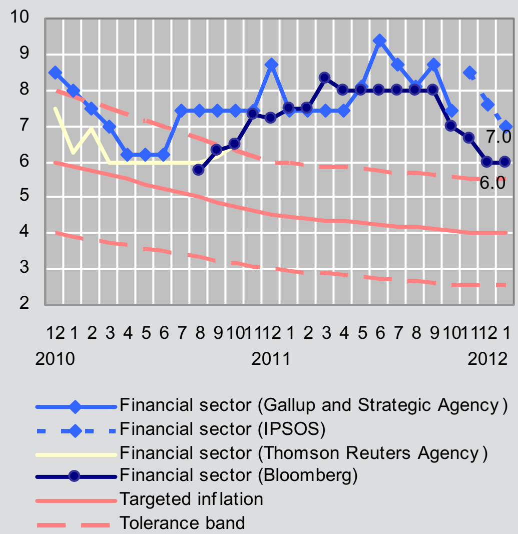
Growth in fruit and vegetable prices in Q1 is likely to be typical for the season and will provide the strongest contribution to total quarterly inflation.

As no major adjustments have been announced in Q1, administered price growth will be relatively low. A rise in administered prices is likely to be affected most by cigarette price hikes[9], expected as Serbia's excises policy is further harmonised with the EU policy in the field. A rise is likely also from adjustments reflecting the last year's consumer price growth. Utility services and medicine price hikes are probable as well.

It is estimated that petroleum product prices in Q1 will only marginally affect quarterly inflation.

At the quarter-end, y-o-y inflation is expected to move around the lower bound of the target tolerance band on account of two factors: an unusually steep fall in fruit and vegetable prices in December (driving down inflation by

Chart III.0.5 **One-year ahead expected and targeted inflation**
(y-o-y rates, in %)



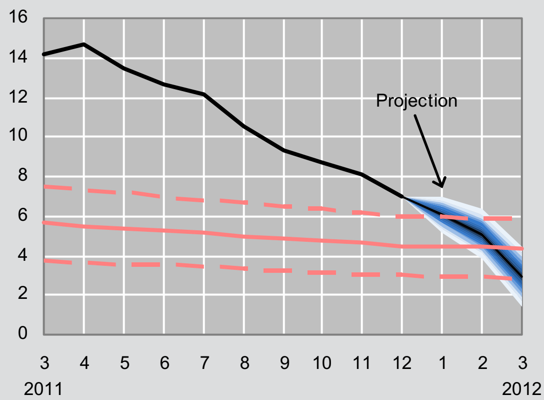
Economic agents revised down their expectations with y-o-y inflation declining at the same time.

corporate sector, households and trade unions. In addition to bank representatives, the financial sector now includes representatives of insurance companies.

[8] At end-December, the RS Government adopted the Decree on special terms of trading in particular types of goods whereby the highest total margin rate on basic food products is limited to 10% in the next six months.

[9] Cigarette prices are included in administered prices as excises make up their large portion.

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



Inflation will continue down in Q1 2012 and may temporarily fall back to around the lower bound of the target tolerance band by the quarter-end.

around 0.6 pp relative to real movements in the market[10]) and the Government's decree restricting trade margins on basic food products. However, given the temporary nature of these factors, we expect that inflation's downward departure from track will be short-term (one to two months, probably March and April).

The key risk to short-term inflation projection relates to the uncertainty as to the effects of restriction of food trade margins. Another potentially serious risk lies in a sudden oil price hike triggered by events unfolding in the Persian Gulf.

[10] NBS's estimate (see Text box 1, p. 10).

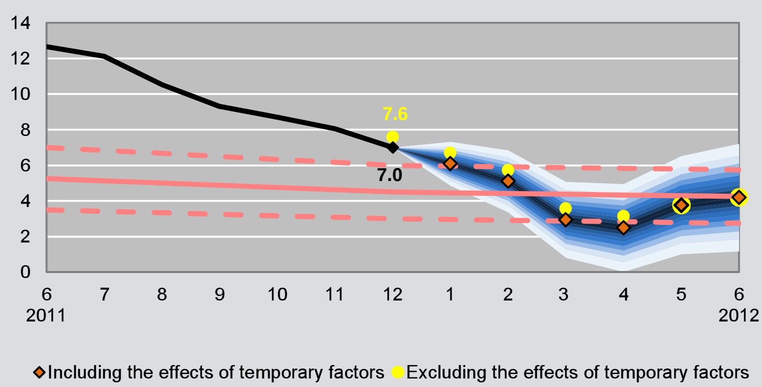
Text box 1: Assessed impact of temporary factors on inflation movements in the first half of 2012

Application of *all seasonal estimation*[1] imputation method in calculating the change in seasonal fruit and vegetable prices was one of the main causes for y-o-y inflation in December 2011 to undershoot the central projection from the November *Inflation Report* and to settle at 7%. This imputation method has been in application since early 2011, but for the first time in December, the price change for three out-of-season vegetable products with a significant share in CPI (tomato, pepper and cucumber) was calculated using the so-called typical price. Through (calculated) price reduction they provided a negative 0.6 pp contribution to y-o-y inflation in December. Had the 2010 imputation method been applied in December last year, using the average price change instead of the typical price for this group of vegetables, the projected fall in y-o-y inflation in the period between December 2011 and April 2012 would have been softer.

Such treatment of seasonal product prices in the calculation of inflation, combined with the effect of the Government of Serbia's decree restricting trade margins on basic food products and absence of any major administrative price increases before the new republic and local governments are set up, plus the impact of high base effect from Q1 2011, could temporarily drive inflation to around the lower bound of the target tolerance band in March and April 2012.

However, the effects of these factors will only be temporary, i.e. should be offset by mid-2012 (see Chart O.1.1) given that the Government's decree was issued for a period of six months and that the low base resulting from the imputation method will be putting an upward pressure on the increase of prices of those same seasonal vegetables once they reappear in the market with the start of the new season (in May and June). In the light of the above, we expect inflation to return to around the target by Q3.

Chart O.1.1 **Short-term inflation projection including and excluding the effects of temporary factors**
(y-o-y rates, in %)



[1] In accordance with the European Commission's recommendations, since the beginning of 2011, the Republic Statistical Office has been using the price imputation method called "all seasonal estimation" in estimating the prices of fruits and vegetables that are out-of-season. According to this method, in the first month of the out-of-season period for a particular fruit or vegetable, the so called typical price is used (weighted arithmetic average of that product's prices from months when it was in season, using the turnover quantities from those months as weights),while from the second month until the beginning of the new season, the change in the price of the whole group of fruits and/or vegetables available in the market is used for the given out-of-season product.

Having price stability as its goal, monetary policy should take into account inflation factors with a medium-term impact. Therefore, when making decisions on the key policy rate and the use of other monetary policy instruments, the National Bank of Serbia does not respond to temporary factors (in this case, the use of the imputation method and restriction on trade margins).

Text box 2: New core inflation indicators

Seeking to further enhance communication and international comparability of data, the National Bank of Serbia has changed its method of analysis of **Consumer Price Index (CPI)** movements.[1] From January 2012, this index will be presented according to new, derived classes of products and services defined by the EUROSTAT in compliance with the internationally accepted Classification of individual consumption by purpose, adapted to the compilation of the Harmonized index of consumer prices of the European Union and the euro area (COICOP/HICP classification).[2] Such CPI decomposition is among those most frequently used by the ECB and central banks of EU member states.

Accordingly, products and services covered by the CPI are divided into five main classes:

1) *unprocessed food* (fresh fruits and vegetables, meat, fish and eggs);

2) *processed food* (bread and cereals, processed meat, processed fish, milk and dairy products, oils and fats, processed fruits and vegetables, sugar, jam, honey, chocolate and confectionery, other food products and non-alcoholic beverages);

3) *industrial products excluding food and energy* (alcoholic beverages, tobacco, clothing, footwear, materials for the maintenance and repair of the dwelling, furnishings, household equipment and routine household maintenance, medical and pharmaceutical products, transport (vehicles and spare parts), recreation and culture and other products);

4) *energy* (electricity, gas, central heating, solid fuels, liquid fuels and lubricants);

5) *services* (craft and personal services, rentals for housing, maintenance and repair of the dwelling, medical services, transport services, postal services, telephone services, recreation and culture, education, restaurants and hotels, social protection, financial and other services).

Monitoring of **administered prices** will continue, but separately, since three out of the major five CPI classes already incorporate products and services whose prices are administered i.e. controlled by the government.

Following the international practice, instead of the earlier measure, the National Bank of Serbia will from now on monitor three new core inflation indicators:

- CPI excluding energy,
- CPI excluding energy and unprocessed food, and
- CPI excluding energy, food (processed and unprocessed), alcohol and tobacco.

The new measures were introduced in an effort to arrive at price movement indicators which could facilitate monetary policy decisions, given that swift shifts of price hikes and falls of some products cause temporary upward or downward pressure on headline inflation. Once products with the greatest short-term price oscillations are excluded from the CPI, we arrive at inflation rates independent of such temporary movements, i.e. rates driven by monetary effects or permanent price changes. As they take into account only the effect of permanent factors, core inflation indicators may diverge from the headline inflation trend. It is food and energy prices that generally display the largest oscillations.

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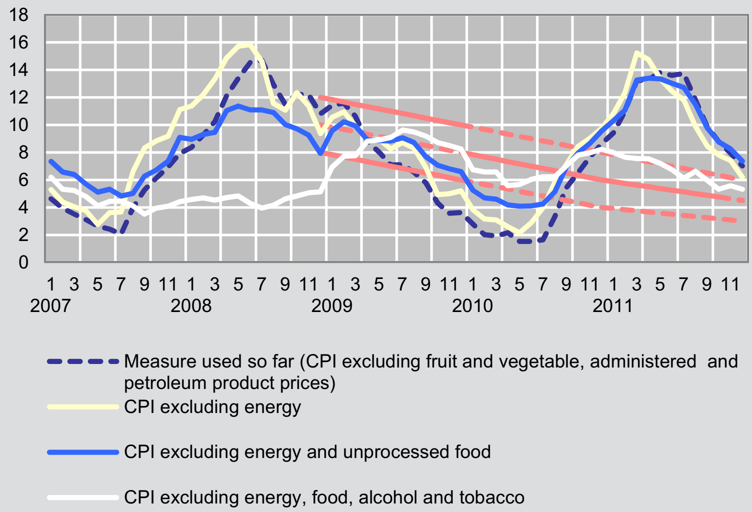
[1] Note that this will not affect the CPI level.

[2] Data on price movements according to the new CPI decomposition have been published on the National Bank of Serbia website since the beginning of 2012, in the statistics section (http://www.nbs.rs/internet/english/80/index.html).

Chart O.2.1 **Core inflation indicators**
(y-o-y rates, in %)



For comparison purposes, Chart O.2.1 shows movements of the indicator used until this January and the movements of the new core inflation indicators in the past period. As can be seen, only the CPI excluding energy, food, alcohol and tobacco oscillated less than the previously used indicator, since it leaves out food prices which are highly volatile in the case of Serbia. At the same time, this indicator moved within the target tolerance band almost throughout the period observed. Reflecting the major influence food prices have on inflation in Serbia, movements of this indicator also suggest that inflation can be kept under control. The other necessary precondition is the reduction of volatility of food prices.

Table below shows the share of each of the above subcomponents within the CPI, according to CPI weights used in 2011.

Table O.2.1 **Share in CPI**
(in %)

Consumer prices (CPI)	**100.0**
Unprocessed food	12.8
Processed food	25.0
Industrial products excluding food and energy	26.6
Energy	16.7
Services	19.0
Core inflation indicators	
CPI excluding energy	83.3
CPI excluding energy and unprocessed food	70.6
CPI excluding energy, food, alcohol and tobacco	40.6
Administered prices	21.7

IV. Inflation determinants

1. Money and capital market trends and bank lending

Interest rates

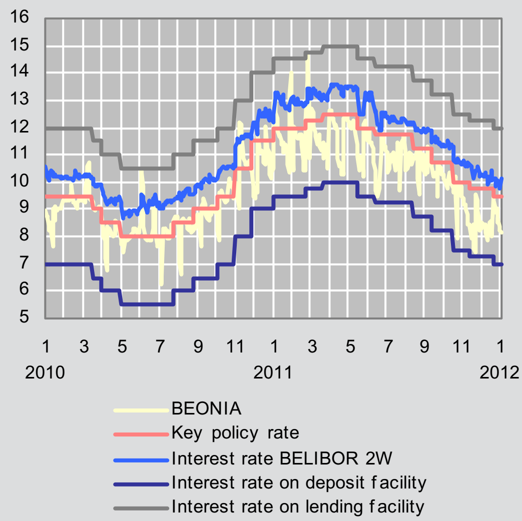
Interest rates in the interbank money market and rates on dinar loans moved in line with further relaxation of monetary policy. In the market of government securities, cuts were made only for shorter-maturity effective rates.

In Q4, BEONIA recorded a stronger fall than the key policy rate, most notably in December.[11] This was largely due to a further rise in banking sector liquidity as the government monetised balances in its foreign exchange accounts. A favourable liquidity position of the banking sector weighed down on trading volumes in the overnight interbank money market.

BELIBOR rates mirrored the key policy rate movements, ranging at end-December from 9.8% for the shortest to 11.4% for the longest maturity. In terms of end-Q4 average monthly values, rates were cut from 1.3 to 1.6 pp. A steeper drop was noted for shorter-maturity rates, giving rise to a slight increase in the yield curve slope.

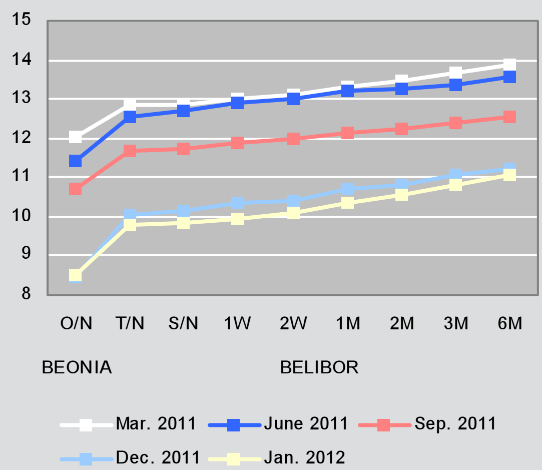
In January, BELIBOR rates continued to reflect movements in the key policy rate – they were down from 0.1 to 0.4 pp on average. By contrast, BEONIA edged up 0.1 pp.

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



Money market interest rates mirrored the key policy rate movements.

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



The favourable banking sector liquidity position reflected on movements in money market interest rates.

[11] BEONIA trended at 8.45% by end-2011, with the key policy rate at 9.75%.

In October and November, shorter-maturity effective rates in the primary market of government securities trended in line with the key policy rate. As investors showed greater interest in short-term investment, full performance was recorded at almost all shorter-maturity auctions. The 6-month effective rate was cut 100 bp to 10.9% in November.

As uncertainty in the global financial market persisted, investors were less willing to participate in over 1-year auctions. The weaker performance induced movements in longer-maturity effective rates in the first two months of Q4 and was the underlying reason behind unchanged rates for 1 and 3-year maturity, while 18-month and 2-year rates went slightly up.

Two 6- and 18-month auctions were held in December, with effective rates down 5 and 20 bp respectively.

