ANNUAL MONETARY POLICY REPORT

National Bank of Serbia

2011

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Introductory note

The National Bank of Serbia is required to submit to the Parliament its annual and semi-annual monetary policy reports, explaining all the factors that affected the implementation of monetary policy in the period under review. The annual report must be submitted by 30 June of the following year and the semi-annual by 30 September[1] of the year under review.

Pursuant to the By-Law of the National Bank of Serbia[2], the above reports must present and analyse the monetary policy strategy, macroeconomic developments (international environment, balance of payments, the country's international investment position, external debt, movements in monetary aggregates, prices, wages and employment, and other macroeconomic movements), monetary policy defined and monetary policy implemented (defined vs. achieved monetary policy objectives, monetary policy instruments and measures applied, and other monetary policy-related issues), as well as outline the monetary policy planned.

The Annual Monetary Policy Report for 2011 was adopted by the NBS Executive Board at its meeting of 25 June 2012.

Monetary policy reports are available on the National Bank of Serbia's website (http://www.nbs.rs).

Executive Board of the National Bank of Serbia:

Dejan Šoškić, Governor

Ana Gligorijević, Vice Governor

Bojan Marković, Vice Governor

Diana Dragutinović, Vice Governor

Mira Erić Jović, Vice Governor

[1] Law on the National Bank of Serbia , RS Official Gazette, Nos 72/2003, 55/2004, 85/2005 – other law and 44/2010 (Article 71, paragraphs 2 and 3).
[2] RS Official Gazette, No 71/2010 (Article 38).

ABBREVIATIONS

bln – billion
bp – basis point
CPI – Consumer Price Index
ECB – European Central Bank
EIB – European Investment Bank
EMBI – Emerging Markets Bond Index
FDI – foreign direct investment
Fed – Federal Reserve System
GDP – Gross Domestic Product
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
mln – million
NAVA – non-agricultural value added
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
y-o-y – year-on-year

Other generally accepted abbreviations are not cited..

Contents

I. Monetary policy framework

The National Bank of Serbia (NBS) has been implementing a full-fledged inflation targeting regime since early 2009, though elements of the strategy were gradually introduced into practice since 2006. In December 2008, the Monetary Policy Committee[3] of the National Bank of Serbia adopted the Memorandum on Inflation Targeting as a Monetary Strategy defining formal implementation of the inflation targeting regime from 1 January 2009. The Memorandum was drafted along the lines of the Agreement on Inflation Targeting between the National Bank of Serbia and the Government of the Republic of Serbia, adopted at the Government session of 19 December 2008. In the best collective judgement of the NBS and the Government of the Republic of Serbia, this was the most adequate monetary policy regime under the circumstances prevailing at the time.

The inflation targeting regime has so far been adopted by a number of central banks worldwide[4] as a pragmatic response to the failure of other monetary policy regimes. The choice of the regime was strengthened by the awareness that permanently high rates of inflation adversely affect economic growth and employment and that the monetary policy focus should therefore be shifted from short-term demand management to medium-term price stability which lies at the core of inflation targeting. The inflation targeting regime is a framework rather than a set of rigid monetary policy rules: it is based on a numerical target for inflation in the medium term and a discretionary right to respond to economic shocks in the short term.

The inflation target of the NBS is defined in terms of the headline inflation rate (with a tolerance band) measured as an annual percentage change in the Consumer Price Index (CPI). Inflation targets are set in cooperation with the Government based on the analysis of current and expected macroeconomic developments and numerical guidelines for the increase in prices of goods and services under direct or indirect government regulation. In late 2009, the Monetary Policy Committee of the National Bank of Serbia adopted inflation targets for the period until end-2012[5] consistent with the need to achieve medium-term price stability. Inflation targets are set as point targets (with a tolerance band) for each month of the year, while annual targets for 2010, 2011 and 2012 are set as follows:

- December 2010: 6±2%,
- December 2011: 4.5±1.5%,
- December 2012: 4±1.5%.

Inflation targets reflect the intention to achieve price stability through gradual disinflation, without causing any disruptions to the macroeconomic processes. In line with the process of gradual disinflation, inflation targets remain above the quantitative definition of price stability

[3] In line with the *Law on Amendments and Supplements to the Law on the National Bank of Serbia* (RS Official Gazette, No 44/2010), all powers of the Monetary Policy Committee have been assumed by the Executive Board.

[4] Currently, there are 27 fully fledged inflation targeters, advanced and emerging countries alike, while several central banks are operating implicit inflation targeting regimes, i.e. regimes preceding a formal switch to full fledged inflation targeting.

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

and the level of inflation targets in advanced countries (2.0% or 2.5%), echoing that the process of price deregulation has not been completed in Serbia nor the process of economic and price convergence to the EU.

It should be borne in mind that the inflation target is a medium-term objective, i.e. that the actual inflation outturn may diverge from the target in the short run due to exogenous shocks. As so far, monetary policy will not react to the primary effects of those shocks, but only to their second-round effects.

The NBS strives to achieve the targeted rate of inflation through changes in its key policy rate, which is the interest rate charged on two-week repo operations. This interest rate represents the key monetary policy instrument and the decisions on its level are based on the analysis of economic circumstances, assessment of future developments and the medium-term inflation projection. Other monetary policy instruments play a supporting role – by contributing to the smooth transmission of the impact of the key policy rate on market rates as well as to the development of the financial market, without jeopardising stability of the financial system.

The NBS runs a managed floating exchange rate regime which implies the right to intervene in case of excessive daily fluctuations in the foreign exchange market, threats to financial and price stability, and risks to the adequate level of foreign exchange reserves.

To improve transparency of its monetary policy and the effectiveness of communication with the public, the Executive Board of the NBS takes monetary policy decisions in line with the agreed schedule of meetings and regularly informs the public about the implementation of inflation targets and measures taken to achieve them in the future.

II. Monetary policy and achievement of targeted inflation

1. Monetary policy in 2011

In the course of 2011, the NBS ended the cycle of monetary tightening and started the cycle of monetary easing with a view to stabilising inflation around the target in the medium term.

Monetary tightening, in place since August 2010, continued in the first several months of 2011. From January to April, the key policy rate was raised by 100 bp, from 11.5% to 12.5%. Aggregate demand remained low despite the unfreezing of pensions and public sector wages, and import prices generated no inflationary pressure thanks to the strengthening of the dinar from late 2010. Nonetheless, the NBS kept tightening its monetary stance in order to prevent second-round effects of the unexpectedly robust growth in food prices, i.e. its spill-over to other prices via higher inflation expectations. The growth in food prices (processed food and fruit and vegetables) was caused by global movements, but also by the existing systemic solutions in the domestic food market.

Consistent with its commitment to make use of all of its monetary policy instruments in order to bring medium-term inflation back within the target band, the NBS issued in January a new *Decision on Banks' Required Reserves*, which entered into force on 17 February 2011. The measures proposed by the new decision did not imply liquidity withdrawal from the banking system, but a lower release of liquidity than envisaged by the earlier decision.[6]

Due to unexpectedly robust growth in food prices, inflation overshot the target tolerance band in March for the sixth consecutive month. The NBS therefore wrote an open letter to the Government in April, in accordance with the Agreement on Inflation Targeting[7], explaining the reasons for the divergence, the time needed to bring inflation back within the target band and the measures taken to that effect.

In its meeting in May, the Executive Board voted to maintain the key policy rate on hold. This decision was based on the May projection, according to which inflation would peak in April or May and then start retreating towards the target, within whose bounds it would settle in H1 of the following year. It was expected that inflation would fall primarily in response to the waning cost push pressure on food prices and low aggregate demand. In light of the key risks to the projection – movements in the country risk premium, food prices and fiscal policy stance, the Executive Board judged that the key policy rate was at or close to the peak of the then cycle. The Executive Board also noted the presence of risks calling for a rather cautious easing of monetary policy, using all available instruments of monetary regulation.