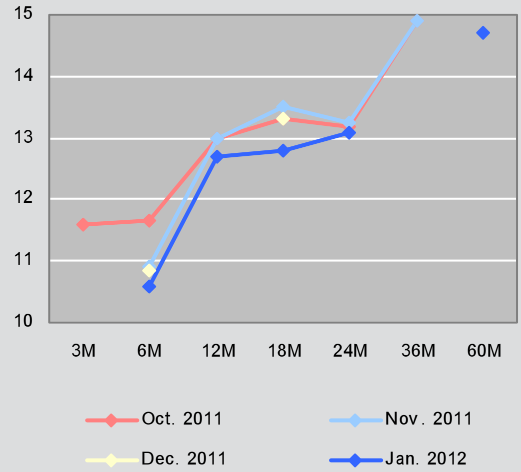
At January auctions, effective rates for all maturities declined and foreign investor participation at longer-maturity auctions intensified. A 5-year auction was held for the first time. The rate on 5-year bonds with the coupon interest of 10.0% and semi-annual coupon payment, arrived at 14.7%.

The first auction of government securities (3-month) was held in February 2009. Since then, longer-maturity securities have been continuously issued (from 6 months to 3 years). The development of the government securities market helped create the benchmark dinar yield curve for up to 5 years, which will positively affect the further process of dinarisation.

In early 2012, amendments to the Corporate Income Tax Law were adopted, exempting non-residents from tax on interest earnings from debt securities. Together with earlier introduced changes in implementation of government securities auctions (lengthening the bid receipt period, abolishment of the second round of bid submission), this is likely to bolster foreign investor interest.

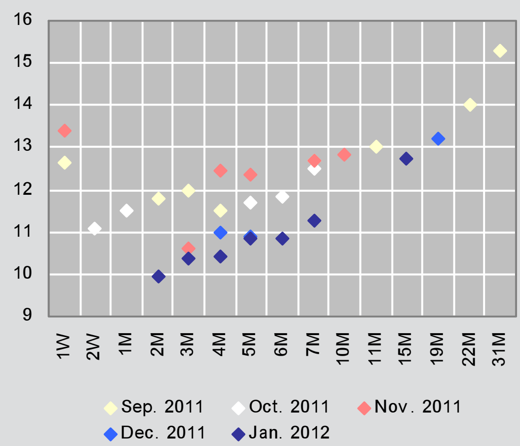
The stock of foreign currency-denominated government securities stayed flat in Q4 (EUR 552.9 mln) as these securities were not auctioned nor did they fall due. The stock of dinar securities declined by RSD 6.1 bln since the funds due for collection exceeded the amount of sold securities (only two auctions were held in December).

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



Q4 saw a decline only for shorter-maturity rates, while in January 2012 all rates recorded a fall.

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



* All trading above RSD 5 mln in the secondary market of government securities.

In Q4, trends in the secondary market were similar to those in the primary market.

The yield to maturity rates in the secondary market of government securities[12] were declining by the year-end and ranged in December between 10.9% for 5-month and 13.2% for 19-month maturity. Trading volumes came at RSD 7.1 bln in Q4, up 1.1% on Q3.

Rates on newly approved dinar loans followed the key policy rate trends. The weighted average rate stood at 17.1%, down by 1.4 pp on end-Q3. A sharper cut was made for corporate, notably investment and current asset loans.

Rates on newly approved foreign currency or foreign currency-indexed loans were revised down as well. In the corporate sector, rates were cut on almost all types of loans. Within households, rates on housing loans were lowered the most, in direct response to the start of application of the Financial Services Consumer Protection Law. Interest rates on the majority of earlier approved loans declined, chiefly on the back of modified Swiss franc-indexed lending terms.

The weighted average deposit rate on new business went down 0.2 pp to 2.9% at the quarterly level.

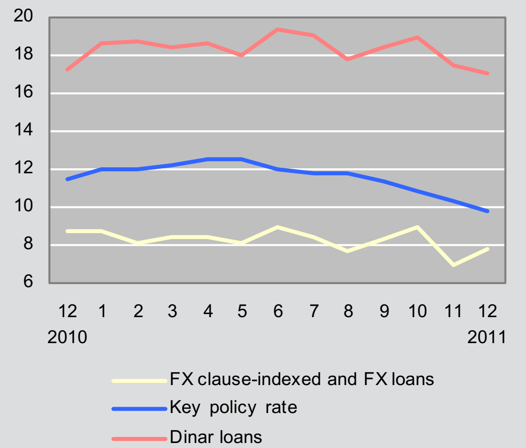
Rates on term household deposits rose 1 pp on end-Q3. The highest interest rates were offered by banks in November. December saw lower rates, though higher than at end-Q3. Interest on the most common form of saving – up to 1-year euro deposits, stood at 5.2%[13] in November, only to fall to 4.7% in December. With the exception of November, rates on term dinar deposits were on a downward slope throughout Q4.

Stock exchange trends

Trends on the Belgrade and regional stock exchanges continue to mirror the heightened uncertainty in the global financial market and investor aversion to risk.

The trend of declining shares of BSE-listed companies continued. Both BSE indices tumbled by 9.7% in Q4, in response to the heightened uncertainty on the global plane, most notably due to the still unresolved euro area crisis. As a consequence, investor aversion to risk remains pronounced. At the annual level, BELEX15 and BELEXline lost 23.4% and 23.8% respectively.[14]

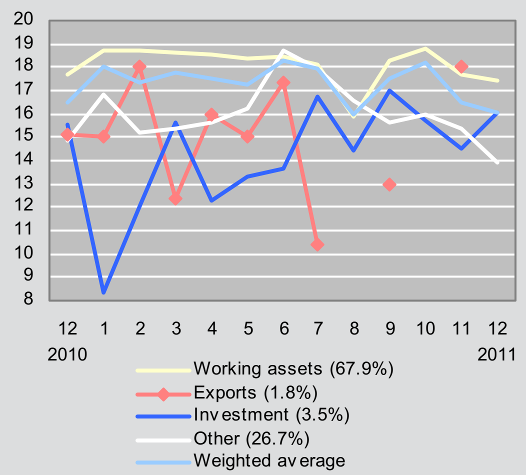
Chart IV.1.5 **Interest rates on new corporate and household loans***
(weighted average values, p.a, %)



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

Rates on dinar loans reflected movements in the key policy rate.

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



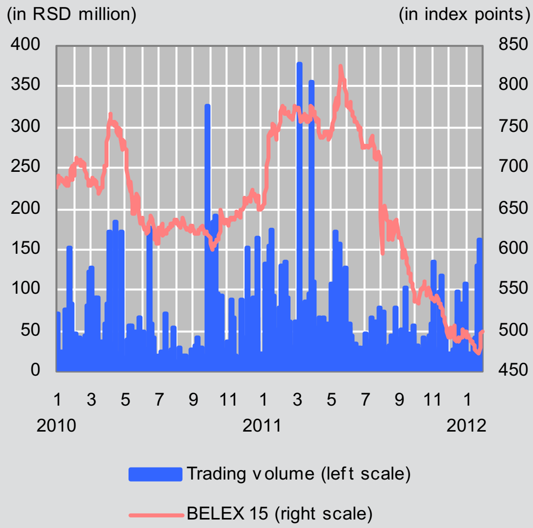
* Excluding revolving loans, current account and credit card overdrafts.
Note: brackets contain shares of types of loans in total newly approved loans in 2011.

Rates on all dinar corporate loans contracted from end-Q3.

[12] Excluding trading until the primary market settlement date, which is not considered true secondary trading.

[13] The rate was down 0.8 pp on November 2010.
[14] Until end-May 2011, these indices gained 26.6% and 16.6% respectively, only to lose 39.5% and 34.7% until the year-end.

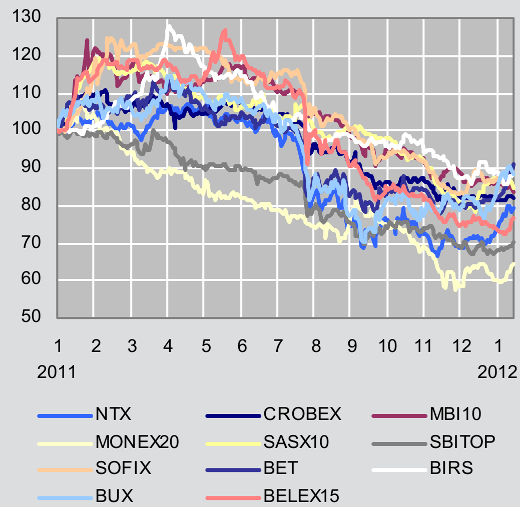
Chart IV.1.7 **Belex 15**



Source: BSE.

BSE shares and trading volumes tumbled further in Q4.

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



Negative developments were recorded on the majority of stock exchanges in the region in Q4.

As the share prices declined, BSE trading volumes contracted as well. The total amount of shares traded was RSD 4.2 bln, down by 4.1% on Q3. Shrinking trading volumes were due to smaller foreign investor participation. Foreign investors were somewhat more active in total sale (44.7%) than total purchases (43.9%), resulting in the net effect of RSD -32.7 mln.

In Q4, trading in frozen foreign currency savings bonds (RSD 2.15 bln) outstripped the volumes recorded in the first nine months of 2011 (RSD 2.04 bln). Most traded were bonds maturing in 2016. However, such high trading volumes were not due to increased market liquidity, but to the above-average trading recorded over three days in December (staying at the Q3 average in all other days). The yield to maturity rates ranged from 4.45% to 5.75% at the year-end.[15]

Driven by falling shares, overall BSE market capitalisation declined by RSD 36.1 bln on end-Q3 and reached RSD 817.5 bln on the last day of 2011.

In Q4, the heightened uncertainty on the global plane affected most capital markets in the region and dragged down almost all regional indices (from 4.7% for SBITOP to 18.5% for MONEX 20). A mild pick-up was noted only for Bucharest and Budapest indices (0.2% BET and 7.6% BUX).

Regional stock exchanges recovered mildly in early 2012 and the BSE by end-January.

Monetary aggregates

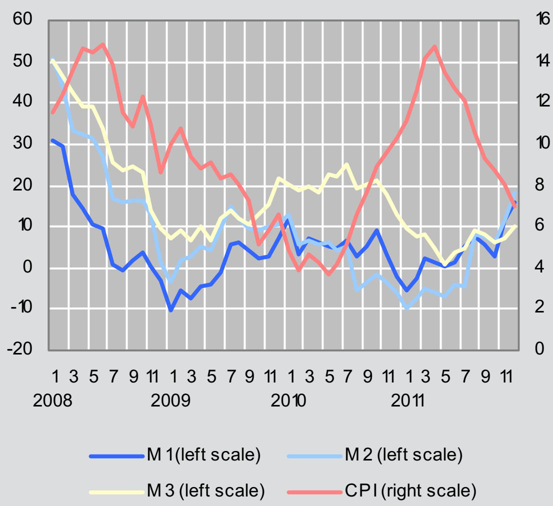
Money supply amplified further in Q4. All monetary aggregates recorded real y-o-y growth.

At end-Q4, total reserve money increased q-o-q (21.6% nominally, 19.1% in real terms). Dinar reserve money was up 24.6% in nominal and 23.8% in real terms.

Growth in dinar reserve money (RSD 44.8 bln) was propped by NBS's net foreign and domestic assets. Tapping on its FX deposits with the NBS, the government gave the strongest impetus to reserve money creation (RSD 58.1 bln). Money was withdrawn via open market

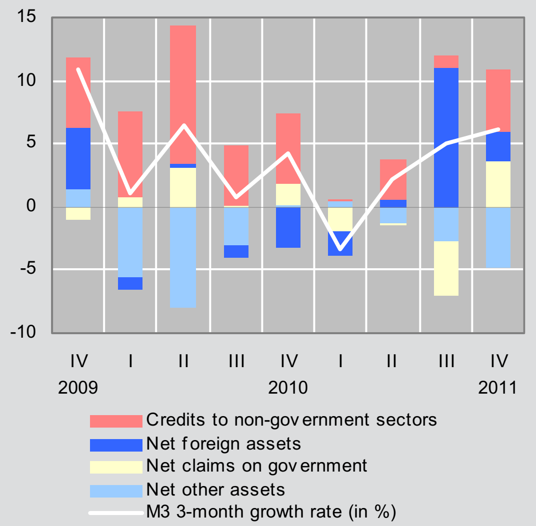
[15] Return on A2016-series bonds equalled 5.33% at the year-end, totalling 5.57% on average for the three days of highest trading volumes.

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



Owing to nominal y-o-y growth in money supply and a fall in y-o-y inflation, money supply began to record real y-o-y growth as of mid-Q4.

Chart IV.1.10 **Contribution to M3 growth**
(in p.p.)



In Q4, the Government contributed to M3 creation at the quarterly level for the first time in 2011.

operations, with net FX swap sales to banks acting in the same direction. Though the repo rate was cut 150 bp in Q4, banks stepped up further their investment in repo securities – at end-2011, the repo stock amounted to RSD 120.6 bln, up by RSD 19.6 bln on end-Q3.

Within the structure of dinar reserve money, cash in circulation rose RSD 19.8 bln, which is usual for a year-end. Bank reserves increased RSD 23.1 bln, mainly on account of rising bank excess reserves with the NBS. Calculated reserve requirements were up RSD 2.0 bln.

Money supply expanded further from end-Q3. Dinar monetary aggregates M1 and M2 rose 13.7% and 11.4% in real terms respectively, and M3 gained 3.7%. A y-o-y decline in dinar monetary aggregates ended as the effect of started application of the new Bankruptcy Law[16] was largely exhausted by end-Q3 – pursuant to the Law, balances of entities subject to bankruptcy were allocated to special accounts. At end-2011, M1 gained 8.2% y-o-y in real terms, and M2 and M3 rose 10.8%.

NBS's rising net foreign assets underpinned M3 growth. Government borrowing was flat through Q4, while its increased spending from accounts (notably FX) with the NBS drove M3 up. Though increasingly slower, growth in corporate and household loans lent a boost to M3 growth.

The dinar component of money supply was boosted by an increase in cash in circulation and short-term deposits arising from transactions rather than those placed for

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

	2011				Share in M3 Dec. 2011 (%)
	March	June	Sep.	Dec.	
M3	5.4	5.2	11.8	10.8	100.0
FX deposits	10.3	9.2	13.5	7.3	67.5
M2	-17.0	-14.7	-1.5	10.8	32.5
Time and savings dinar deposits	-25.2	-20.4	1.4	14.8	12.9
M1	-10.4	-10.2	-3.4	8.2	19.6
Demand deposit	-6.3	-7.5	-3.1	3.7	12.0
Currency in circulation	-17.0	-14.7	-4.0	16.1	7.6

[16] The Law envisages automatic initiation of bankruptcy proceedings against entities with blocked accounts. Bankruptcy proceedings were automatically initiated in 2010 against entities whose accounts were blocked over 3 years, and in 2011 against entities whose accounts were blocked for more than 2 years.

saving purposes. The sharpest growth was recorded for balances in companies[17] and household accounts. In euro terms, the total level of FX deposits remained unchanged on end-Q3.

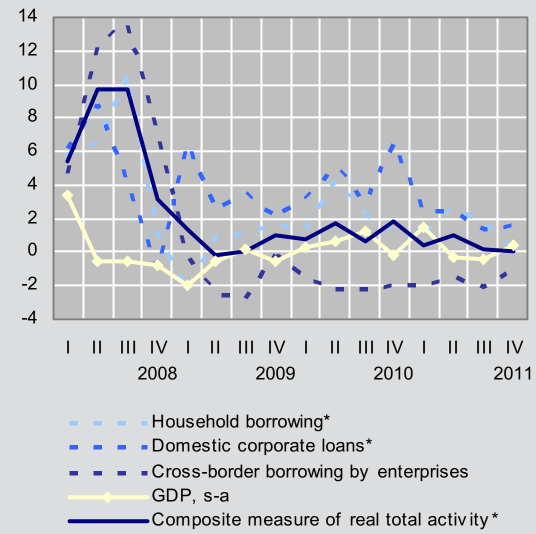
To mark the World Savings Day (31 October), banks offered somewhat higher interest rates on saving deposits in November, though lower than in earlier years. Clients generally opted for short-term saving in dinars (up to 6 months and 1 year) and longer-term saving in foreign currency (up to 2 and 5 years). In November, dinar savings rose RSD 1.9 bln and FX savings EUR 101.1 mln.[18] Dinar savings continued up in December (RSD 2.0 bln), notably 3- and 6-month deposits.

Monetary multiplier declined mildly on end-Q3 as reserve money rose faster than money supply.

Slower growth in economic activity and a faster rise in money supply led to further deceleration of velocity of money in Q4.

All monetary aggregates declined in January, which is usual for the beginning of a year. Reserve money was driven down mainly by NBS's net domestic assets under open market operations. With the contraction in cash in circulation and all deposit categories, a decline was recorded for all three monetary aggregates.

Chart IV.1.11 **Loans and GDP**
(quarterly rates, %)



* Deflated by inflation, excluding the effects of valuation changes.

A slowdown in corporate and household lending continued in Q4.

Bank lending

Lending activity expanded further in Q4, though at a slower pace than in Q3. The slowdown in growth continued in y-o-y terms as well.

Under the composite measure[19], corporate and household lending continued up, though at a slower pace, which was due to growth in domestic loans.

Rising by 1.6% and mere 0.2% respectively, real growth in domestic corporate and household loans totalled 1.1% in Q4, down by 0.4 pp on Q3. Nominally, total bank lending increased by RSD 63.7 bln, or RSD 21.8 bln excluding the exchange rate effect. As a result, the slowdown in y-o-y growth in lending was more pronounced than in the quarter before. The real y-o-y rise amounted to 7.2% in December, down by 3.7 pp on September.

Banks continued to rely on domestic sources of finance and tapped most funds from rising dinar deposits, notably of the corporate sector. This time, however, FX deposits had no impact on the growth in lending. In contrast, with banks' shrinking external claims, domestic lending increased, while a part of available funds was invested in safer, repo and government securities.

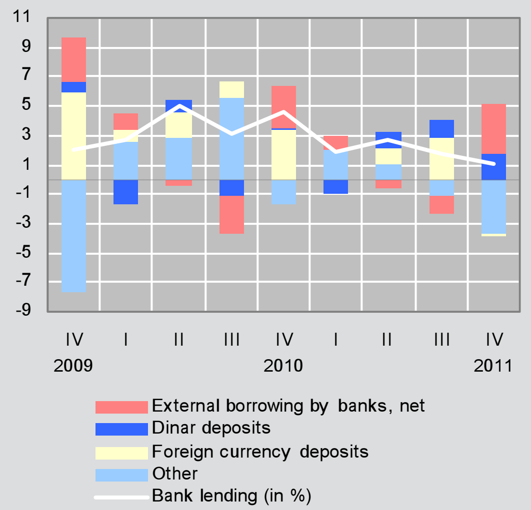
Bank claims in respect of corporate loans rose by RSD 43.7 bln, or RSD 17.1 bln excluding the exchange rate effect. Unlike in Q3, lending to corporates exceeded that to public enterprises. Total fresh lending was weaker than in earlier quarters, with current asset loans accounting for the major portion of disbursed loans. In Q4, banks extended more new investment loans than in the quarter before. Enterprises used more import loans than in Q3, while export lending was marginal. Though the claims structure by sector remained unchanged, trade and

[17] Companies include non-budget financed private and state-owned enterprises.

[18] In November 2010, growth arrived at RSD 2.9 bln and EUR 391.3 mln respectively.

[19] As an indicator of overall borrowing, it covers domestic lending (corporate and household borrowing from domestic banks) and cross-border borrowing.

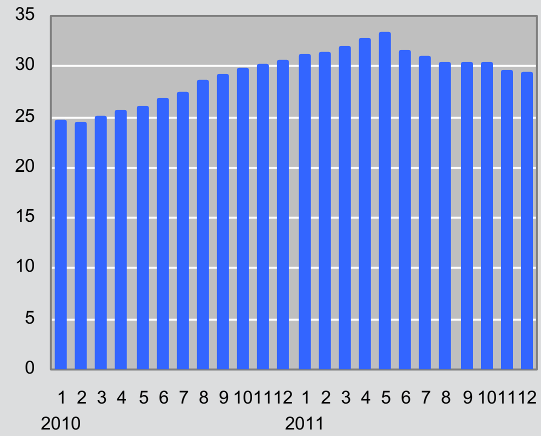
Chart IV.1.12 **Contributions to quarterly rate of lending growth***
(in percentage points)



* Excluding the effect of exchange rate changes.

A rise in dinar deposits and contraction in external receivables lent the major boost to lending.

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



The share of dinar receivables declined mildly in Q4.

industrial enterprises received somewhat less, and transport enterprises somewhat more loans than in Q3.

Given the loan disbursements from domestic banks and direct debt repayment to foreign creditors, overall corporate borrowing stagnated for the second quarter in a row, while y-o-y growth in borrowing slackened. Still, enterprises used external trade loans worth EUR 317.3 mln in Q4.[20]

Household lending picked up by RSD 14.6 bln, or RSD 0.9 bln excluding the exchange rate effect. Housing loans were the predominant category of loans approved. Borrowing under credit cards and consumer loans contracted, the level of current account overdrafts was similar to Q3, while the disbursement of cash loans stepped up. Pursuant to the new Financial Services Consumer Protection Law, implemented as of early December 2011, banks modified provisions relating to the disbursement terms of some earlier extended housing loans. Banks' offer included longer-maturity housing loans without a foreign currency clause.

Activity in the subsidised segment of the lending market contracted further in Q4. Subsidised loans worth RSD 6.3 bln were approved, of which most to farmers (RSD 3.7 bln). No funds were allocated under the 2012 budget for interest subsidising under the major subsidised loan programme[21], while government-supported lending for housing purposes will continue in 2012. For this reason, the impact of this segment will be significantly smaller than in earlier years.

The share of dinar in total loans shrank by 0.9 pp in Q4 to reach 29.3% in December. Such contraction was the most manifest in the corporate sector, while the households sector share was relatively stable.

Measured by the share of NPLs, the loan repayment capacity was somewhat weaker relative to end-Q3. In

[20] Given their specific nature, trade loans are not covered by the composite measure of lending activity.

[21] The RS Government programme of measures aimed at mitigating the adverse effects of the global financial crisis, implemented from 2009 to 2011.

Table IV.1.2 **Subsidised loans**
(in RSD bln)

	2010	2011			
	Q4	Q1	Q2	Q3	Q4
Government Programme of Measures to Ease the Effects of the Global Financial Crisis					
Loans approved	**37.6**	**27.0**	**59.0**	**7.9**	**-**
Liquidity	22.7	24.3	50.9	-1.1	-
Investment	9.8	1.8	6.6	8.4	-
Consumer	1.7	0.9	1.5	0.6	-
Dinar cash	3.4	-	-	-	-
Subsidised housing loans					
	2.0	**0.9**	**1.3**	**2.0**	**2.0**
Subsidised military loans					
	0.3	**n.a.**	**0.2**	**0.5**	**0.5**
Subsidised farmers' loans					
	2.4	**n.a.**	**n.a.**	**2.7**	**3.7**

Sources: Ministry of Economy and Regional Development, National Mortgage Insurance Corporation, Ministry of Agriculture, Trade, Forestry and Water Management.

December, NPLs amounted to 19.2% under the gross principle (10.5% by the net principle) – up by 0.4 pp on September. The share of corporate loans in arrears over 90 days was down 0.1 pp to 24.6%.[22] Household loan arrears contracted by 0.4 pp to 8.0%[23] in December. Despite a high share of NPLs, other relevant indicators signal banking sector stability – capital adequacy ratio equalled 19.7% in September, while loan loss provisions stood at 119.6% in December.

[22] One of the reasons for a high NPL share is the unfavourable tax treatment of the NPLs direct-write off, which is why banks perform the direct write-off only after all prior legal actions regarding the claims collection are concluded (cashing the collateral, conclusion of bankruptcy proceedings, etc). Court proceedings often protract over several years, have an uncertain outcome and entail the accompanying costs.

[23] Including enterpreneurs, loan arrears were up by 0.1 pp to 9.9%.

Text box 3: Net financial position of corporates, households and the government with banks in Serbia and abroad

Net positions of all sectors with banks in Serbia and abroad have changed under the impact of the economic crisis. Government net borrowing increased, while corporate sector lowered slightly its net debt position. Household net savings were boosted, largely compensating for the higher net borrowing by the government. The currency composition of net government and corporate debt also shifted, in the direction of a higher share of dinar debt, while household net savings remained broadly unchanged in this respect.

Since the breakout of the economic crisis in 2008 government net liabilities to banks significantly expanded (at end-Q3 2011, the net liabilities to banks in Serbia and abroad stood at RSD 307.0 bln, or around 9% of GDP, of which RSD 186.5 bln were net liabilities to Serbian banks alone). On the other hand, following a short-lived hike, corporate net borrowing from domestic and foreign banks has abated. Enterprises have been steadily repaying their debts since Q3 2010 (at end-Q3 2011 corporate net liabilities equalled RSD 1,105.6 bln, or around 34% of GDP, of which RSD 666.0 bln were net liabilities to banks in Serbia). Net household claims on the domestic banking sector grew significantly during that period, reaching RSD 235.2 bln (around 7% of GDP) at end-Q3.

Chart O 3.1 **Sectors' net position with banks in Serbia and abroad**
(in % of GDP)

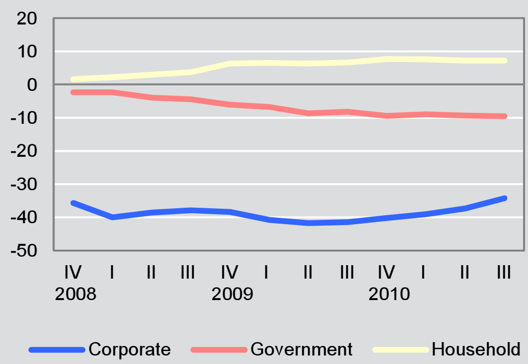


Chart O 3.2 **Corporate net position with banks in Serbia and abroad**
(in % of GDP)

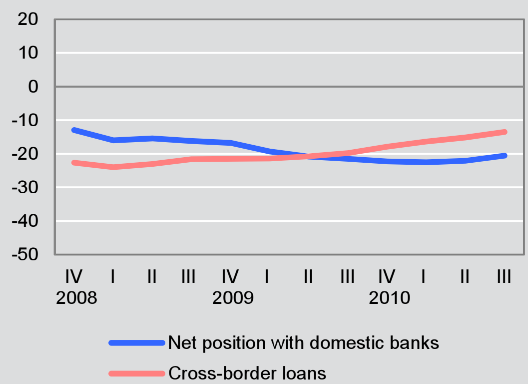
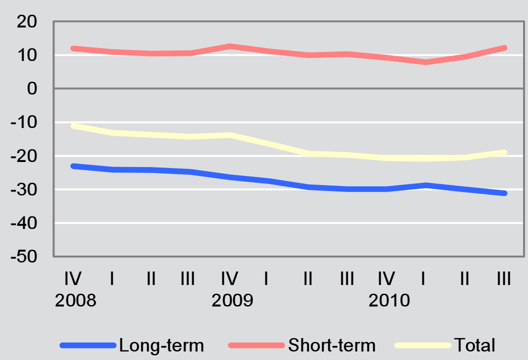
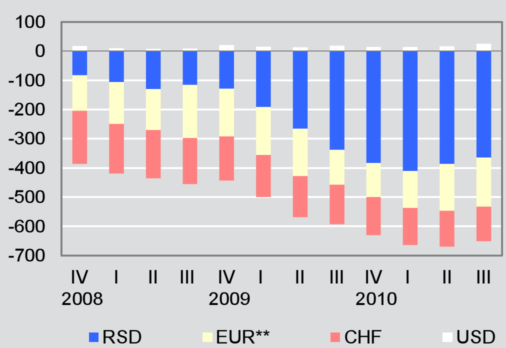


Chart O 3.3 **Maturity composition of the sectors' net position with banks in Serbia**
(in % of GDP)



Note:
Net amount <0: borrower from the banking sector;
Net amount >0: lender to the banking sector.

Chart O 3.4 **Currency composition of the sectors' net position with banks in Serbia***
(in RSD bln, Dec 2010 = 100)



* Excluding the exchange rate effect.
** Including other currencies.

The debt and banking crisis in the euro area weighed down on corporate and government liabilities toward foreign banks, which contracted from RSD 688.7 bln (around 25% of GDP) at end-Q2 2010 to RSD 560.1 bln (around 17% of GDP) at end-Q3 2011. This contraction was largely counterbalanced by additional borrowing from domestic banks.

From Q4 2008 until end-Q3 2011 the long-term net liabilities to domestic banks of all three sectors were on the increase, reaching around 31% of GDP at end-Q3 2011. Short-term, the sectors' claims exceed their liabilities to domestic banks. From Q4 2008 until end-Q4 2010 their short-term net claims dwindled. However, 2011 saw corporate, household and government claims on domestic banks rising, until they settled to around 12% of GDP at end-Q3 2011.

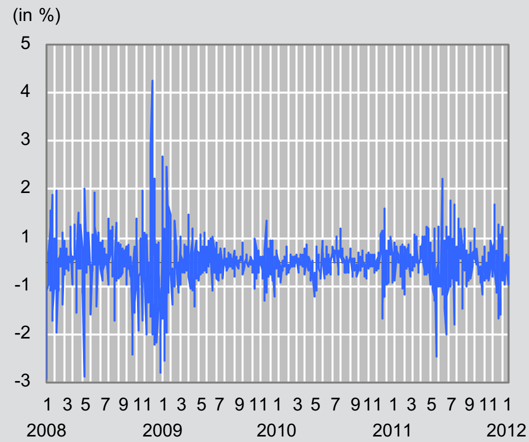
The currency composition of corporates, households and the government's net financial position in the period observed shifted toward a higher share of dinar net debt. Dinar net liabilities account for the major share of total net liabilities of all sectors toward banks in Serbia (around 56%), followed by those denominated and indexed in euros (around 26%) and Swiss francs (some 18%). Corporate net debt to Serbian banks is predominantly euro-denominated or -indexed (77% of total net liabilities). Next in size are liabilities in dinars and Swiss francs (around 20% and 3% of total net liabilities, respectively). The major part of government net liabilities to domestic banks is in dinars (around 61%), while the euro-denominated and -indexed share makes up around 38% of total net liabilities. The dinar share of the government net liabilities grew steadily in the observed period. Household net claims on banks are predominantly in foreign currency. At end-Q3 2011, households were net lenders to domestic banks in both euros and dollars (around 96% and 4% of total net claims, respectively), but net borrowers in dinars and Swiss francs.

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

All currencies in the region were affected by the second wave of the global crisis. Compared to those under a similar exchange rate regime, the dinar weakened the least on average.

Persistent tensions in the global financial market weighed down on all currencies in the region. The dinar was no exception, but was, on balance, one of the more stable currencies. In the course of Q4, it lost on average 0.1% against the euro. Due however to somewhat stronger depreciation pressures in the second half of December, the dinar ended the year 3.3% weaker than at end-Q3. Though heightened in December, at quarterly level its volatility was less pronounced than in Q3, ranging from 99.5 to 104.6 dinars per euro. In terms of dollar rate, the dinar's slide was sharper, averaging 4.8% in Q4 (7.7% end-of-period). The nominal effective exchange rate of the dinar[24] depreciated on average by 1.1%, and so did the real effective exchange rate (0.3% against the euro and 3.8% against the dollar).