[6] For more information see Reserve requirements, p. 6.

[7] Agreement on Inflation Targeting between the National Bank of Serbia and the Government of the Republic of Serbia was adopted in the government session of 19 December 2008.

[8] See Appendix 1, p. 33

Expecting prevalence of disinflationary pressures in the coming period, the NBS embarked on a process of monetary policy relaxation around mid-year. The groundwork for gradual relaxation of monetary policy was laid by past monetary policy measures, which prevented the rise in inflation expectations and the pass-through from food to other prices. From June until the end of year, the NBS lowered the key policy rate by 275 bp, from 12.50% to 9.75%.

At the same time, though on a downward path, y-o-y inflation was running above the upper bound of the target tolerance band for another six-month period (April–September). The NBS therefore sent an open letter to the Government in October to explain the reasons for the divergence, the actions taken and the time needed to bring inflation back within the target.[9]

Uncertainties in the global financial market persisted, reflecting anticipation of an adequate systemic solution to the sovereign debt crisis in the euro area periphery. Due, in particular, to high public debt levels, the governments were less in a position to respond by fiscal stimuli as they had done during the first wave of the crisis, which gave rise to fiscal and financial uncertainty. The loss of confidence among financial market players spilled over to the real economy, stalling its recovery not only in the euro area, but the world over. Downward growth revisions for Serbia's key trading partners conditioned the lowering of our growth forecast too.

In an environment of heightened global uncertainty, support to the country's macroeconomic and financial stability was provided by a precautionary stand-by arrangement concluded with the IMF in September 2011. The arrangement was expected to help improve investment climate and act as an additional buffer to the domestic economy against external adversities. Compliance with the fiscal responsibility rules was assessed as critical to the implementation of the arrangement, in order to create more scope for the monetary policy to respond to the disinflationary impact of economic slackening.

The November projection confirmed the previously projected inflation trajectory – inflation was expected to return within the target tolerance band in Q1 2012 and stay within it 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 nascent drop in inflation expectations and the weakening of the cost-push pressure on food prices. At its November meeting, the Executive Board cut the key policy rate by 75 bp, citing international environment and the expansionary fiscal policy at home as the key risks to the projected inflation path.

By the time of the Executive Board meeting in early December, international environment had deteriorated further. Elusiveness of the solution to the euro area sovereign debt crisis heightened uncertainty and instability in the global financial market. Country risk premiums for Serbia and most of the other countries in the region rose in November, and so did depreciation pressures. The prospects for the real sector worsened not only in the euro area, but also worldwide. According to data provided by the Serbian Statistical Office, real y-o-y GDP growth slowed down in the last two quarters of the year. The process of disinflation continued, as well as the drop in inflation expectations.

After reviewing current economic developments and forward-looking estimates at its December meeting, the Executive Board voted to cut the key policy rate by 25 bp, 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.

2. Monetary policy instruments

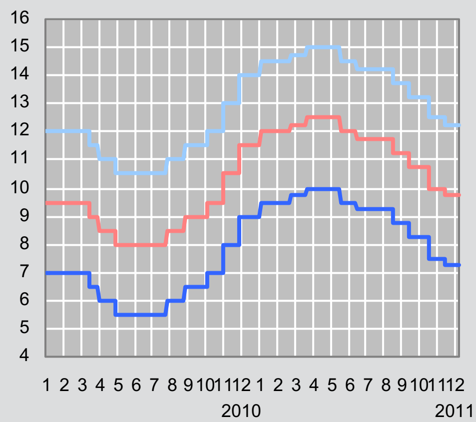
The main monetary policy instrument of the NBS is the key policy rate, i.e. interest rate on two-week repo operations. Other instruments of monetary regulation, notably reserve requirements and operations in the FX market, are also exercised.

Open market operations

The main open market operations implemented by the NBS are reverse repo transactions conducted under sale

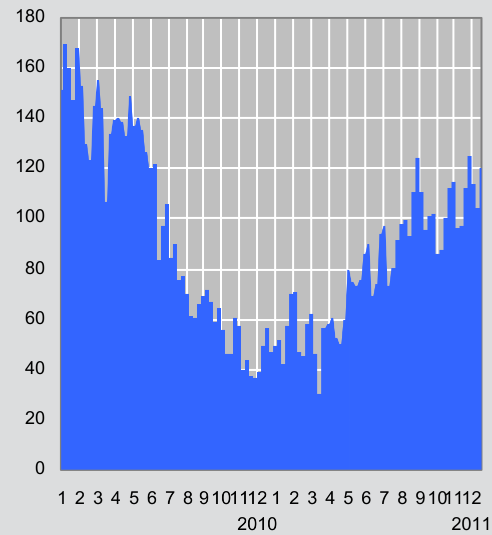
[8] See Appendix 2, p. 35

Chart II.2.1 **Key policy rate and interest rate corridor**
(daily data, p.a, %)



Source: NBS.

Chart II.2.2 **Stock of sold NBS securities**
(RSD bln)



Source: NBS.

and repurchase (repo) agreements at a two-week maturity. The role of the key policy rate, as the operating target for short-term rates in the money market, is supported by the corridor of interest rates on deposit and lending facilities and by other open market operations.

In the course of 2011, the NBS Executive Board changed the level of the key policy rate nine times. From 11.5% p.a. at end-2010, the key policy rate was raised by April by a total of 100 bp. The revisions took place in January, March and April. In June, the NBS started the process of monetary easing, lowering the key policy rate until the end of the year by a total of 275 bp to 9.75%. The only month that saw no changes in the level of the key policy rate was August.

The NBS implemented open market operations by trading in own securities. To conduct repo sales, the NBS issued one series of treasury bills in the nominal amount of RSD 500.0 bln. The issue of one series of high nominal value is consistent with the practice in earlier years which enables a more adequate management of securities of the same series and facilitates liquidity management for banks.

During the year, 52 repo sales auctions were held. Repo auctions of two-week securities were conducted at a fixed interest rate and were held once a week. The total volume of securities sold came at RSD 2,136.1 bln. By contrast to H2 2010, H1 2011 witnessed a gradual increase in the sale of NBS securities. The sales volume rose from H2 2010 by RSD 40.3 bln to reach RSD 802.8 bln in H1 2011. Relative to end-2010, the stock of NBS securities in banks' portfolios increased by RSD 27 bln to RSD 73.9 bln at end-June 2011.

The sale of securities continued up in H2 despite the lowering of the key policy rate. In fact, the highest monthly volume of sale in 2011 was hit in November (RSD 267.4 bln). Consequently, the highest stock of NBS securities in banks' portfolios was registered in early December (RSD 125.4 bln). As the sale lost pace during December, the stock of securities sold amounted to RSD 120.6 bln at year-end. Relative to end-2010, the stock of securities in banks' portfolios increased by RSD 73.7 bln. The increase in H2 is largely attributable to the withdrawal of government foreign exchange deposits.

The NBS engaged in no outright sale of securities in the course of 2011.

Deposit and lending facilities

The use of NBS deposit facilities is regulated by the *Decision on Terms and Conditions of Depositing Excess Liquidity with the National Bank of Serbia*. There were no amendments to this decision during 2011.

The average stock of bank deposits with the NBS equalled RSD 2.7 bln. The lowest average monthly stock was recorded in March (RSD 1.3 bln) and the highest in December (RSD 7.3 bln).

The use of NBS lending facilities is regulated by the *Decision on the Conditions and Manner of Extending Daily Liquidity Loans to Banks against Collateral of Securities.* During 2011 this decision was amended twice – in January and March.

Consistent with the National Bank's commitment to play an active role in the process of dinarisation of the domestic financial system, the amendments to the above decision removed the long-term foreign currency securities of the Republic of Serbia from the list of eligible collateral. Thus, collateral for daily liquidity loans narrowed down to dinar securities only (dinar securities without a foreign currency clause). Taking into account the Government's decision to issue coupon dinar securities, the amended decision provided for the possibility of using as collateral not only discount, but also interest-bearing securities. The amendments also extended the residual maturity of securities eligible for collateral from one to three years, and defined the percentage of the nominal value of collateral securities up to which, depending on their residual maturity, they may serve as collateral for a liquidity loan.

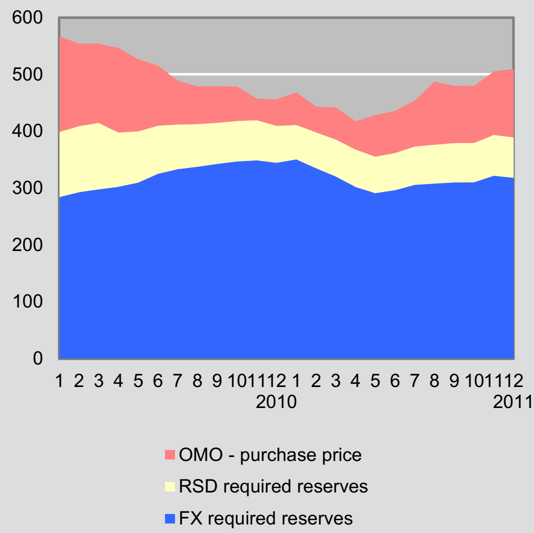
During 2011, 17 banks used intraday loans (RSD 532.4 bln) and 6 banks overnight loans (RSD 5.5 bln). Overnight loans were disbursed in Q1 alone.

Reserve requirements

Consistent with its commitment to use all available monetary policy instruments in order to bring medium-term inflation back within the target tolerance band, in January 2011 the NBS issued a new Decision on Banks' Required Reserves, which entered into force on 17 February 2011.

While retaining the basic reserve requirement concept, the new decision introduced differentiated reserve ratios on both the dinar and foreign exchange reserving base subject to the maturity of liabilities. Dinar liabilities with maturity up to two years became subject to 5% ratio, while those with maturity over two years to 0% ratio. At the same time, the ratio on FX liabilities with maturity up to two years was set at 30% and that on liabilities with maturity over two years at 25%.

Chart II.2.3 **Volume of sterilisation by monetary policy instruments**
(RSD bln)



Source: NBS.

The Decision further stipulated the obligation for banks to apply differentiated reserve ratios when allocating a portion of FX required reserves in dinars. Thus, banks were required to allocate in dinars 15% of required reserves on liabilities in euros with maturity up to two years, and 10% of required reserves on liabilities in euros with maturity over two years.

Transition periods were stipulated (18 February–17 March and 18 March–17 April) to even out possible variations in the impact of the decision and enable phased-in harmonisation of required reserves calculation and allocation. Full implementation of the Decision began on 17 April.

In 2011, required reserves allocated in dinars rose by RSD 6.2 bln, while those allocated in foreign exchange (leasing excluded) decreased by EUR 101.1 mln. Leasing required reserves declined by EUR 55.8 mln.

Foreign exchange market operations

In accordance with the *Monetary Policy Programme of the National Bank of Serbia for 2011,* the NBS implemented a managed float exchange rate regime, intervening in the foreign exchange market only rarely.

To ease excessive daily volatility of the exchange rate of the dinar against the euro, the NBS sold a total of EUR 90 mln and bought EUR 45 mln in the IFEM in the course of 2011. The NBS intervened strictly under market conditions, as a price taker dealing at prices quoted by banks.

Appreciation pressures strengthened in response to a lower country risk premium, higher inflow of portfolio investment and substantial purchase of foreign exchange by non-residents. As a result, in the year to May, the dinar appreciated against the euro by a nominal 8.8%. During this period, the NBS intervened in the IFEM by buying EUR 45.0 mln from banks.

Economic troubles of the euro area periphery, the rise in the country risk premium, and the Government's decision not to rollover the six-month euro-indexed bills heightened the market uncertainty in June, bolstering bank demand for foreign exchange and paving the way for depreciation pressures. The dinar lost 5.4% against the euro in June and the NBS intervened by selling EUR 30.0 mln in the IFEM.

Over the following months, the foreign exchange market stabilised on the back of FDI inflows and agreement on a precautionary stand-by arrangement with the IMF. The market also responded positively to the issue and successful sale of 10-year eurobonds of the Republic of Serbia in the international financial market. During this period, in order to moderate excessive daily volatility of the exchange rate, the NBS intervened by selling EUR 30.0 mln.

Over the last two months of 2011, the dinar weakened against the euro, reflecting a rise in the country risk premium and a surge in dinar liquidity. What happened was that the Government tapped on its foreign exchange accounts with the NBS in November, and still more so in December, thereby bolstering dinar liquidity. At the same time, with energy imports falling due for payment, resident demand for foreign exchange heightened in the second half of December. To ease excessive daily volatility of the exchange rate, the NBS intervened in December by selling EUR 30.0 mln.

Foreign exchange swaps

In early March 2011, the NBS reinstated its three-month foreign exchange swap auctions, as a regular instrument for supplying foreign exchange/dinar liquidity. These weekly auctions, conducted under market conditions, aim to bolster interbank swap trading and the development of FX hedging instruments. Until the end of year the NBS organised 88 swap auctions, selling to banks EUR 179.5 mln in the first leg and buying from them EUR 185.0 mln in the second leg of trading. At year-end, NBS swap receivables came at EUR 111.0 mln and its swap obligations at EUR 49.0 mln.

Auctions of short-term dinar loans

To facilitate bank liquidity management, the NBS organised monthly auctions of short-term dinar loans against collateral of securities during 2011. There were no loan approvals in the auctions organised.

Other interest rates

To ensure compliance of regulations under its remit with the amended *Law on the National Bank of Serbia*, in June 2011 the NBS adopted new decisions relating to interest rates and the manner of calculation, collection and payment of interest.

While retaining the earlier concept in terms of the level and relative relationship between interest rates, the new *Decision on Interest Rates Applied by the National Bank of Serbia in the Implementation of Monetary Policy* envisaged an obligation of the NBS to use the key policy rate as a point of reference when setting other interest rates to be applied in the implementation of monetary policy.

The new *Decision on the Manner of Calculation, Collection and Payment of Interest by the National Bank of Serbia* also retained the concept of the earlier decision. The provisions governing the manner and timeframe for the calculation, collection and payment of interest, as well as the relevant formulas remained unchanged, while the provisions on the calculation of discounted value of collateralised securities in the event of activating the collateral were deleted.

3. Achievement of inflation target in 2011

Y-o-y inflation trended above the upper bound of the target tolerance band throughout 2011. The target was overshot because of sharp food price growth, driven by the 2010 agricultural shock, and the effect of low monthly inflation rates last year. Food price volatility may be put down to the underdeveloped market and the existing systemic solutions in this area, as well as to a high share of food in the CPI. The trends in market-determined prices of non-food products and services stayed within the target tolerance band throughout the period observed.

From 10.3% in December 2010, y-o-y inflation rose to its peak of 14.7% in April 2011. It began to decline thereafter and slid to 12.7% in June and 7.0% in December (target: 4.5±1.5%).

Food prices were the key driver behind movements in y-o-y inflation. Due to bad agricultural season in 2010, high import duties and elevated exports, prompted by rising prices of primary agricultural commodities in the global market, food producers were exposed for a longer period to stronger cost-push pressures which to a large degree spilled over to consumer prices, particularly in Q1.