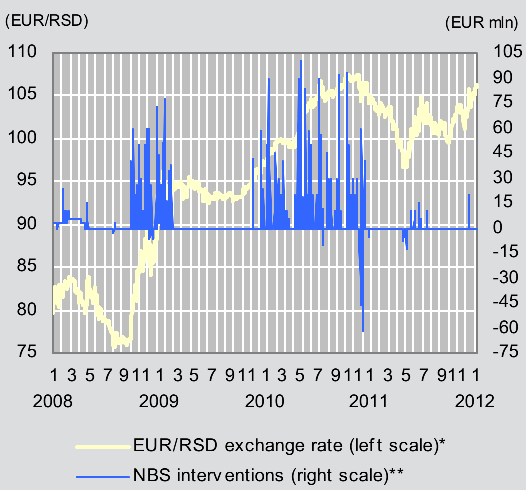
Chart IV.2.2 **Daily changes in EUR/RSD exchange rate***



* Negative rates indicate depreciation and positive rates appreciation of the dinar.

Daily volatility of the exchange rate of the dinar was weaker than a quarter earllier, but intensified from one month to the next.

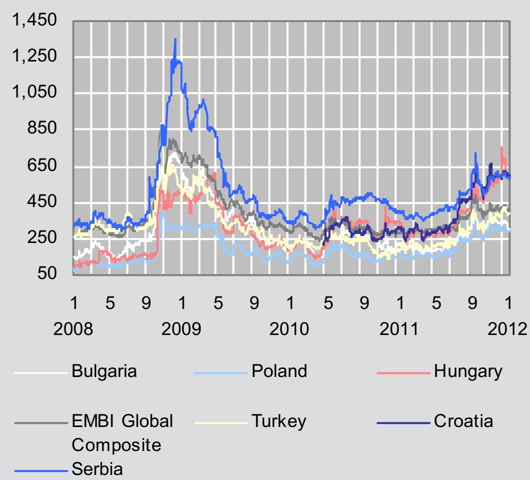
Chart IV.2.1 **Movements in EUR/RSD exchange rate and NBS FX interventions**



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

During Q4, the NBS intervened twice in the IFEM by selling foreign exchange.

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

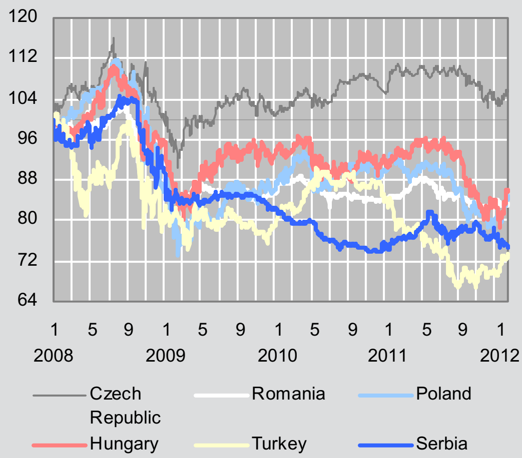


Source: JP Morgan.

While increasing for most of the countries observed, EMBI for Serbia decreased in Q4.

[24] Weights used: 0.8 for the euro and 0.2 for the dollar.

Chart IV.2.4 **Movements in exchange rates of national currencies against the euro**
(daily data, December 31, 2007 = 100)



* Growth indicates appreciation.

Compared to currencies under a similar exchange rate regime, the dinar weakened the least on average in Q4.

Dinar exchange rate movements were determined chiefly by increased dinar liquidity and stronger foreign exchange demand by residents, as well as by inflows from FDI and remittances. Dinar liquidity increased in November, and particularly in December, as the government tapped on its foreign exchange deposits with the NBS. The increase in residents' demand for foreign exchange in the second part of December was also seasonally-induced, i.e. caused by the need to provide foreign exchange funding for energy imports. The rise in country risk premium also played a part in the weakening of the dinar. Working in the opposite direction and alleviating depreciation pressures in Q4 were FDI inflows, higher supply of foreign exchange from non-residents and purchase of foreign cash in exchange transactions.

The downward trend in IFEM trading volumes, in place since August, ended in December, when the daily average reached EUR 96.8 mln.[25] At quarterly level, trading volumes averaged EUR 70.0 mln per day, down by 34.0% from a quarter earlier. To ease excessive daily volatility of the exchange rate in late December, the NBS sold EUR 30.0 mln in the IFEM.[26] Overall in Q4, the NBS bought EUR 49 mln and sold EUR 111 mln in swap transactions.

Following a decrease in October, the risk premium for Serbia and most of the other countries in the region increased in November and stabilised thereafter. At the end of the year, EMBI for Serbia was 601 bp, or 24 bp less than at end-Q3. At the same time, the majority of countries in the region saw a rise in their risk premiums in Q4. Fitch's affirmation of Serbia's rating was one of the factors determining a more positive perception of the country risk compared to regional peers.

EMBI for Serbia went further down in January, measuring on its last day 593 bp. Cross-regional comparison shows that the value of this index for Serbia was less volatile in the prior period.

Foreign capital inflow

Capital inflows, notably those from FDI, contributed to the easing of depreciation pressures.

Though lower than in Q3, capital inflows met the current account deficit financing needs in Q4.

The dominant type of non-resident investment was FDI (EUR 599.7 mln), most of it absorbed by retail trade in October and the financial sector (bank recapitalisation) and production of means of transport in December. During Q4, investments also flowed into real estate business and construction industry.

By contrast to prior quarters when portfolio investment exceeded FDI, Q4 saw a net outflow of portfolio investment in the amount of EUR 17.6 mln. This was due to increased risk aversion to the region, but also to the smaller issue volumes of longer-term government securities. Already in January 2012, non-residents resumed their purchases of government securities.

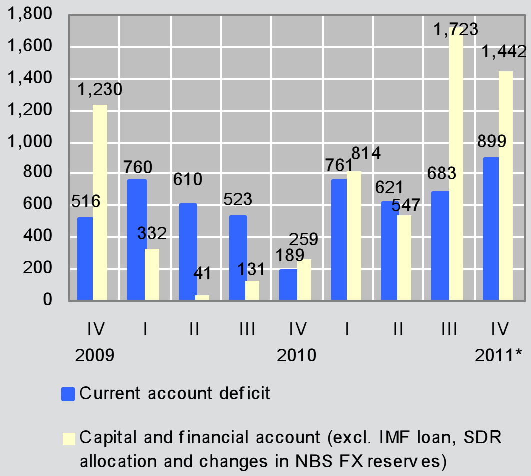
As banks disbursed more loans than they repaid, their net borrowing went up by EUR 104.2 mln in Q4. At the same time, net foreign borrowing by enterprises provided an inflow of EUR 16.1 mln. Net government borrowing increased by EUR 86.0 mln(a part of it relating to World Bank and EIB loans).

In late Q4, banks scaled down their holdings abroad, transferring them to foreign exchange accounts of the

[25] NBS included.

[26] In 2011, the NBS sold EUR 90.0 mln and bought EUR 45.0 mln in the IFEM.

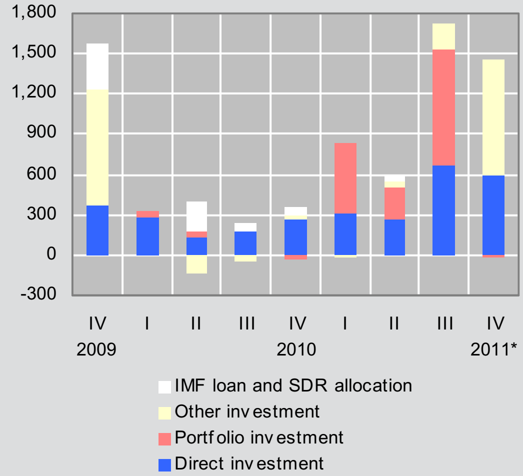
Chart IV.2.5 **Current account deficit and net capital inflow**
(in EUR mln)



*Preliminary data.

Capital inflows met the current account deficit financing needs in Q4.

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



*Preliminary data.

Including those registered in Q4, FDI inflows in 2011 totalled EUR 1.8 bln.

National Bank of Serbia for the purposes of required reserve allocations. To meet the requirement regarding maximum exposure to a connected person (5% of capital)[27], banks transferred to the National Bank of Serbia's accounts more than EUR 400 mln at the close of December. As soon as 2012 started, the process reversed. Due mainly to these temporary movements, other investments provided an inflow of EUR 860.8 mln in Q4.

From the aspect of the country's balance of payments, there was no need to draw on resources under the stand-by arrangement with the IMF, though a positive review remains desirable. Implementation of the arrangement would contribute to the country's macroeconomic stability as it impacts on the level of country risk premium, the size of foreign investment, and terms of foreign borrowing.

Talks within Vienna Initiative 2 started in January in circumstances different from those surrounding Vienna Initiative 1. The aim of the initiative is to improve coordination among relevant stakeholders at international level to avoid adverse cross-border effects in the context of ongoing deleveraging in advanced economies and to support transition towards a more sustainable banking model in emerging Europe, the model implying greater reliance on the domestic sources of funding.

3. Aggregate demand

A modest rise in aggregate demand in Q4 is attributed to higher domestic demand.

After declining in Q3, aggregate demand is estimated to have edged up by 0.3% in Q4. Looking closer, domestic demand is assessed to have gone up, and net external demand down, as indicated by imports growing faster than exports. Domestic demand was boosted by investments, as well as by government and household final consumption.

Observed year on year, Q4 GDP picked up to 0.8%, from 0.5% in Q3, which is attributed to stronger investment activity.

[27] Decision on Risk Management for Banks.

According to RSO, GDP grew by 1.9% in 2011. The NBS sees this growth as stemming from an upswing in investment activity, while it estimates that net exports had a neutral contribution, and that final consumption contributed negatively.

Domestic demand

Household spending

Household consumption slightly upped in Q4.

Household consumption is estimated to have increased by 0.2% s-a in Q4, giving a boost to economic activity (0.2 pp contribution). Higher consumption is signalled mainly by an estimated upturn in retail trade turnover, as well as in catering, mobile telephony and passenger transport. VAT receipts, another indicator of household consumption, slowed down their y-o-y decline in Q4.

According to NBS estimate, retail trade turnover, the key indicator of household consumption, advanced on the quarter before by 1.9% s-a. However, it remains subdued – 27.5% below its pre-crisis level.

On the other hand, household real income arising from wages, pensions and social benefits, which is the main source of funding for consumption, fell in Q4 (1.3% s-a). The fall was cushioned by a slight increase in consumer and other retail loan approvals intended to finance consumption.

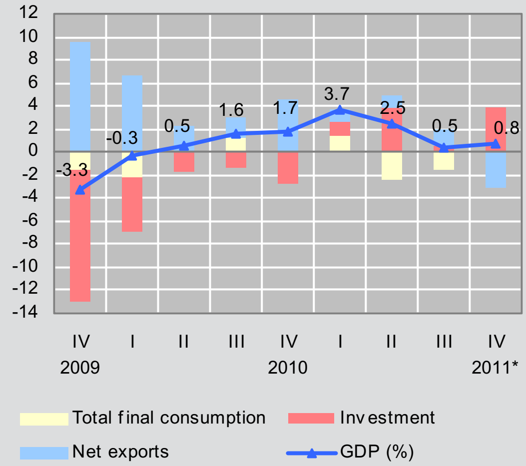
Government spending

Government spending ramped up in Q4.

In real terms, government spending rose in Q4 by 1.2% s-a, as suggested by outlays for goods and services in the public sector, and was also stronger y-o-y (1.2%).

The Republic of Serbia budget for 2012, adopted at end-December last year, projects a RSD 124.4 bln deficit.[28] Higher expenditures are projected for public sector wages financed from the budget, while outlays for goods and services are expected to shrink compared to 2011.

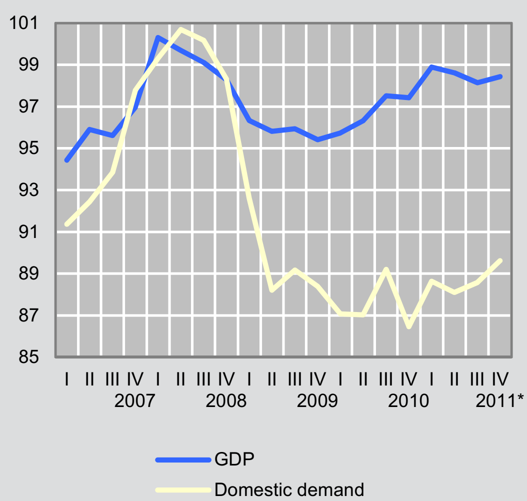
Chart IV.3.2 **Contribution to y-o-y GDP growth rate**
(in percentage points)



* NBS estimate.

Y-o-y GDP growth in Q4 resulted from an upswing in investments.

Chart IV.3.1 **GDP and domestic demand**
(s-a, H1 2008 = 100)

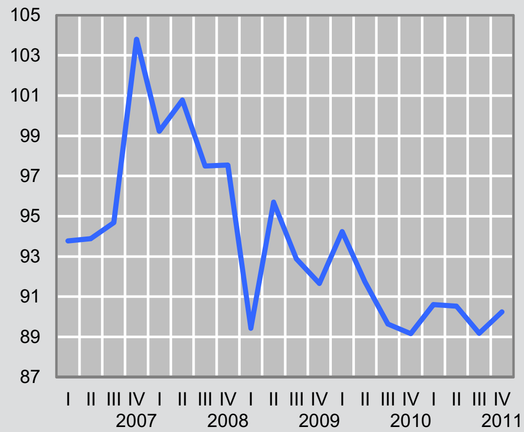


* NBS estimate.

GDP growth in Q4 was drived by domestic demand.

[28] The NBS estimates the consolidated budget deficit at around RSD 150 bln.

Chart IV.3.3 **Government spending**
(s-a, H1 2008=100)



Q4 saw government spending rise in real terms.

Investment activity

Investments in fixed and current assets gained ground in Q4.

Private sector investment activity is estimated to have picked up in Q4, as its fixed investments rose by 5.1% s-a. On the other hand, movements in government capital expenditures suggest a drop in the public sector investment activity of 0.2% s-a.

Indicators of an upswing in fixed investments are higher imports of capital goods and an increase in the number of building permits issued. Also, the volume of investment loans approved in Q4 exceeded that in Q3, while net cross-border borrowing was recorded for the corporate sector after a longer period of time.

In parallel with fixed investments, those channelled into current assets (stock building) also gained ground. Within finished product stocks in industry, stocks of non-durable consumer goods went up.

Table IV.3.1 **Investment indicators**

	2005-2008 (average)	2010	2011			
		Q4	Q1	Q2	Q3	Q4
Real indicators *(seasonally-adjusted, quarterly, growth, in %)*						
Construction	2.2	1.9	1.2	4.1	1.7	1.5 *
Industrial production of capital goods (physical volume)	-6.5	8.9	21.5	-21.3	-9.9	7.2
Exports of capital goods**	29.3	22.8	-10.1	-4.4	8.8	5.8
Imports of capital goods**	11.2	0.7	13.8	-13.0	5.4	5.1
Stocks of capital goods	-1.6	-7.3	48.0	1.7	-2.7	-14.2
Industrial production of intermediate goods (physical volume)	3.9	-2.4	6.9	-1.2	-2.9	-3.2
Exports of intermediate goods**	17.6	7.8	7.4	-7.7	-3.4	5.7
Imports of intermediate goods**	15.4	3.1	2.9	-3.4	-4.4	-0.3
Stocks of intermediate goods	0.5	-2.5	2.1	-3.0	-2.7	-4.2
Government investment**	16.2	-2.9	-6.3	-3.6	-2.5	-0.2
Financial indicators						
Medium- and long-term external borrowing by enterprises (net, in EUR mln)	528.8	-228.4	-213.2	-169.0	-58.5	11.8
Long-term credits to enterprises (in RSD bln)	43.3	27.1	8.9	43.6	35.3	44.6
of which: investment loans	n.a.	19.4	-6.4	7.0	11.0	19.4
Long-term credits to households (in RSD bln)	78.9	12.8	-9.1	19.9	5.2	16.2

* NBS estimate.
** Imports are deflated by the index of producer prices of manufactured products in Germany; Exports are deflated by export producer prices of capital goods; Government investment spending is deflated by the index of producer prices of manufactured products.