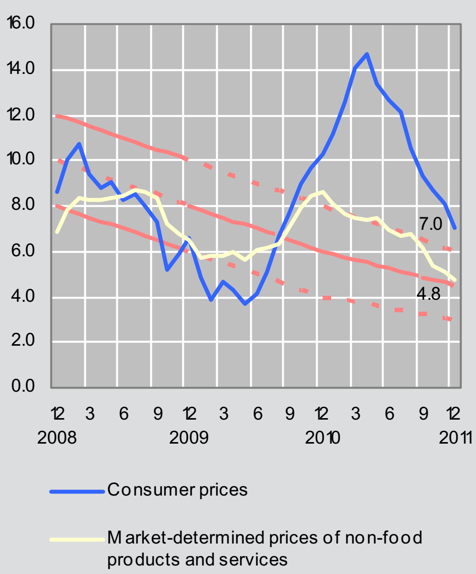
A change in the direction, i.e. decrease in y-o-y inflation in May and June was for its major part due to subsiding cost-push pressures on food price growth as the effect of hikes in primary agricultural commodities prices was exhausted. A disinflationary effect was also generated from aggregate demand which remained low despite the unfreezing of pensions and public sector wages in early 2011.

Consumer price growth came at 6.8% in H1 2011, on the back of processed food (3.0 pp) and administered prices (1.9 pp). Fruit and vegetable prices displayed unusual movements in H1 (robust growth in Q1 and a sharp fall in Q2) – they rose to 13.9% by end-H1 (0.8 pp). Food prices (processed food and fruits and vegetables) contributed 3.8 pp or 56% to headline inflation in H1. A significant boost to headline inflation also came from higher prices of electricity, cigarettes, medicaments and petroleum products. On the other hand, a fall in imported inflation in H1, buoyed mainly by appreciation of the nominal effective exchange rate of the dinar, brought about a lower rise in prices of non-food products and services (1.7%) than other prices.

Y-o-y inflation continued down throughout H2 2011 and came close to the upper bound of the target tolerance band in December – 7.0% (target:4.5±1.5%). The decline was caused by weaker cost-push pressures on food prices, low aggregate demand and past monetary policy measures. Further, a decline in y-o-y inflation bore down on inflation expectations and dampened inflationary pressures.

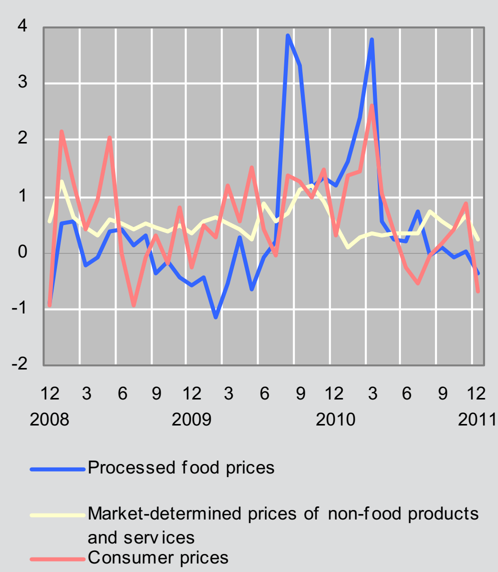
As in H1, food prices were again the key determinant of y-o-y inflation in H2, though exerting an opposite effect than in H1. The stabilisation of processed food prices as a result of the wearing off of the effect of 2010 price hikes of primary agricultural commodities, plus a solid supply

Chart II.3.1 **Price movements**
(y-o-y growth, %)



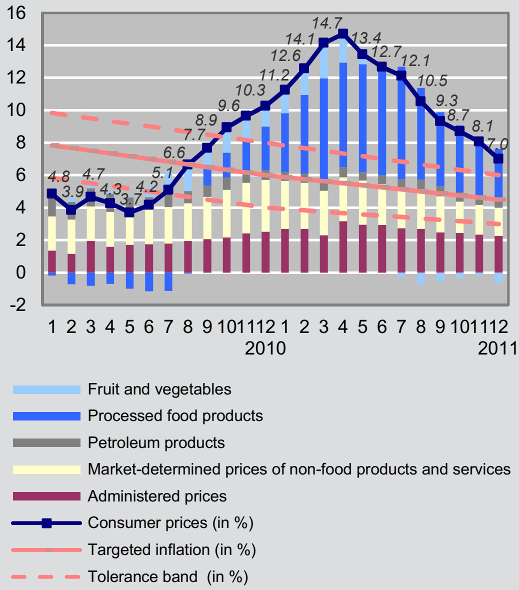
Sources: Statistical Office and NBS.

Chart II.3.2 **Price movements**
(monthly growth, %)



Source: NBS.

Chart II.3.3 **Contribution of CPI components to y-o-y inflation**
(in percentage points)



Source: NBS.

Table II.3.1 **Growth and contribution of CPI components to y-o-y inflation**

	Growth rates (in %)	Contribution (in p.p.)
Total	**7.0**	**7.0**
Processed food products	**9.5**	**3.1**
Market-determined prices of non-food products and services	**4.8**	**1.7**
Fruit and vegetables	**-11.0**	**-0.6**
Administered prices	**10.5**	**2.3**
Electricity	13.5	0.9
Household gas	10.3	0.1
Utilities-housing services	10.1	0.3
Social welfare services	0.8	0.0
Transportation services (regulated)	18.1	0.2
PTT services	9.2	0.2
Cigarettes	12.8	0.5
Medicines	4.0	0.1
Other	1.0	0.0
Petroleum products	**13.4**	**0.5**

Sources: Statistical Office and NBS.

of new season agricultural commodities, led to further weakening of food cost push pressures. The end-of-year drop in inflation was somewhat faster than expected by the NBS, mainly due to the one-off methodological effect in the calculation of fruit and vegetable prices. Of a 7.7 pp decline in y-o-y inflation from June to December, food prices accounted for 4.5 pp (or 80%) – Chart II.3.3.

Consumer prices edged up by mere 0.2% in H2 because of a 21.9% fall in fruit and vegetable prices (contribution to headline inflation in H2: -1.4 pp). In addition to low aggregate demand, a disinflationary effect was also fuelled by processed foods as their input prices plummeted, and by sluggish administered price growth. On the other hand, a rise in prices of non-food products and services was higher than in H1 (1.1 pp contribution to overall consumer price growth in H2). This was due to several individual price hikes (household chemicals, clothes and footwear, textbooks, coal and wood, alcoholic beverages).

Though to a lesser degree, H2 inflation was shaped by developments in the international environment. As no solution was found to the public debt sustainability crisis in peripheral euro area countries, uncertainty and instability in global financial markets heightened. After imported deflation in H1, imported inflation was recorded in H2 in response to price hikes in the EU and US and the depreciation of the nominal effective exchange rate of the dinar.

III. Macroeconomic environment

1. International environment

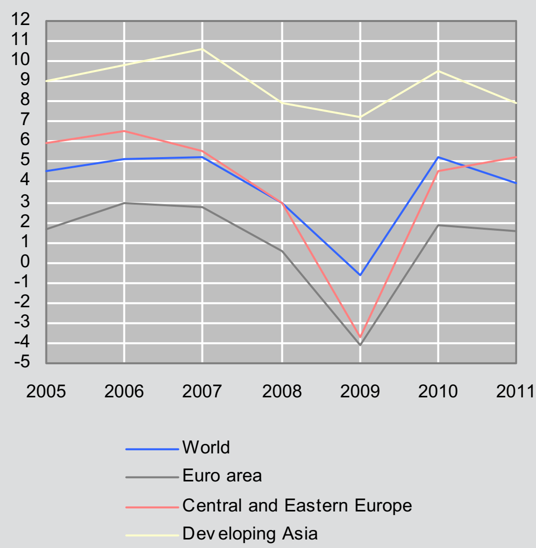
The pace of global economic activity slowed significantly in 2011, especially in H2, relative to 2010. This was due primarily to the deepening of the euro area sovereign debt crisis. Concerns about fiscal sustainability of peripheral countries and the potential losses of Western European banks widened the yield spreads on peripheral and German bonds. As the terms of financing worsened and bank aversion to lending increased, by the end of the year the ECB started offering full allotment three-year refinancing operations at fixed (reference) interest rate[10], which in part helped lower the yields on peripheral bonds.