As a result of such movements, contribution of investments in fixed and current assets to GDP growth in Q4 was 0.9 pp.

Net external demand

Net external demand is estimated to have had a negative impact on economic activity in Q4 2011.

With real s-a imports of goods and services rising faster than exports in the last quarter of 2011, foreign trade provided a negative contribution to GDP movements (-1.0 pp contribution of net exports).

Y-o-y, the contribution of foreign trade to GDP growth was also negative (-3.0 pp) as imports of goods increased by 16.6% and exports by 1.0%.

In terms of exports, growth was registered for processed food and chemical products, and a fall for agricultural products, electrical equipment and metal products. On the side of imports, an increase was recorded for both production inputs (equipment and intermediate goods) and consumer goods.

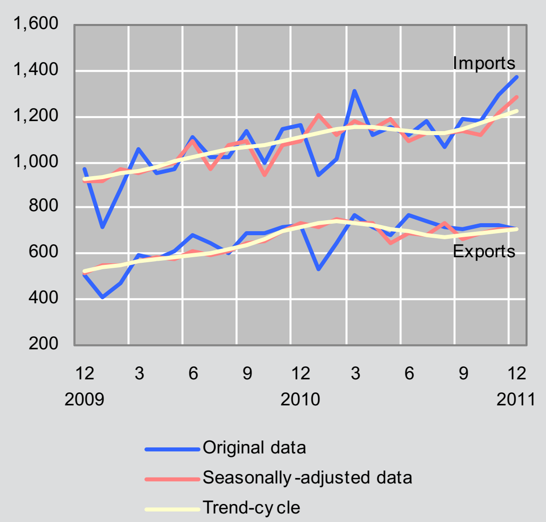
At end-Q4, s-a exports were 11.6% higher and imports 6.6% lower than in the pre-crisis period[29] .

Q4 was the second quarter in a row to witness imported inflation (2.0%[30]). This resulted from the 0.8% average price growth in the EU and United States and the 1.2% depreciation of the nominal effective exchange rate of the dinar relative to Q3. Still, the estimated rise in import prices had no major impact on headline inflation in Q4.

Ural oil prices spiked by 4.6%, exhibiting moderate levels of volatility over the quarter as a whole. Fuelled by expectations of a breakthrough in the euro area's sovereign debt crisis, oil prices rallied in the first month of Q4 and reached their highest level in early November. As the economic prospects for the euro area deteriorated and oil demand subsided due to a mild winter, the trend reversed and oil prices receded through the end of the year. In January, however, they rebounded in response to the escalating Iranian crisis and news of an improvement in the US labour market. The global slowdown in economic growth this year is bound to reflect on weaker demand and lower average oil prices relative to 2011.

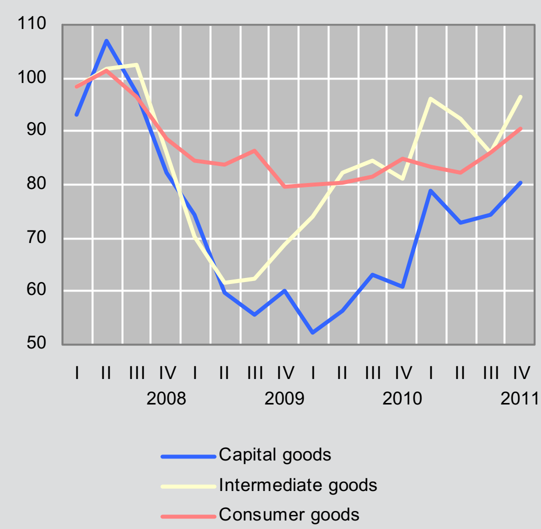
Copper prices also rose in Q4 (5.9%). As in the case of oil, most of the growth came through in October (around

Chart IV.3.4 **Exports and imports**
(in EUR mln)



Net exports negatively affected GDP movements in Q4 due to imports rising faster than exports.

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

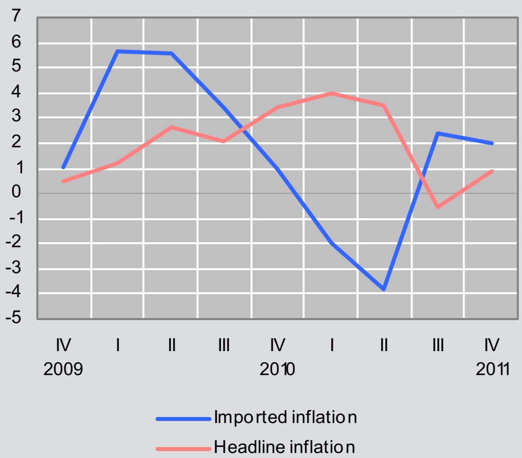


All components of imports recorded growth in Q4.

[29] January–September 2008.

[30] Ratio of averages for two consecutive quarters.

Chart IV.3.6 **Domestic and imported inflation***
(quarterly rates, in %)

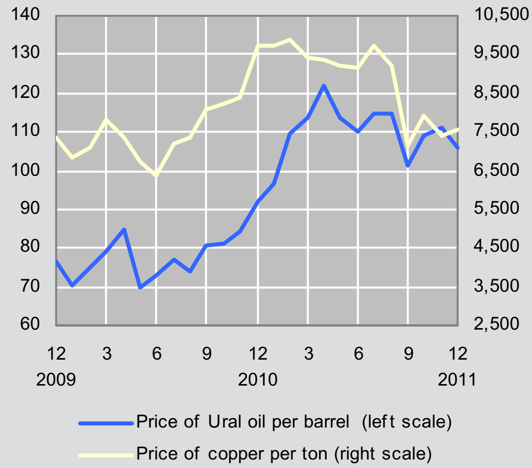


Sources: NBS and Eurostat.

* Ratio of averages for two consecutive quarters.

Imported inflation equalled 2.0% in Q4.

Chart IV.3.7 **Oil and copper price movements**
(in USD)

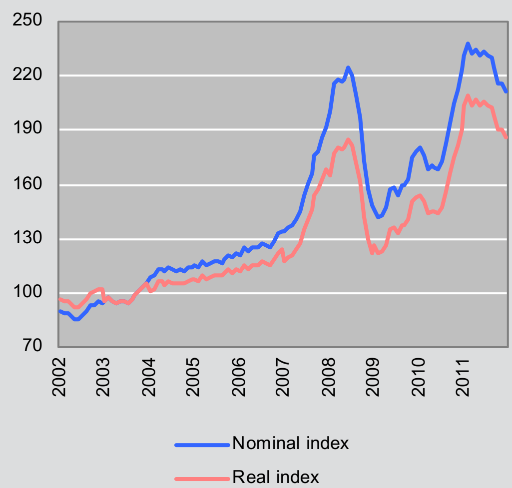


Source: *Bloomberg.*

Oil and copper prices rose in Q4 relative to end-Q3. Their growth continued in January.

10.8%). Copper prices retreated in November and remained relatively flat throughout December. The drop was occasioned by the worsening performance of the world's leading economies and slower growth of China, the world's largest copper consumer. Nevertheless, as early as in January copper prices soared by 12.3% relative to end-December, reflecting expectations of a major increase in China's demand and the falling copper inventories in LME[31] warehouses.

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



Source: FAO, UN.

World food prices continued to fall in Q4.

As indicated by the FAO Food Price Index, global food prices continued down in Q4 (6.3%). The drop was steepest in October (4.1%) when prices of cereals, oils and fats, sugar and dairy products all headed down. Following stagnation in November, food prices resumed their decline in December, hitting a 13-month low. The main reasons for the decline are bumper crops, slowing demand and strengthening of the dollar. Though global food prices have been on the decline over the last several months, their future profile is difficult to predict.

4. Economic activity

Economic activity is estimated to have rebounded somewhat in Q4, as the negative output gap widened.

[31] *London Metal Exchange* (LME).

Weighed down by weakening industry and trade, Q3 GDP is estimated to have dropped by 0.5% s-a. The resulting NAVA decline was 0.6% s-a.[32]

Economic activity rose mildly in Q4 (GDP grew by 0.3% s-a, while NAVA stayed flat). Y-o-y, GDP and NAVA accelerated to 0.8% and 0.4%, respectively. Economic activity still remains below its pre-crisis level.[33]

The estimated growth in economic activity in Q4 resulted primarily from ramped up activity in mining and quarrying, electricity, gas and steam[34] supply and construction, while manufacturing shrank in the same period.

Despite faltering output in manufacturing, Q4 saw an upturn in total industrial performance (0.8% s-a) thanks to mining and quarrying and electricity, gas and steam supply rising by 6.7% and 7.1% s-a, respectively.[35] To counter an unfavourable hydrological situation[36] in Q4, mining intensified and thermoelectric power plants' electricity production and coal production soared to record heights.

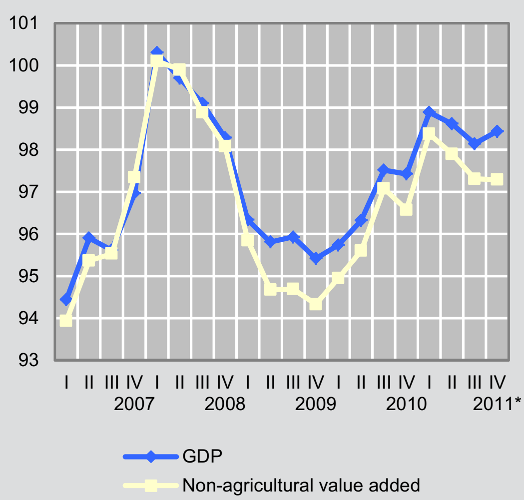
Physical volume of manufacturing output contracted in Q4 (1.8% s-a), mainly due to shrinking production of pharmaceuticals, beverages and electrical equipment. On the other hand, other means of transport, computers, electronic and optical products were the greatest positive contributors in this sector, as well as printing and reproduction of video recordings.

Construction is estimated to have ramped up further in Q4 (1.5% s-a), as indicated by the higher estimated value of construction works and the number of building permits issued.

Estimates show growth in transportation and storage, as well as in wholesale and retail trade. Conversely, adding to weakening of manufacturing output, activity also shrank in water supply, sewerage, waste management and remediation activities, as well as in accommodation and food services and professional, scientific and technical activities.

In y-o-y terms, information and communication activities added most to GDP growth in Q4, predominantly through

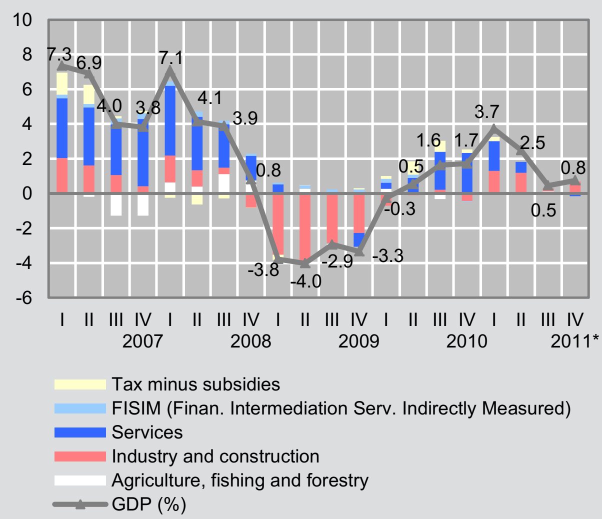
Chart IV.4.1 **Economic activity indicators**
(s-a, H1 2008 = 100)



* NBS estimate.

GDP slightly increased in Q4, while NAVA stagnated.

Chart IV.4.2 **Contribution to y-o-y GDP growth rate**
(in p. p.)



* NBS estimate.

Industry and construction contributed positively to y-o-y GDP growth in Q4.

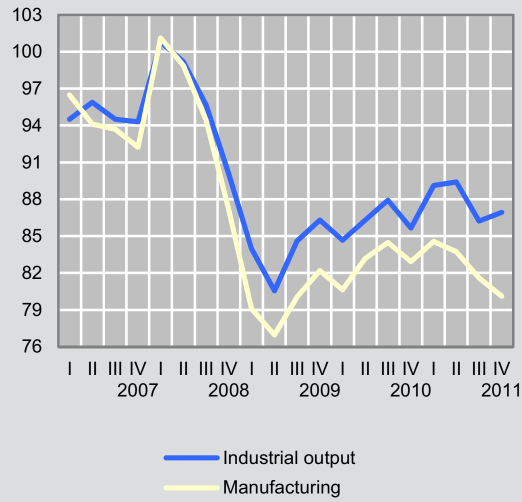
[32] In y-o-y terms, GDP and NAVA slowed down in Q3 to 0.5% and 0.2%, respectively.

[33] Q4 GDP was 1.6% below its pre-crisis level and NAVA was 2.7% lower. Pre-crisis period is considered to be H1 2008.

[34] According to the new classification of activities, this is Sector D – Electricity, gas, steam and air-conditioning supply.

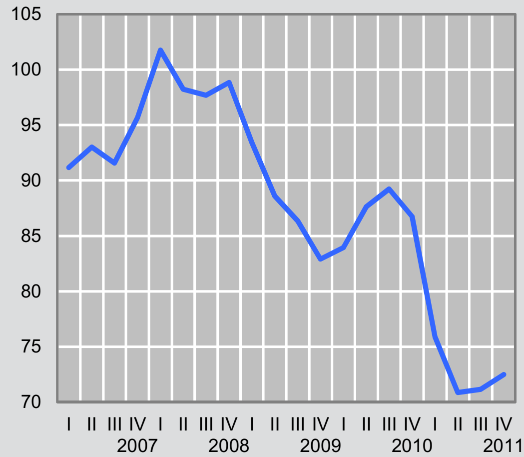
[35] Growth rates of physical volumes of production.

Chart IV.4.3 **Industrial output**
(s-a, H1 2008 = 100)



Although total industrial output expanded in Q4, manufacturing contracted.

Chart IV.4.4 **Retail trade**
(s-a, H1 2008 = 100)



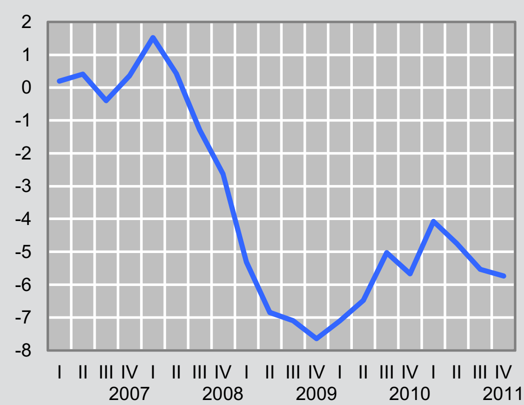
Retail trade turnover increased in Q4.

telecommunications and programming and software development.

According to RSO, GDP grew by 1.9% in 2011. The NBS estimates that the greatest positive contribution came from industrial production and information and communications. The greatest negative contributors were wholesale and retail trade.