Assistance packages provided by international creditors to Greece, Ireland and Portugal failed to produce the expected results. Relevant indicators signal a 0.3% contraction in the euro area's GDP in Q4, wherefore total euro area growth in 2011 is estimated at 1.6% – hardly sufficient to translate into higher employment.

The US economy, on the other hand, stayed relatively resilient to the spill-over effects of the euro area crisis thanks to expansionary monetary policy, labour market flexibility and structural adjustment. The dollar's reserve currency status enabled further borrowing under favourable terms. The US economy is estimated to have expanded in 2011 by 1.8%. The unemployment figure decreased gradually in the course of the year, reaching 8.5% in December.

The adverse spill-over effects of the sovereign debt crisis were felt most strongly in Central and East European countries, many of whom recorded lower growth than in 2010 due to the smaller volume of exports to the euro area and lower capital inflow. Still, as most of these countries are operating a managed float exchange rate regime, their economic adjustment was smoother thanks to the depreciation of local currencies against the euro, which precluded a major economic slack.

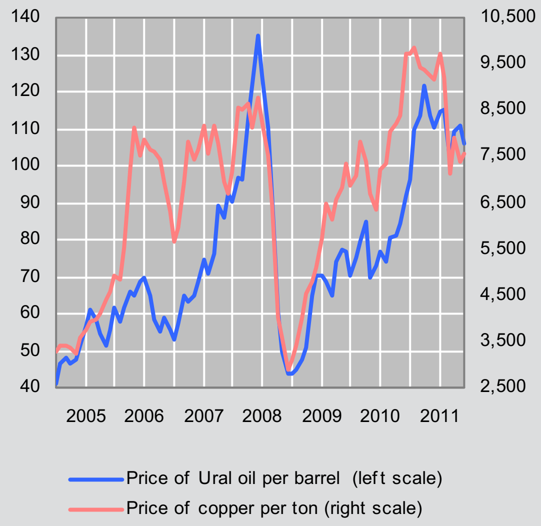
Chart III.1.1 **Economic activity by region**
(GDP growth rates, %)



Source: *IMF Outlook, January 2012*.

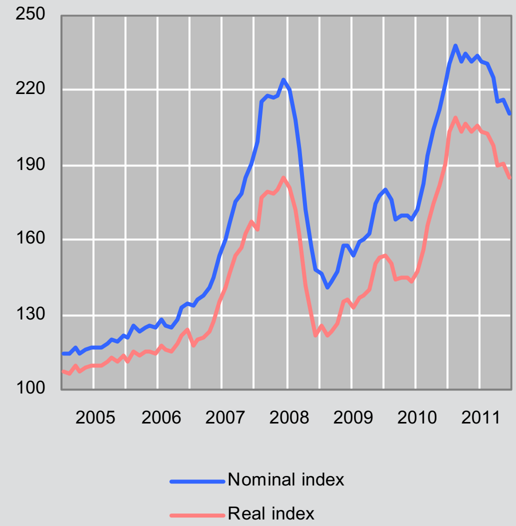
[10] Remittances make up the largest share of net current transfers.

Chart III.1.2 **Oil and copper prices**
(US dollars)



Source: Bloomberg.

Chart III.1.3 **Global food price index**
(2002 – 2004 = 100)



Source: FAO.

Robust expansion of Asian-Pacific economies proceeded in 2011, though at a somewhat slower pace. Growth was led by China (9.2%) and India (7.4%), whose markets felt no major ripple effects of the euro area crisis. In contrast to these movements, Japan's economy contracted by 0.9%, as a consequence of natural disasters that marked the year.

Central banks of advanced economies maintained accommodative stance in 2011. This refers in particular to the Fed and the Bank of England, which in addition to record low interest rate policy, implemented the quantitative easing programme. To quell inflationary pressures, the ECB raised its policy rate in April and July by 25 bp each. However, as the likelihood of recession increased, the ECB trimmed its main rate in Q4 in two steps of 25 bp to the level of 1.0%. Despite the spill-over effects of the euro area crisis, most central banks of Central and East European countries decided not to loosen their monetary reins. Some of them, like the Hungarian National Bank, increased the key policy rate in order to defend the value of its domestic currency.

Currency markets were highly volatile in 2011. Propped up by positive expectations of a solution to the debt crisis in the euro area periphery, the euro stood relatively high against the US dollar during H1. In H2, however, the dollar marked noticeable gains as the prospects for the euro area growth dimmed and yields on peripheral bonds spiralled up. In search of a safe haven, investors turned increasingly to the dollar, the Swiss franc and the Japanese yen, pushing their values higher. To maintain competitiveness of the domestic economy, the Swiss National Bank was even forced to put a cap on the value of the franc and announced it would not tolerate its strengthening above 1.20 CHF/EUR.

Global inflationary pressures, which marked H1, started weakening in H2 reflecting a decrease in aggregate demand triggered by the sovereign debt crisis in the euro area and high unemployment. The inflationary effect of high food prices also weakened, as evidenced by the movements of the *FAO Food Price Index*. In H2 2011, this index lost some 10% due to increased supply in the market of primary agricultural commodities.

Following a rise in H1, oil prices reversed their trend and were on the decline until the end of the year. Their movement was determined by the level of demand, conditioned by economic growth prospects which deteriorated as the year progressed, as well as by geopolitical situation. Overall in 2011, oil prices marked no sharp ups and downs as in the previous years.

International copper prices followed a similar pattern, rising in H1 and falling in H2. Their movements were under the dominant sway of demand-side factors, i.e. forecasts of global economic growth.

Gold reinforced its safe haven appeal in 2011. Its price rose as the debt crisis deepened and signs of recession in the euro area emerged. In early September it hit an all-time high of USD 1,895 per troy ounce. Still, in Q4 the price of gold retreated in response to investors' lower risk aversion and increased optimism with regard to finding a solution to the Greek debt crisis.

2. International transactions

Balance of payment trends and FX reserves

2011 saw current account deficit rising, driven mainly by the growing trade deficit. Higher current account deficit was funded by larger FDI and considerable portfolio investment inflows, as well as additional long-term borrowing by the government. As a result of financial account inflow outweighing the current account deficit, FX reserves of the NBS recorded growth in 2011.

Current account deficit rose by 42.5% from last year, reaching EUR 2,967.8 mln in 2011. The reasons behind the growth were higher trade (15.5%) and income account deficits (13.1%), as well as current transfers[11] (6.3%) falling below the year before. Though exports and imports of goods recorded similar growth in 2011 (14.0% and 14.6%, respectively), goods and services export to import ratio went slightly up (0.3 pp) to 68.2%, prompted by higher income from exports of services. Current account deficit stood at 9.5% of GDP in 2011.

Exports grew, mainly on the back of increasing demand for our products in the European Union and Russian Federation markets (exports to these markets expanded by 14.9% and 40.7%, respectively). The key driver for imports on the other hand was the investment cycle in some export-oriented industries, set in motion in 2011. Accordingly, the greatest contributors to imports in 2011 were equipment (31.6%), intermediate goods (15.3%), and consumer goods (5.0%).

The largest net inflow into financial account came from FDIs, which outstripped the year-earlier level by EUR 966.8 mln. Sector-wise, FDIs were predominantly channelled into trade (39.4%), financial sector, based on bank capital increase (15.1%), metals production (7.3%), real estate (6.6%) and construction (4.2%). In 2011 portfolio investments also recorded a significant inflow (EUR 1,619.1 mln), mainly owing to the sale of the Republic of Serbia eurobonds.