Negative output gap is estimated to have widened somewhat in Q4, preserving the strength of disinflationary pressures induced by aggregate demand. Output gap was estimated using Kalman filter. However, in periods of crisis, the potential GDP may be overestimated due to the erosion of production capacities and work skills of the long-term unemployed persons. Consequently, actual negative output gap may be lower than estimated, which would indicate weaker disinflationary pressures stemming from aggregate demand.

Chart IV.4.5 **Output gap***
(percentual deviation from the trend)



* NBS estimate based on Kalman filter.

Negative output gap widened in Q4.

[36] Low water levels in Serbia and region-wide, due to a drought in the second half of 2011.

5. Labour market developments

Wages

Q4 net wages decreased in real terms from the quarter before. Industrial unit labour costs dropped slightly.

According to seasonally-adjusted data, nominal net wages in Q4 almost flatlined q-o-q, going down by 0.4%. In real terms, net wages recorded a 1.1% drop, falling faster in the private (2.4% s-a) than in the public sector (1.0% s-a).

Real net wages plunged across most industries, with greatest real decreases recorded in real estate, financial sector, wholesale and retail trade, while agriculture showed an increase.

Observed y-o-y, nominal wages grew at a slower pace(10.9%), reflecting primarily slower growth of private sector wages. In real terms, y-o-y wage growth picked up to 3.0%, as both private and public sector wages increased (2.6% and 2.3% y-o-y, respectively).

The average net wage paid out in Serbia in Q4 equalled RSD 40,098.

Industrial unit labour costs declined slightly in Q4 (0.4% s-a), being pushed down by real gross wages that fell faster than labour productivity in industry. Industry-wise, the downward pressure came from reduced unit labour costs in mining and electricity supply on the back of productivity boost (high increase in the physical volume of production with the number of employees remaining broadly unchanged). Conversely, unit labour costs in manufacturing went up. This was mainly due to a slump in productivity caused by steeper fall in physical volume of production relative to employment.

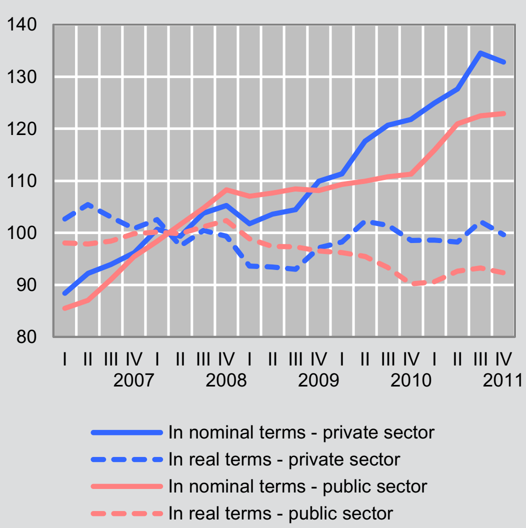
Employment

The Labour Force Survey shows higher unemployment rate in November relative to April 2011.

According to the November Labour Force Survey, the unemployment rate edged up to 23.7% from 22.2% in April, and total unemployment figure rose by 41,000. Broken down by education profile, unemployment hiked the most among persons with high school qualifications (by around 23,000). The structure of the unemployed by job search duration also deteriorated, i.e. the rate of long term unemployed rose 1.3 pp (from 16.3% to 17.6%).

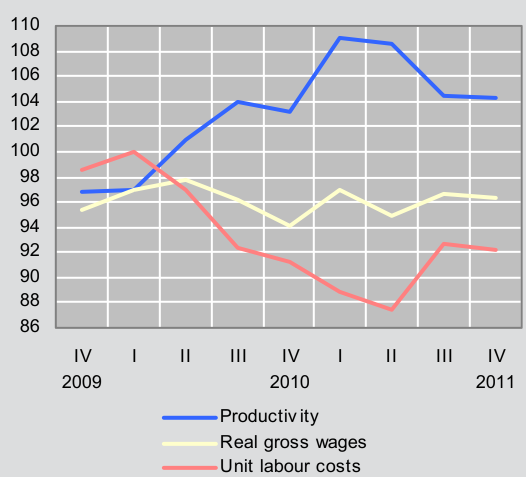
The same survey reported 35.3% employment rate in November, down by 0.9 pp from April. The fall, prompted mainly by employment decreases in agriculture and trade,

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



Both private and public sector wages decreased in real terms in Q4.

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



Unit labour costs slightly dropped in Q4.

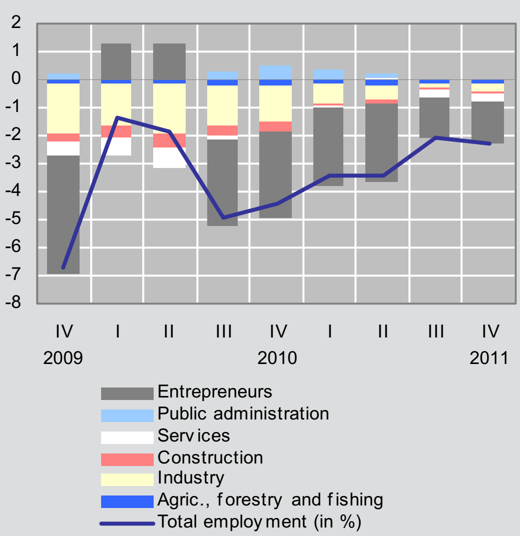
Chart IV.5.3 **Employment figure and unemployment rate**

Source: Serbian Statistical Office.

The number of employed persons remained unchanged in Q4, while unemployment rate rose from April 2011.

represents continuation of a downward trend started back in October 2008. Though remaining relatively high, informal employment also recorded a drop in the period observed, falling by 2.1 pp (from 19.9% to 17.8%).

Chart IV.5.4 **Contributions to y-o-y employment growth rate**
(in p.p.)



Source: Serbian Statistical Office.

Y-o-y fall in employment slightly accelerated in Q4.

As only minor changes in employment figures were recorded across most of the sectors, the Serbian Statistical Office has estimated employment to have practically stagnated q-o-q (dropping by 0.1%). The decline in employment numbers in industry, chiefly manufacturing (contributing -0.2 pp to the overall employment), was largely compensated for by the rising employment numbers in the public sector.

Within the public sector, education and administrative activities, as well as public administration and compulsory social insurance, saw employment increases, while health care and social protection recorded a decline.

Relative to the same period last year, the drop in employment accelerated slightly in Q4 (from 2.1% to 2.3%), owing mainly to faster y-o-y employment decrease in manufacturing.

6. International environment

International environment in Q4 was marked by the continuing sovereign debt crisis in the euro area. At the end of January, however, an agreement was reached on closer fiscal policy coordination within the EU.

Signs of abatement of the sovereign debt crisis in some euro area members are beginning to emerge. Still, gradual progress in finding an adequate systemic solution that would appease investors and prevent the contagion from spreading has increased instability in the financial markets and is threatening to stall the recovery of the real economy not only in the euro area, but also worldwide.

Austerity measures taken by European governments to cut public debt do not have a positive impact on the countries' economic performance. Relevant indicators signal a contraction in the euro area's GDP in Q4. Such movements are expected to persist in Q1 2012, pushing the region officially into recession. In consequence, many institutions have scaled down their growth forecasts for 2012. According to the latest IMF projection[37], released in late January, the euro area is expected to go into a mild recession in 2012 (GDP drop of 0.5%). Downward revision of the growth rate is due to the rise in sovereign yields, the effects of bank deleveraging on the real economy, and the impact of additional fiscal consolidation. Germany, as the largest euro area economy, is set to expand by mere 0.3%, whereas Italy is poised for a 2.2% fall in GDP.

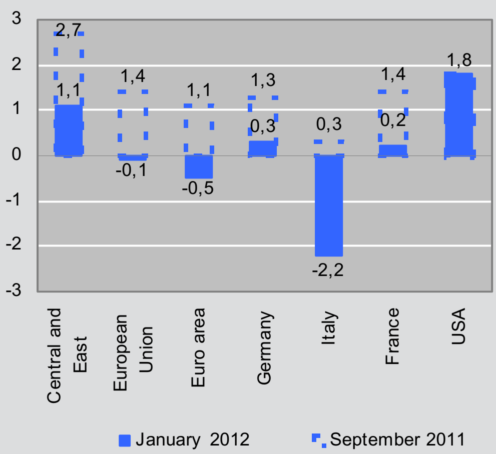
The adverse spillover effects are expected to be largest for Central and Eastern Europe, given the region's strong trade and financial linkages with the euro area economies. According to the latest IMF projection, Central and Eastern Europe is expected to record 1.1% growth in 2012, 1.6 pp less than projected in September.

Unlike most European counterparts, the US economy is showing positive tendencies.The number of jobs in non-agricultural sectors increased by 243,000 in January, while respondents in the Bloomberg survey expected an increase of 155,000. The unemployment rate continued down, settling at 8.3% in January. According to advance estimates, GDP growth accelerated from 1.8% in Q3 to 2.8% in Q4 (annualised and s-a). The Fed projects around 2% growth of the US economy in 2012, which is close to the IMF's forecast (1.8%).

Concerns about public debt sustainability of the euro area periphery widened the yield spreads between peripheral and German bonds, especially in November.[38] The yield on six-month German bonds, one of the investor safe havens, fell in Q4 and turned negative in early January. On the other hand, January yields on 10-year Italian bonds stayed above 7%, which is the level at which Greece, Portugal and Ireland were forced to request assistance. The situation is exacerbated still further by the downgrading of some large banking groups and more than half of the euro area member states. In mid-January, *Standard&Poor's* lowered the rating of the EFSF, which could additionally push up the cost of borrowing for some euro area members. Still, by the end of January, EU leaders managed to agree on a fiscal treaty, aimed at strengthening budgetary discipline in signatory countries.

The ECB eased its monetary policy stance in Q4.Namely, due to gradual materialisation of downside risks to medium-term inflation and economic growth, the ECB trimmed its reference rate twice by 25 bp each, to 1.0%. The next cut is expected in Q1 2012. At the same time, to

Chart IV.6.1 **Revisions of real GDP growth forecasts for 2012 by the IMF***
(%)

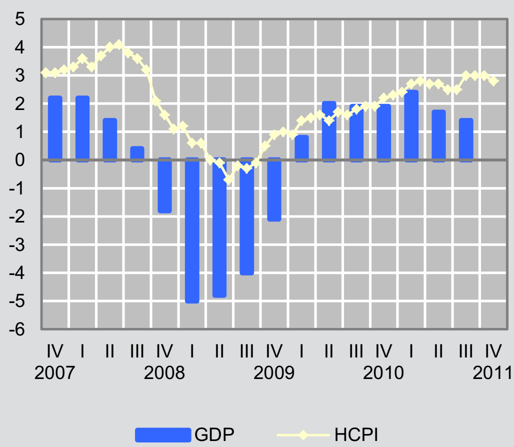


* Revision relative to the September World Economic Outlook.

Source: IMF WEO, September 2011 and January 2012 Updates.

Crisis in the euro area has conditioned a downward revision of GDP growth forecasts for European countries for 2012.

Chart IV.6.2 **Eurozone GDP and inflation**
(y-o-y rates, in %)



Source: Eurostat.

In December 2011, inflation fell to 2.8% y-o-y. The slowdown in y-o-y GDP growth continued in Q3.

[37] *WEO Update,* January 2012.

[38] Yield spreads narrowed in early December ahead of the EU summit (9 December) and following a coordinated action by the Fed and five other central banks geared at enhancing their capacity to provide liquidity support to the global financial system (late November).

support bank lending and liquidity in the money market, the ECB changed its collateral and reserve ratio requirements and offered full allotment three-year refinancing operations at fixed (reference) interest rate[39]. In December 2011, banks took up around EUR 500 bln worth of these loans. The next refinancing operation is scheduled for February 2012.

Inflationary pressures are receding in the United States too. Y-o-y inflation declined in the course of Q4 and reached 3.0% at year-end. For the time being, the Fed stays on the same monetary policy course and continues with the programme of extending the average maturity of its portfolio. To increase policymaking transparency and improve communication, as of January 2012 the Fed publishes projections for the path of the federal funds rate for the next several years. According to these projections, the Fed's policy rate is likely to stay at exceptionally low levels at least through late 2014.

Most Central and East European countries saw a rise in their y-o-y inflation rates in Q4. The weakening of national currencies against the euro in Q4 could add to inflationary pressures in the coming period. The weakening was most pronounced in the case of the Hungarian forint. The Hungarian National Bank tightened its monetary stance by lifting the policy rate in two 50 bp steps to 7%, making it the highest policy rate in the EU.

Continuing uncertainties over euro area crisis, as well as the ECB's monetary easing, sparked the demand for the dollar, pushing it further up against the euro in Q4. Investor interest running high, the European markets became parched for the greenback. The world's leading central banks (Fed, ECB, Swiss National Bank, Bank of England, Bank of Canada and Bank of Japan) therefore agreed in late November to lower the pricing on the existing temporary US dollar liquidity swap arrangements. During Q4 the Swiss franc marked no gains vis-à-vis the euro in excess of the ceiling announced by the Swiss National Bank (1.20 CHF/EUR). Putting a cap on the value of the Swiss franc has given the Japanese yen more of a safe haven flavour. From end-October, the yen rose by around 8%against the euro.

The strengthening of the dollar and the sale of gold for cash bore down on the price of gold in Q4. The price of gold is now by around 15% down from the historical high of 1,895 USD/Oz hit in early September 2011. Still, with the euro area crisis continuing, gold retains its safe haven appeal.

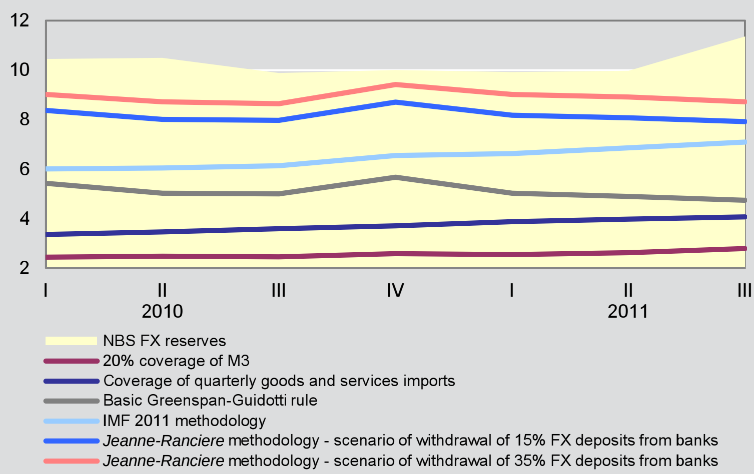
[39] Longer-term refinancing operation (LTRO).

Text box 4: Is the current level of the National Bank of Serbia's international reserves an adequate insurance against potential risks?[1]

One of the main roles of a central bank's international reserves is to ensure smooth foreign trade in case of interruption of foreign exchange inflows. International reserves are considered adequate if they are sufficient to cover three months of imports, which in case of Serbia was around EUR 4.1 bln in September 2011. This criterion, however, does not take into account financial flows which may be even more important than foreign trade flows. To account for the difference, the ratio of full coverage of short-term external debt[2] to international reserves is used as a complementary measure. Under this ratio, the adequate level of international reserves in September 2011 was calculated at EUR 4.7 bln. Given the risk of deposit flight from domestic banks, the adequate level of international reserves should ensure the 20% coverage of the broadest monetary aggregate M3 – in case of Serbia the adequate level of reserves equalled EUR 2.8 bln in September 2011. Standing at EUR 11.4 bln at the time, the National Bank of Serbia's international reserves were sufficient to cover all of the specified individual risks.

As the above indicators are partial measures of risks, a new model was developed to include the scenario of simultaneous materialisation of a greater number of macroeconomic risks. The new IMF methodology is based on that concept.[3] Its application showed that the level of National Bank of Serbia's international reserves at end-Q3 2011 was higher than needed to cover a potential foreign exchange outflow in the next quarter (EUR 7.1 bln). Such outflow was based on the assumption that the worst-case scenarios have recurred – contraction in external demand and remittances inflow, outflow of bank deposits and the lack of access to foreign funding.

Chart O.4.1 **NBS FX reserves and indicators of their adequate level**
(EUR bln)



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[1] Given the data available, the analysis was made as at September 2011.

[2] Under the remaining maturity.

[3] *IMF Policy Paper: Assessing Reserve Adequacy*, February 2011.

A similar conclusion is drawn by assessing the adequate level of international reserves under the *Jeanne-Ranciere* methodology[4], which is adapted to specific conditions in Serbia. Namely, the amount of EUR 7.9 bln would suffice to eliminate the adverse effects of a sudden stop in capital inflows over the short term, including the repeat of the scenario of foreign exchange deposit run from banks in Q4 2008. If customer withdrawals from banks were more than double that recorded in Q4 2008, the adequate level of international reserves to cover all of the above risks would be EUR 8.7 bln, which is however lower than the actual level of international reserves at end-Q3 2011.

In addition to macroeconomic and prudential policy, a central bank's international reserves are of a paramount importance for mitigating the effects of external financial shocks. We may therefore conclude that the current level of National Bank of Serbia's international reserves is more than enough to insure against the aforementioned risks.

Table O.4.1 **Adequate level of NBS FX reserves at end-Q3 2011 under different methods and scenarios**

(EUR bln)

Method of assessment of adequate level of FX reserves and scenarios	**Adequate level**
Individual indicators of adequate level of FX reserves	
Coverage of quarterly goods and services imports	4.1
Basic form of Greenspan-Guidotti rule - coverage of 100% short-term debt (by remaining maturity)	4.7
20% coverage of M3	2.8
Composite indicators of adequate level of FX reserves	
IMF 2011 methodology	7.1
Jeanne-Ranciere methodology	
Scenario of withdrawal of 15 FX deposits from banks, with higher probability of a sudden stop of capital inflow	7.9
Scenario of withdrawal of 35% FX deposits from banks, with higher probability of a sudden stop of capital inflow	8.7
Stock of FX reserves	11.4

[4] *Jeanne, O., Ranciere, R.: The Optimal Level of International Reserves for Emerging Market Countries: Formulas and Applications, IMF Working Paper WP/06/229, IMF.*

V. Inflation projection

Inflation is expected to revolve around the lower bound of the target tolerance band in late Q1 2012. From Q2 2012 it is expected to rise gradually, peaking close to the upper bound of the target tolerance band in H1 2013. The key risks to inflation projection continue to be those stemming from the international environment and fiscal policy at home. Judging by the downward revisions of global growth forecasts and the resulting fall in export demand, the pace of economic activity is likely to slow.

The medium-term inflation projection aims to show 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

The last quarter of 2011 saw a further fall in y-o-y inflation rates – from 9.3% in September to 7.0% in December. The fall proved faster than forecast at the time of the November Report. The greatest deviation from the central projection stated in the November Report was recorded for fruit and vegetable prices whose quarterly growth turned out lower than expected.

Q-o-q, inflation edged up by 0.6%, driven primarily by market-determined prices of non-food products and services, and, to a lesser degree, by administered prices (natural gas and heating). Prices of processed food declined, while those of petroleum products rose negligibly.

Uncertainties in the global financial market persisted in Q4, reflecting anticipation of an adequate systemic solution to the sovereign debt crisis that would appease investors and prevent contagion from spreading to other euro area members. The loss of confidence among financial market players started spilling over to the real economy, prompting a downward revision of global growth forecasts for 2012.

Inflationary pressures receded in Q4 relative to Q3 as the expected weakening of global demand fed through into lower prices of base metals and industrial raw materials (cotton, wool, rubber, leather). The prices of primary agricultural commodities also plummeted, dragging the FAO Food Price Index down by 6.3% in Q4. The only prices to record growth in the last quarter of the year were those of oil (4.6%).

Instability in the global financial market also led to an increase in the country risk premium. EMBI for Serbia rose from Q3 by around 80 bp on average, though less than for some other countries in the region. This may be partly due to Fitch's affirmation of Serbia's rating, which had a positive impact on investor sentiment.

The rise in risk premium reflected on movements in the nominal exchange rate of the dinar. Overall in Q4, the exchange rate of the dinar stagnated against the euro relative to Q3, but suffered nominal depreciation by the end of the year on account of an increase in resident demand for foreign exchange and a surge in dinar liquidity prompted by increased government spending from its dinar accounts. Nonetheless, the dinar was more stable compared to regional peers, owing chiefly to strong inflows of FDI.

Inflation expectations of the financial sector fell by 2.0 pp in Q4, largely as a result of the continuing drop in y-o-y inflation rates.

After falling in Q2 and Q3, economic activity is estimated to have edged up by 0.3%in Q4, which places total growth in 2011 at 1.9%.

According to NBS estimates, aggregate demand remains low. This is also signalled by the rise in unemployment rate from 22.2% in April to 23.7% in November 2011.

Aggregate demand will also be buffeted by headwinds from the likely recession in the euro area. Loss of confidence in the euro area banking sector and fiscal consolidation measures taken by member states could stall the recovery of the real sector. Besides, slower economic growth in the CEFTA region means weaker export demand for Serbia.

Inflationary pressures subsiding, the key policy rate was lowered by 300 bp over the last nine months. It currently stands at 9.5%.

Projection assumptions

Growth in administered prices is expected to be slower than in 2011, most of it unfolding in the second half of the year.

Given their low level compared to other market prices, fruit and vegetable prices are likely to step up in the course of 2012.

Faced with the risk of slipping into recession yet again, the ECB has started easing its monetary policy stance. As the euro area inflation is expected to return close to the target in the course of 2012, the easing is likely to proceed.

Inflation projection

Inflation is expected to revolve around the lower bound of the target tolerance band in late Q1 2012. From Q2 2012 it is expected to rise gradually, peaking close to the upper bound of the target tolerance band in H1 2013.

In late Q1 and early Q2 2012 inflation is likely to move around the lower bound of the target tolerance band.[40] The main reasons for the departure from the projected trajectory would be the decline in food prices, due to the restriction on trade margins for basic food products, and the treatment of seasonal product prices in the calculation of inflation rates. The drop in y-o-y inflation will also be aided by the exclusion of the high Q1 2011 inflation rates from the calculation.

In H2 2012 and H1 2013 inflation is likely to move around the upper bound of the target tolerance band. As the decree restricting trade margins ceases to be valid in July 2012, the prices of processed food could generate mild inflationary pressures. The second half of 2012 could also witness a reversal in fruit and vegetable prices, which produced disinflationary effects in the prior period.

A major part of administered price growth, usually taking place in the first half of the year, could be delayed for the second half of the year due to the forthcoming elections and formation of the new government.

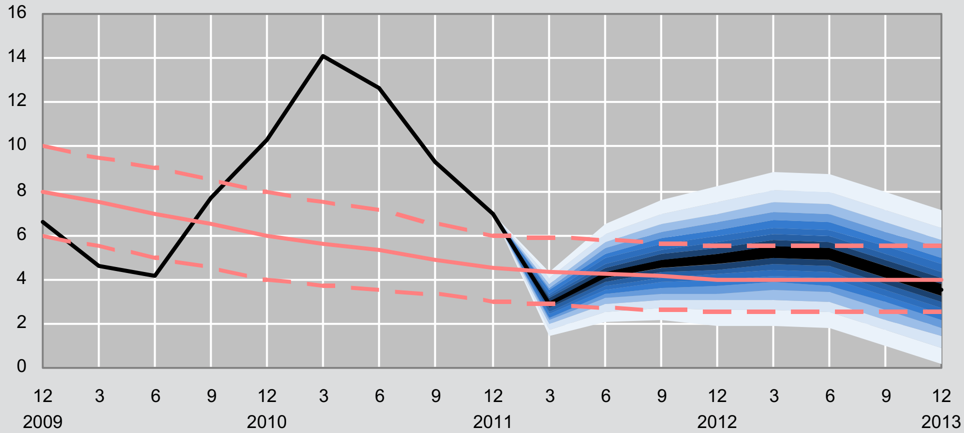
Petroleum product prices are expected to rise slightly over the forecast period provided Persian Gulf tensions do not intensify and international crude oil prices do not go up.

Table V.0.1 **Projection assumptions**

	2012	2013
External assumptions		
EU inflation (Q4 to Q4)	1.5%	1.7%
ECB policy rate (year-end)	0.5%	1.0%
Euro area GDP growth	-0.5%	0.9%
Ural oil price per barrel (year-end, USD)	115	120
Internal assumptions		
Administered prices (Dec to Dec)	8.1%	7.0%
Fruit and vegetable prices (Dec to Dec)	11.9%	4.0%
Trends		
Appreciation trend of the real exchange rate (average)	2.3%	2.4%
Real interest rate trend (average)	4.7%	3.4%

[40] See text box 1, p. 10.

Chart V.0.1 **Inflation projection**
(y-o-y, in %)



Inflation is expected to revolve around the lower bound of the target tolerance band in late Q1 2012. From Q2 2012 it is expected to rise gradually, peaking close to the upper bound of the target band in H1 2013. The projection is slightly asymmetrical to the upside due to the risks stemming from uncertainties in the international environment and fiscal movements at home.

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%.

Throughout the forecast period, disinflationary pressures will for their major part originate from low aggregate demand. The recovery of demand in Serbia is held back by the uncertain economic outlook for the euro area.

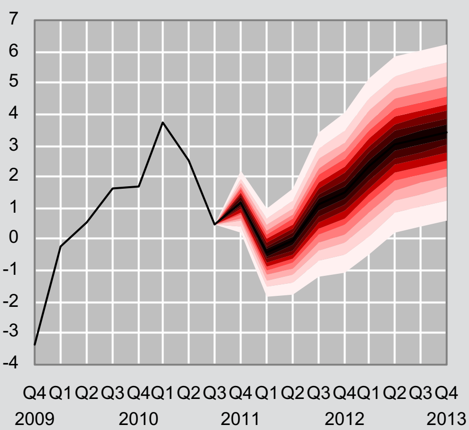
With a good agricultural season behind us and consequently lower food production costs, no inflationary pressures are expected in this respect.

Mirroring the easing of inflation pressures and the fall in y-o-y inflation rates, inflation expectations will continue down, supporting the disinflation process.

Pressures in the foreign exchange market registered in late 2011 could reflect on growth in import prices. The rise in net importers' marginal costs also appears likely.

Over the forecast period, disinflationary pressures will be coming from low aggregate demand, falling inflation expectations and absence of the cost-push pressure on processed food prices. Inflationary pressures, on the other hand, will stem from faster growth in fruit and vegetable prices in the new agricultural season, faster growth in

Chart V.0.2 **GDP growth projection**
(y-o-y rates, in %)



Economic growth will lose pace in 2012, reflecting lower export demand. From 2013, it is expected to accelerate, driven by net exports.

administered prices in H2 2012, and higher import prices and net importers' real marginal costs.

According to NBS estimate, GDP growth will slow to 0.5% in 2012. The estimate is based on lower growth forecasts for Serbia's main trading partners that are bound to weigh down on export demand and investment in our country.

The greatest contribution to economic growth in 2012 will come from net exports, thanks to automotive industry investments completed in the prior period. Fixed investment and final consumption will provide negative contributions.

It should be noted that the GDP growth projection from the last Report assumed economic stagnation in the euro area in 2012 and implied higher downside risks due to the assessment of a significant likelihood of the euro area's slipping into recession.

The new GDP growth projection assumes a 0.5% fall in economic activity of the euro area. This time, the risks to the projection are judged to be balanced, i.e. equally possible in either direction.

Risks to the projection

Uncertainties surrounding the projected outlook for inflation continue to be associated with movements in the international environment, continuation of the EU accession process and compliance with the planned fiscal framework.

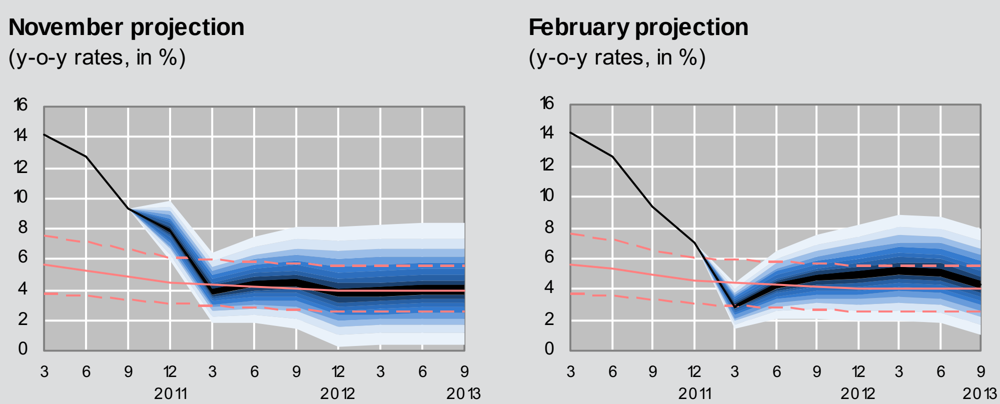
Gradual progress in finding a solution to the sovereign debt crisis and movements in the euro area economic activity would affect not only the demand for our export products, but also the country risk premium. Based on the latest indicators, the drop in euro area economic activity in 2012 could be softer than the assumed 0.5%, though deviations are possible in both directions.

A standstill in Serbia's EU accession process could give rise to negative perceptions. The resulting lower investment and weaker economic activity would produce disinflationary effects, while the rise in country risk premium and the ensuing depreciation pressures would generate inflationary effects.

Compliance with the planned fiscal framework is of vital importance at a time when the global financial market is sensitive to indicators of public debt sustainability. Any major deviation from the 2012 budget agreed earlier with the IMF could produce inflationary consequences through higher risk premium, depreciation pressures and stronger demand.

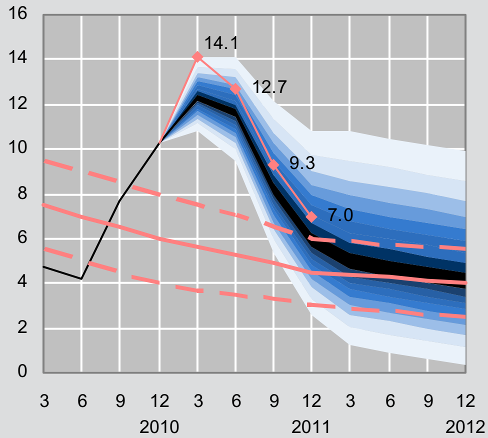
On balance, the risks to inflation projection are judged to be skewed slightly to the upside.

Chart V.0.3 **Current vs. previous projection**



The projected spread of inflation outcomes for H1 2012 is lower than in November, but higher in the period thereafter.

Chart V.0.4 **Inflation outturn vs. February 2011 inflation projection**
(y-o-y rates, in %)



In H1 2011 inflation moved close to the upper bound of the February 2011 projection band and fell back to the midpoint of the projection band in H2.

Comparison with the previous projection

The projected spread of inflation outcomes for H1 2012 is lower than in the November Report, due to lower than expected growth in food prices.

Looking further ahead, inflation is projected at a higher level on account of a faster growth in administered prices in H2 2012, possibly stronger inflationary pressures from food prices once the decree limiting trade margins for basic food products ceases to be valid, and faster growth in fruit and vegetable prices with the onset of a new agricultural season.