Table III.2.1 **Serbia's balance of payments**
(in EUR mln)

	2010	2011
CURRENT ACCOUNT – BALANCE	-2,082	-2,968
CURRENT TRANSACTIONS BEFORE GRANTS – BALANCE	-2,275	-3,174
1. Goods (1.1 – 1.2)	-4,774	-5,514
1.1. Exports of goods f.o.b	7,402	8,438
1.2. Imports of goods f.o.b.	-12,176	-13,952
2. Services (2.1 – 2.2)	5	161
2.1. Receipts	2,667	3,032
2.2. Expenditure	-2,662	-2,872
3. Balance of goods and services (3.1 – 3.2)	-4,768	-5,353
3.1.Exports of goods and services	10,070	11,470
3.2. Imports of goods and services	-14,838	-16,823
4. Income	-670	-758
4.1. Receipts	438	428
4.2. Expenditure	-1,108	-1,186
5. Current transfers	3,356	3,143
5.1. Receipts	3,624	3,494
5.2. Expenditure	-268	-351
CAPITAL ACCOUNT	1	-3
FINANCIAL ACCOUNT	1,986	2,752
1. Direct investment – net	860	1,827
1.1. Abroad (claims)	-143	-122
1.2. In Serbia (liabilities)	1,003	1,949
2. Portfolio investment – net	39	1,619
2.1. Assets (claims)	-30	67
2.2. Liabilities (liabilities)	69	1,552
3. Other investments	158	1,107
3.1. Assets (claims)	-792	458
3.2. Liabilities (liabilities)	950	649
4. Reserve assets	929	-1,801
ERRORS AND OMISSIONS	96	219
OVERALL BALANCE	-929	1,801

Sources: NBS (ITRS), Statistical Office.

Government net borrowing in 2011 stood at EUR 687.5 mln. In the same period, banks and enterprises reduced their cross-border liabilities by net repayments of EUR 710.8 mln[12] and EUR 416.6 mln, respectively.

The above financial account trends resulted in EUR 1,801.5 mln growth in FX reserves in 2011 (under the balance of payment methodology), despite the widened current account deficit. By end-2011, the FX reserves of the NBS reached EUR 12,057.7 mln. At the same time, net FX reserves[13] stood at EUR 6,664.0 mln, up by EUR 1,591.0 mln on end-2010.

[11] Remittances make up the largest share of net current transfers.

[12] Banks repaid EUR 1,148.53 mln under short-term loans and took EUR 437.8 mln net worth long-term loans.

[13] Net FX reserves are FX reserves less banks' required reserves and drawings from the IMF.

In 2011, the NBS met the NIR floor criterion agreed in the IMF's Technical Memorandum of Understanding. Calculated by the IMF's program exchange rate[14], net FX reserves stood at EUR 6,456.0 mln on 31 December 2011, outstripping the NIR floor set for end-December 2011 by EUR 1,956.0 mln.

At end-2011, FX reserves covered money supply (M1) by 429.6%, short-term debt by 1,860.8 %, and 8.6 months of imports of goods and services.

In 2011, securities featured more prominently in the composition of FX reserves compared to the share of funds in accounts abroad. At year-end, foreign securities made up 71.3% of FX reserves, funds in accounts abroad (deposits and current accounts of NBS abroad) – 21.9%, foreign cash – 2.1%, and gold and special drawing rights – 4.7%. Income the NBS realized in 2011 on account of deposit interest, SDW, demand deposits and current accounts reached EUR 7.9 mln, while coupon payments on foreign securities equalled EUR 148.5 mln.

The sale of Republic of Serbia euro-denominated securities brought EUR 1,257.8 mln inflow to FX reserves (of which EUR 533.5 mln from sale in the domestic market and EUR 724.3 mln in the international financial market).

FX reserves of the National Bank of Serbia were also boosted through disbursement of loans in the amount of EUR 586.7 mln, approved to the Republic of Serbia for the following purposes:

- programme support to the budget, by the Banque Société Générale, Paris, under the guarantee of the World Bank (EUR 292.6 mln) and the European Union (EUR 100.0 mln);

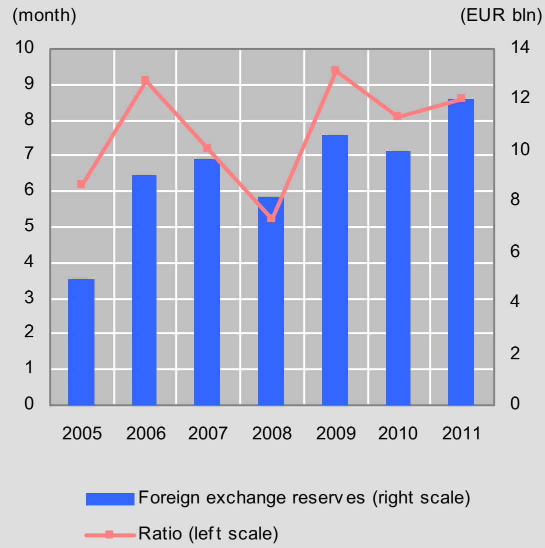
- SMEs development, reconstruction of roads, bridges and schools and regional and municipal infrastructure, loan by the European Investment Bank (EUR 86.3 mln);

- public finance management, loan by the World Bank (EUR 72.4 mln) and the Council of Europe Development Bank (EUR 17.5 mln);

- SMEs, loan by the Italian Government (EUR 15.0 mln) and

- railroad financing, loan by the Eurofima (EUR 2.9 mln).

Chart III.2.1 **Ratio of FX reserves to imports**



Source: NBS.

FX inflow was also generated through temporary payment operations with Kosovo and Metohija (EUR 277.3 mln)[15], donations (EUR 102.7 mln) and the drawdown of the last tranche under the stand-by arrangement with the IMF (EUR 51.7 mln). Banks allocated EUR net 236.9 mln to required reserves in 2011.[16]

In 2011, government timely serviced its external debt, which accounted for a EUR 463.4 mln outflow from the country's FX reserves. Liabilities falling due under frozen foreign currency saving deposits were serviced by additional EUR 225.9 mln. An outflow from FX reserves was also generated through NBS interventions in the IFEM.

Country's international investment position

In 2011, Serbia saw its external financial assets going up by 9.1% and its external liabilities by 8.8% – to EUR 19,484.0 mln and 44,290.9 mln, respectively.

[14] The NBS Exchange Rates List No. 143 of 29 July 2011.

[15] According to the *Law on a Temporary Execution of Certain Payment Operations in the Federal Republic of Yugoslavia*, banks are obliged to sell the foreign exchange receipts from transactions with Kosovo and Metohija to the National Bank of Serbia (FRY Official Gazette No. 9/01).

[16] In order to comply with the NBS criteria on bank exposure to related persons, banks increased required reserves in foreign currency held with the NBS by EUR 555.4 mln.

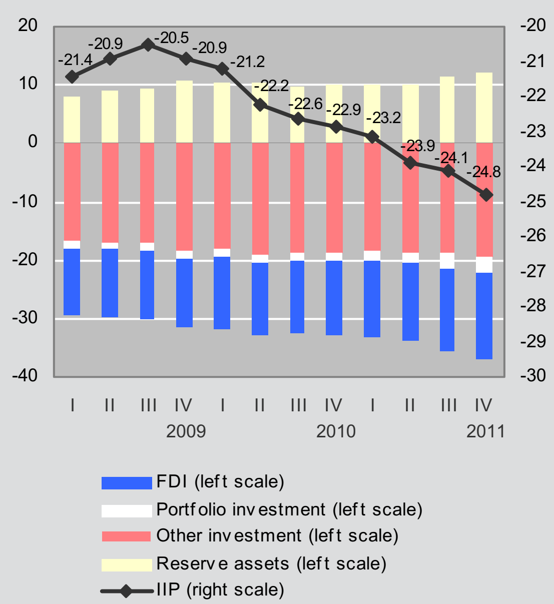
Serbia's international investment position deteriorated in 2011 by EUR 1,948.1 mln in new borrowings, ending the year with a net borrowing total of EUR 24,806.9 mln. Net capital inflow under transactions performed added EUR 2,675.0 mln to Serbia's debt. Conversely, currency changes, changes in prices of financial instruments and other changes led to the improvement of the net result by EUR 42.5 mln, 144.8 mln and 536.9 mln, respectively.