In H1 2011 inflation moved close to the upper bound of the projection band stated in the February 2011Report and fell back to the midpoint of the projection band in H2. The main reason for the departure from the projected trajectory in H1 was the robust growth in food prices, while an additional impetus, though less strong, came from the higher than expected growth in administered prices.

Outlook for the key policy rate

The future path of the key policy rate will depend on inflation factors, while developments in the international environment and the fiscal policy stance at home remain the key risks.

Table A
Indicators of Serbia's external position

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011
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	9.4	8.1	7.7	7.5	8.4	8.6
Forex reserves/short-term debt	360.7	535.6	702.2	519.2	941.7	917.5	380.8	528.8	546.4	888.8	1,031.6	1,323.9	1,860.8
Forex reserves /GDP	13.6	16.4	16.3	24.2	38.7	33.8	25.0	36.7	34.5	33.6	32.6	36.2	37.2
Debt repayment/GDP	1.4	2.0	3.9	4.7	7.0	10.1	10.6	11.5	11.8	14.4	11.1	12.3	12.6
Debt repayment/exports of goods and services	7.0	9.0	16.4	17.7	23.5	33.2	34.0	39.1	34.0	39.7	31.1	34.3	37.3
EXTERNAL SOLVENCY INDICATORS (in %)													
External debt/GDP	58.7	55.9	49.8	60.1	60.9	60.2	64.6	77.9	82.1	76.7	74.4	76.0	74.5
Short-term debt/GDP	3.8	3.1	2.3	4.7	4.1	3.7	6.6	6.9	6.3	3.8	3.2	2.7	2.0
External debt/exports of goods and services	300.9	251.6	211.5	228.9	204.1	197.3	207.6	265.3	236.2	212.9	206.2	210.4	210.5
FINANCIAL RISK EXPOSURE INDICATORS (in %)													
Forex reserves/M1	143.3	195.1	220.1	290.3	356.1	306.7	300.4	393.4	416.6	446.7	431.1	448.2	430.1
Forex reserves/reserve money	131.9	167.8	165.5	169.8	179.5	173.8	140.7	190.5	196.4	202.5	209.4	228.1	205.9
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP	59.3	63.9	73.7	73.6	81.2	85.8	86.8	73.6	86.4	90.6	86.4	87.0	85.6
MEMORANDUM: (in EUR million)													
GDP (in EUR million)	16,028	17,306	19,026	20,306	23,305	28,468	32,668	28,883	28,984	7,129	8,081	8,307	8.886[1)]
External debt	9,402	9,678	9,466	12,196	14,182	17,139	21,088	22,487	23,786	22,672	22,734	23,860	24,125
External debt servicing	218	348	736	945	1,635	2,885	3,453	3,314	3,403	1,026	898	1,025	1,123
Central bank foreign exchange reserves	2,186	2,836	3,104	4,921	9,020	9,634	8,162	10,602	10,002	9,919	9,967	11,359	12,058
Short-term debt	606	529	442	948	958	1,050	2,143	2,005	1,830	1,116	966	858	648
Current account balance	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-2,084	-2,082	-761	-621	-683	-899

		2004	2005		2006		2007	2008	2009	2010	2011
		Nov.	May	July	Feb.	Apr.	Jun.	Dec.	Dec.	Nov.	Mar.
CREDIT RATING	S&P	B+		BB-	BB-/positive		BB-/stable	BB-/negative	BB-/stable		BB/stable
	Fitch		BB-			BB-/stable		BB-/negative		BB-/stable	

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) - ratio of foreign exchange reserves at end-period to average monthly imports of goods and services.
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	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Real GDP growth (in %)[1]	4.3	2.5	9.3	5.4	3.6	5.4	3.8	-3.5	1.0	3.7	2.5	0.5	0.8[9]
Consumer prices (in %, relative to the same month a year earlier)[2]	14.8	7.8	13.7	17.7	6.6	11.0	8.6	6.6	10.3	14.1	12.7	9.3	7.0
Core inflation (in %, relative to the same month a year earlier)[2]	4.4	6.1	11.0	14.5	5.9	7.9	10.8	3.6	8.6	13.2	13.6	9.9	7.0
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	9,919	9,967	11,359	12,058
Exports (in EUR million)[3)8)]	3,125	3,847	4,475	5,330	6,949	8,686	10,157	8,478	10,070	2,586	2,883	2,985	3,010
- 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	28.7	15.5	11.5	4.2
Imports (in EUR million)[3)8)]	-6,387	-7,206	-9,543	-9,613	-11,971	-16,016	-18,843	-13,577	-14,838	-3,873	-4,100	-4,243	-4,598
- growth rate in % compared to a year earlier	27.2	12.8	32.4	0.7	24.5	33.8	17.7	-28.0	9.3	20.5	12.0	8.2	13.8
Current account balance[4)8)]													
(in EUR million)	-671	-1,347	-2,620	-1,778	-2,356	-5,053	-7,054	-2,084	-2,082	-761	-621	-683	-899
as % of GDP	-4.2	-7.8	-13.8	-8.8	-10.1	-17.7	-21.6	-7.2	-7.2	-10.7	-7.7	-8.2	-10.1
Unemployment according to the Survey (in %)[5]	13.3	14.6	18.5	20.8	20.9	18.1	13.6	16.1	19.2	/	22.2	/	23.7
Wages (average for the period, in EUR)	152.1	176.9	194.6	210.4	259.5	347.6	358.4	337.9	330.1	338.3	380.9	381.4	389.4
RS budget deficit/surplus (in % of GDP)[6]	-4.3	-2.6	-0.3	0.3	-1.9	-1.7	-1.7	-3.3	-3.6	-3.7	-4.9	-3.5	n.a.
Consolidated fiscal result (in % of GDP)	-1.8	-2.4	0.8	0.9	-1.9	-2.0	-2.5	-4.6	-4.6	-3.1	-3.8	-3.8	n.a.
RS public debt, government securities by nominal value (external + internal, in % of GDP)[6]	71.9	63.7	50.9	50.6	40.1	31.8	26.9	34.1	41.9	43.0	43.5	47.0	n.a.
RS public debt, government securities at market value (external + internal, in % of GDP)[7]	71.9	63.7	50.8	50.6	40.1	31.8	26.9	33.9	41.5	42.2	42.5	45.9	n.a.
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	75.92	69.41	72.15	75.80
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	73.22	70.64	74.68	80.87
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	103.95	99.80	101.95	102.09
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	103.60	102.46	101.17	104.64
Memorandum													
GDP (in EUR million)	16,028	17,306	19,026	20,306	23,305	28,468	32,668	28,883	28,984	7,129	8,081	8,307	8,886[9]

1) At constant prices of previous year.

2) Retail prices until 2006.

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

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

5) Source: Labour Force Survey, Statistical Office.

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

7) Public debt statistics records government securities at market value since November 2011. In line with such methodological change, the National Bank of Serbia made a backward estimate of the stock of public debt.

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: Decision on the Monetary Policy Programme of the National Bank of Serbia in 2012 and the Monetary Policy Programme of the National Bank of Serbia in 2012

Pursuant to Article 14, paragraph 1, item 1) of the Law on the National Bank of Serbia (RS Official Gazette, Nos 72/2003, 55/2004 and 44/2010), the Executive Board of the National Bank of Serbia hereby issues

D E C I S I O N
ON THE MONETARY POLICY PROGRAMME
OF THE NATIONAL BANK OF SERBIA IN 2012

1. This Decision defines the Monetary Policy Programme of the National Bank of Serbia in 2012, which is integral hereto.

2. This Decision shall be published in the RS Official Gazette and shall enter into force on 1 January 2012.

NBS Executive Board, No 87
8 December 2011

B e l g r a d e

Chairman at the meeting of
the NBS Executive Board

G o v e r n o r
National Bank of Serbia

Dejan Šoškić, PhD

MONETARY POLICY PROGRAMME OF THE NATIONAL BANK OF SERBIA IN 2012

1. The primary monetary policy objective is to achieve the inflation target, whereby the National Bank of Serbia will contribute to the stability of the financial system and sustainable economic growth.

2. In 2012, monetary policy of the National Bank of Serbia will be based on the *Memorandum of the National Bank of Serbia on Monetary Strategy*[1] *and the Memorandum of the National Bank of Serbia on Setting Inflation Targets for the 2010–2012 Period*[2].

3. Expressed numerically – in terms of the **annual percentage change in the consumer price index,** the monetary policy objective for 2012 is to gradually lower inflation from 4.5%±1.5 percentage points at the end of the previous year to 4.0%±1.5 percentage points at the end of 2012. The inflation target is defined as a continuously declining value (with a tolerance band) of annual changes in consumer prices. It is set for each month of the year, which contributes to the accountability and credibility of monetary authorities and helps anchor inflation expectations.

4. Monetary policy decisions of the Executive Board of the National Bank of Serbia in the course of 2012 will be designed to facilitate the achievement of low and stable inflation in the medium run. The objective is to gradually lower inflation from 4.5%±1.5 percentage points to 4.0%±1.5 percentage points until the end of 2012. The inflation target path set for the period until 2012 is consistent with the achievement of medium-term price stability and reflects the intention of the National Bank of Serbia to achieve price stability through gradual lowering of inflation without causing macroeconomic disturbances.

5. To pursue its inflation target, the National Bank of Serbia will use the interest rate on main open market operations as its main monetary policy instrument. This interest rate will be changed in a consistent and predictable manner, in line with economic developments and inflation projection. In addition, the National Bank of Serbia will use all other instruments under its remit to achieve its medium-term inflation target.

6. Committed to transparent and accountable communication with the public, the National Bank of Serbia will a) issue press releases, b) hold press conferences, c) publish the Inflation Report, and d) issue other publications.

7. The National Bank of Serbia will continue to implement the managed floating exchange rate regime. The National Bank of Serbia will intervene in the foreign exchange market to mitigate excessive daily volatility of the exchange rate and/or to encourage trading volumes in order to ensure the unimpeded functioning of the foreign exchange market, and to preserve the stability of the financial system and the stability of prices in the domestic market.

8. In 2012, the National Bank of Serbia will continue to develop and strengthen market-based monetary instruments and to create conditions in cooperation with banks for the further upgrade of the interbank money market.

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[1] *The Memorandum of the National Bank of Serbia on Monetary Strategy* was adopted at the meeting of the Monetary Policy Committee of the National Bank of Serbia of 22 December 2008.

[2] *The Memorandum of the National Bank of Serbia on Setting Inflation Targets for the Period 2010–2012* was adopted at the meeting of the Monetary Policy Committee of the National Bank of Serbia of 14 December 2009.

9. The National Bank of Serbia will continue to implement the dinarisation strategy which rests on three pillars: the preservation of macroeconomic stability, development of the dinar money and capital markets and development of hedging instruments. Increasing the degree of dinarisation will contribute to enhanced efficiency of the monetary policy transmission mechanism and reduced vulnerability of the corporate and household sectors to volatility of the dinar exchange rate.

10. When needed, the National Bank will independently or in cooperation with the Government of the Republic of Serbia, take necessary measures to preserve the stability of the financial system.

11. The coordination between monetary and fiscal policies is important in an inflation targeting regime. In 2012, the National Bank of Serbia will continue to cooperate with the Government of the Republic of Serbia. *The Agreement between the National Bank of Serbia and the Government of the Republic of Serbia on Inflation Targeting*[3] commits the Government to pursue sustainable and predictable fiscal policy in line with the inflation target.

12. Should the actual inflation rate depart from its target for longer than six consecutive months, the National Bank of Serbia will notify the Government in writing about the reasons for such departure, propose policy action to be taken to deal with it and give an estimate of the period within which inflation can be expected to return within the target band.

[3] *The Agreement between the National Bank of Serbia and the Government of the Republic of Serbia on Inflation Targeting* was adopted at the Government's meeting of 19 December 2008.

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Sources of data: the National Bank of Serbia and Serbian Statistical Office, unless stated otherwise.

Executive Board meetings and changes in the key policy rate

2011

Date	Key policy rate (p.a., in %)	Change (in basis points)
17 January	12.00	+50
10 February	12.00	0
10 March	12.25	+25
7 April	12.50	+25
12 May	12.50	0
9 June	12.00	-50
7 July	11.75	-25
11 August	11.75	0
8 September	11.25	-50
6 October	10.75	-50
10 November	10.00	-75
8 December	9.75	-25

2012

Date	Key policy rate (p.a., in %)	Change (in basis points)
19 January	9.50	-25
9 February	9.50	0
8 March		
12 April		
10 May		
7 June		
12 July		
9 August		
6 September		
18 October		
8 November		
6 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 8 December 2011

After reviewing current economic developments, the Executive Board of the National Bank of Serbia voted to lower the key policy rate by 0.25 pp to 9.75 percent.

The key disinflationary factors, both now and in the foreseeable future, will be weaker cost-push pressures arising from administered and food prices as well as low aggregate demand. The process of disinflation will be further aided by the continued drop in inflationary expectations. Inflation is expected to retreat within the target tolerance band in the first quarter of the next year.

With global fiscal and financial uncertainty still elevated, mainly due to the public debt crisis in the eurozone, we expect that Serbia's macroeconomic and financial stability will be underpinned by the adoption of the budget complying with fiscal rules and by the precautionary stand-by arrangement concluded with the IMF.

Future path of the key policy rate will depend on the materialization of risks, primarily those stemming from the international environment and the fiscal policy stance at home, and on their impact on inflation.

The next rate setting meeting of the Executive Board will take place on 19 January 2012.

Press release from Executive Board meeting held on 19 January 2012

After reviewing current economic developments and estimates for the coming period, the Executive Board of the National Bank of Serbia voted to lower the key policy rate by 0.25 percentage points to 9.50 percent.

Inflation stayed on a downward path, ending 2011 somewhat lower than expected by the National Bank of Serbia, mainly due to the one-off effect of methodological changes in the calculation of fruit and vegetable prices. Inflation is expected to continue down and possibly undershoot the target tolerance band at the end of the first quarter. A part of this fall will be short-lived, resulting from the above methodological changes and other effects such as that of the administrative cap on trade margins and the so-called base effect of high monthly inflation rates recorded in the same period last year. This taken into account, inflation is expected to stabilise around the target in the third quarter of the year.

The Executive Board's decision to lower the key policy rate further reflects the above inflation profile and heightened global fiscal and financial uncertainty sustained primarily by the unresolved eurozone crisis.

Future path of the key policy rate continues to depend strongly on the materialisation of risks stemming from the international environment and fiscal policy at home, and their impact on inflation.

The next rate-setting meeting is scheduled for 9 February.

Press release from Executive Board meeting held on 9 February 2012

The NBS Executive Board voted to maintain the key policy rate at 9.5 percent.

Year-on-year inflation continues down, driven primarily by the weakening of the cost-push pressure on food prices and low aggregate demand. The drop in year-on-year inflation rates will proceed over the coming months, due chiefly to the base effect of high monthly inflation rates recorded in early 2011. Inflation is expected to return within the target tolerance band already in this quarter. After that, it will temporarily fall back to around the lower bound of the target tolerance band, and stabilise around the target mid-year. Monetary policy decisions are based primarily on consideration of inflation factors with a medium-term impact.

Under the NBS estimate, the global economic slowdown, together with the probable recession in the euro area, will slow the pace of Serbia's economic growth which is expected at around 0.5% in 2012.

The key risks to inflation projection stem from the international environment due to the still unresolved crisis in the euro area, as well as from fiscal policy at home. Keeping the budget deficit within the framework earlier agreed with the IMF would serve as an additional safeguard of macroeconomic stability and leave more scope for future relaxation of monetary policy.

At today's meeting, the Executive Board adopted the February Inflation Report which will be published and presented on 13 February.

The next rate-setting meeting will be held on 8 March 2012.

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