The biggest contributor to the country's debts was external borrowing which expanded by EUR 2,392.8 mln and reached EUR 9,915.6 mln, mainly through the sale of a EUR 1,518.3 mln worth of government securities to non-residents, which pushed this segment of debt up to EUR 2,322.4 mln. The Government also incurred more debt in programme and project loans by international financial institutions and loans by development banks of foreign governments. Expanding by 13.8%, these credit borrowings reached EUR 7,133.8 mln. The increase in government borrowing had the strongest bearing on NBS reserve assets, which went up by EUR 2,055.7 mln and reached EUR 12,057.7 mln, given that receipts from the sale of Republic of Serbia Eurobonds in the international financial market boosted the FX reserves.

The banking sector's international financial position in 2011 showed a net borrowing of EUR 9,084.7 mln, up by 3.5 % from a year ago. Banks' foreign assets contracted by 28.8% to EUR 1,479.9 mln, due to a decrease in domestic banks' disposable reserves in accounts abroad and lower investments in foreign debt securities. Banks' foreign liabilities shrunk by 2.7%, to EUR 10,564.6 mln, possibly due to a considerable – 66% reduction in banks' short-term external debt which settled at EUR 581.7 mln. Contraction of banks' foreign liabilities was partially counterbalanced by capital increases of domestic banks by their foreign-based owners which rose by 6.7%, to EUR 5,465.4 mln.

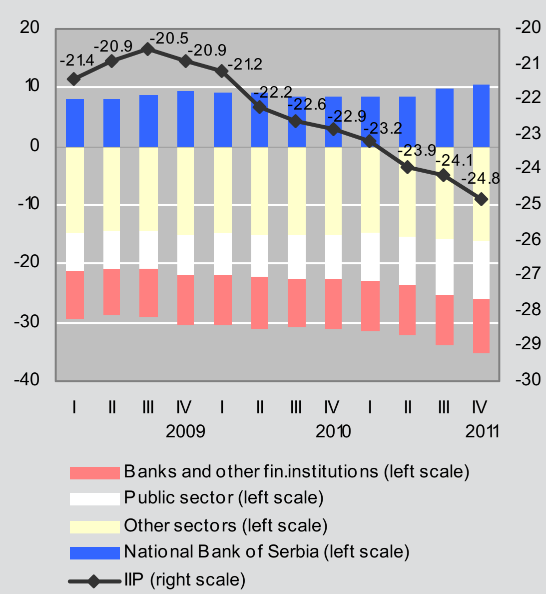
International financial position of other sectors (primarily of the corporate sector, as the biggest net borrower) expanded by an additional 8.2% to EUR 16,177.4 mln. Foreign assets of the corporate and household sectors increased by 3.0% to EUR 5.946,5 mln, while foreign liabilities of the corporates rose 6.7% to reach EUR 22,123.9 mln. FDI inflow to Serbia was 15.3% higher than the year before and totalled EUR 12,211.5 mln. Share capital of international investors was boosted by EUR 1,273.3 mln, mainly owing to the sale of companies from Delta Maxi group, new investments into Fiat Automobiles Serbia and NIS capital increase, and came at EUR 9,082.7 mln. In addition, intercompany liabilities of Serbian companies toward their foreign-based owners rose by EUR 300.4 mln and equalled EUR 2,541.5 mln. Portfolio investments expanded by EUR 49.6 mln, to EUR 449.8 mln.

Chart III.2.2 **International investment position of the Republic of Serbia by instrument**
(in EUR bln)



Source: NBS.

Chart III.2.3 **International investment position of the Republic of Serbia by sector**
(in EUR bln)



Source: NBS.

Companies net repaid their foreign loans by 6.5%, to EUR 8,988.0 mln, while trade loans were increased by EUR 347.6 mln, reaching EUR 474.6 mln.

External debt

The Republic of Serbia's external debt at end-2011 amounted to EUR 24,125.4 mln, up by EUR 339.0 mln or 1.4% on end-2010. Currency differentials, i.e. the euro's depreciation against other currencies accounted for EUR 155.5 mln or 0.6% increase.

At end-2011, external debt equalled 77.5% of GDP, showing an improvement of 7.4 pp from the year-ago period. The country's external liquidity indicator – the ratio of external debt to exports of goods and services came at 210.3% at end-2011, losing 25.9 pp compared to the end of the last year. External debt repayments relative to exports of goods and services stood at 35.5%, gaining 1.7 pp from end-2010.

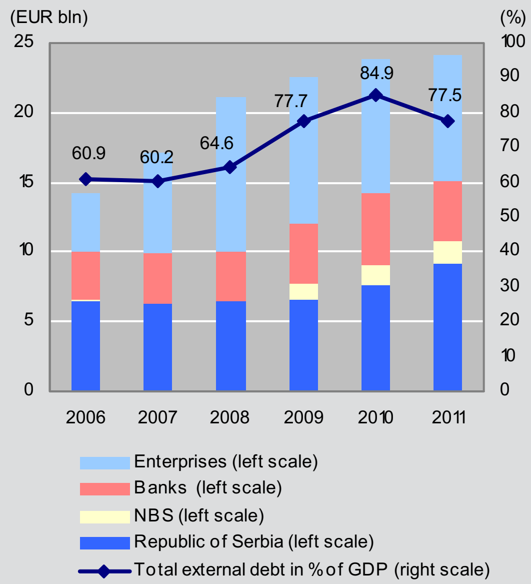
Public sector external debt[17] in 2011 soared by EUR 1,696.8 mln or 18.7%, settling at EUR 10,773.3 mln at the close of the year. This marked a shift in the composition of external debt in 2011, with the public sector's share swelling to 44.7% i.e. by 6.5 pp. Relative to end-2010, public sector added 2.2 pp to its share of debt, which reached 34.6% of GDP.

Private sector external debt came at EUR 13,352.1 mln at end-2011, which entailed a EUR 1.357.9 mln or 9.2% cutback from end-2010. As a percentage of GDP, it fell by 9.6 pp and settled at 42.9%.

Bank external debt in 2011 (EUR 4,364.1 mln) shrunk by EUR 728.5 mln or 14.3%, mainly under short-term bank lines and deposits (which fell from EUR 1,730.7 mln to EUR 581.7 mln). Long-term bank debt at EUR 3,782.4 mln was EUR 420.4 mln higher than last year. Enterprise external debt equalled EUR 8,988.0 mln at year end, recording a 6.5% drop year-on-year.

Sectoral composition of outstanding long-term loans points to the following net borrowers (higher disbursements relative to the principal payments): banking (EUR 411.1 mln), mining (EUR 201.3 mln) and transportation and storage (EUR 53.5 mln), while other sectors were net repayers (with principal payments exceeding the loans disbursed).

Chart III.2.4 **Republic of Serbia's external debt by debtor**



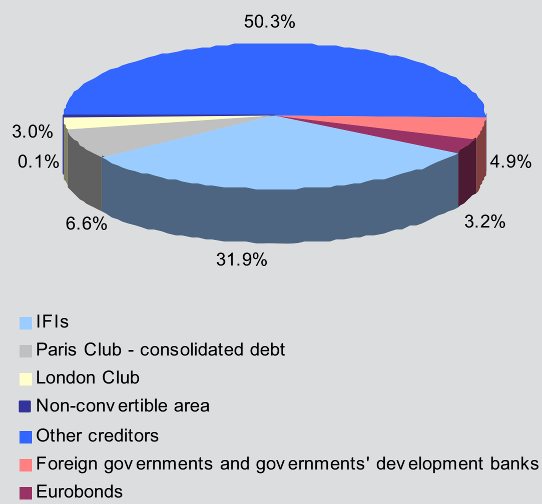
Source: NBS.

The external debt maturity structure improved further in 2011, as the share of short-term debt dropped by 5.0 pp to a mere 2.7% of total debt at end-2011.

By end-2011, debt to international financial organisations came at EUR 7,701.6 mln, 31.9% of total debt. Consolidated debt owed to Paris Club and London Club creditors equalled EUR 1,582.0 mln and EUR 720.4 mln respectively (6.6% and 3.0% of the total). Debt to foreign governments and development banks of foreign governments reached EUR 1,189.6 mln, accounting for 4.9% of the total, while non-convertible currency debt (clearing), at EUR 23.8 mln, equalled 0.1% of the total. Through the eurobond issue in the international market, the Republic of Serbia incurred EUR 772.8 mln in debt, which made up 3.2% of its total external debt. Debt to other foreign creditors, including banks, other financial institutions, suppliers, strategic

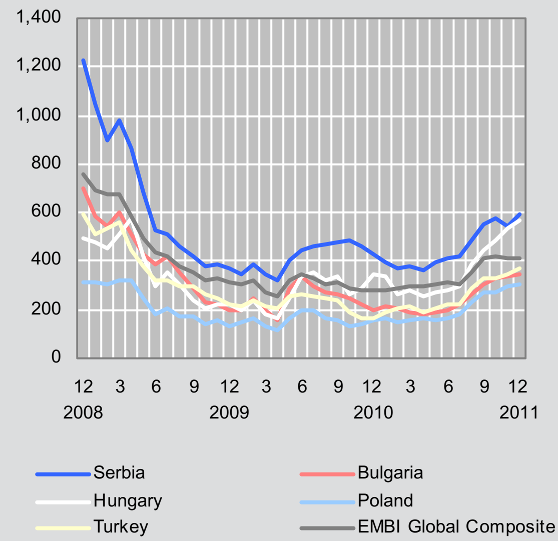
[17] Pursuant to the IMF's methodology, the Republic of Serbia's external debt also includes public debt liabilities, which, in addition to the old rescheduled debts and new government borrowings, encompass NBS liabilities, non-regulated RS liabilities including clearing debt, as well as a portion of debt of local governments and state funds and agencies that is not government-guaranteed.

Chart III.2.5 **Republic of Serbia's external debt by foreign creditor**
(as at 31 December 2011)



Source: NBS.

Chart III.3.1 **EMBI by country**
(monthly averages, basis points)



Source: JP Morgan.

partners and other companies, stood at EUR 12,135.2 mln or 50.3% of the total.

3. Trends in the FX market and the dinar exchange rate

In 2011, dinar gained 0.8% against the euro in nominal terms, bucking the trend prevalent in the majority of European countries running similar exchange rate regimes.

Strengthening of the dinar was most prominent in the first half of the year, reaching the year's peak at mid-May (96.7 EUR/RSD). Such trend was aided mainly by the decline in the country risk premium and the strengthening of Serbia's credit rating[18], which made the dinar and dinar-denominated securities more attractive to investors. Restrictive monetary policy measures (lifting of the key policy rate by April and implementing amendments to required reserve regulations) also contributed to the dinar's strengthening.

Against the backdrop of market insecurity creeping in since June as a result of the deepening debt crisis in the euro area and soaring country risk premiums in Serbia and region-wide, the dinar started to weaken. Such tendency, which extended until end-July was reversed over the following three months, chiefly owing to FDI inflow, while the precautionary stand-by arrangement concluded with the IMF also helped stabilise the exchange rate.

November and December saw appreciation and depreciation pressures alternating, ultimately leading to dinar weakening toward the year-end. The key contributors to the appreciation were FDIs and higher inflow from remittances. In November and especially December, the government spent funds from its FX accounts, which strengthened dinar liquidity. Depreciation pressures intensified in late December, triggered by higher residents' demand for foreign exchange, partly seasonal in character, i.e. stemming from energy imports. With its BB- credit rating confirmed by Fitch, Serbia was perceived less risky compared to its

[18] Standard & Poor's lifted Serbia's credit rating from BB– to BB, retaining the stable outlook.

regional peers, which partially softened the dinar's weakening against the euro.

In 2011, the NBS intervened in the IFEM by selling EUR 90.0 mln and purchasing EUR 45.0 mln. The average daily interbank trading in the IFEM (the NBS excluded) rose by c. 80% relative to 2010, reaching EUR 77.2 mln. Larger trading volumes in the IFEM since May went in parallel with higher daily oscillations in the dinar exchange rate, which had a stabilising impact on capital inflows and outflows, i.e. discouraged inflow of speculative capital.

In 2011, the dinar lost 2.0% against the dollar in nominal terms. As the dinar strengthened against the euro and weakened against the dollar, 2011 saw the nominal effective exchange rate of the dinar appreciating[19] by 0.3%. Such trends, coupled by 7.0% inflation at home and lower inflation rates in the euro area and the US (2.7% and 3.0%, respectively), caused the real effective appreciation of the dinar of 4.4% (5.0% against the euro and 1.8% against the dollar).

4. Money and capital market trends and bank lending

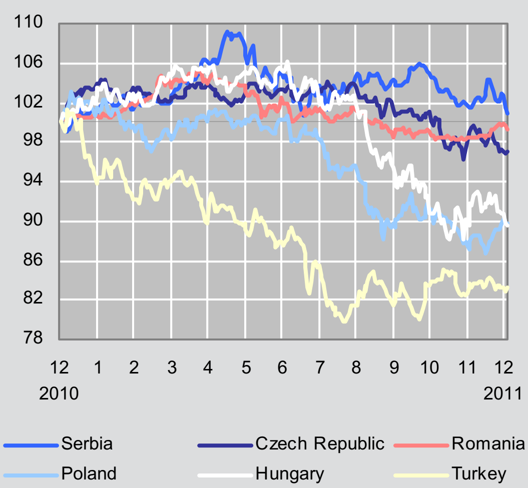
Interest rates

BEONIA generally trended below the key policy rate throughout 2011. Its negative deviation from the key policy rate ranged from 0.1 pp to 1.3 pp in terms of monthly averages. The main driver behind such movements in BEONIA was ample liquidity of the banking sector, as witnessed by lower trading in the overnight money market. Namely, average daily trading volumes came at RSD 6.6 bln in 2011, down by 18.9% on 2010.

In the first two months of 2011, the yield curve slope narrowed and from March until the year-end the range of BELIBOR rates stabilised at around 1.0 pp. Until end-2011, BELIBOR rates of all maturities mirrored the trends in the key policy rate.

In December 2011, average monthly values of BELIBOR moved between 10.1% for the shortest and

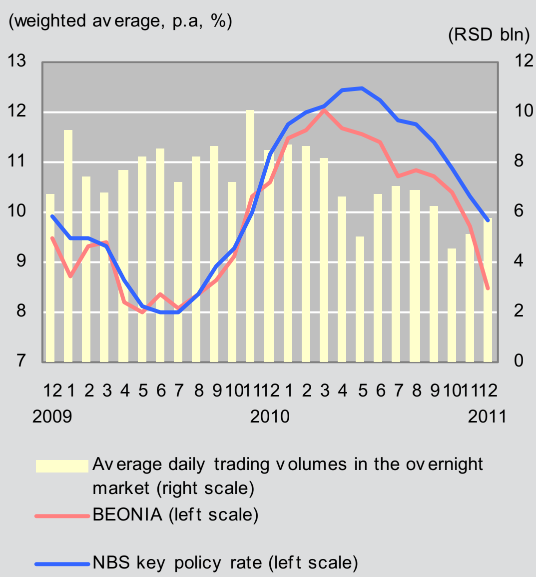
Chart III.3.2 **Movements in exchange rates of national currencies against the euro***
(December 31, 2010 = 100)



* Growth represents appreciation.

Sources: NBS and websites of central banks.

Chart III.4.1 **Trends in the overnight interbank money market and NBS key policy rate**



Source: NBS.

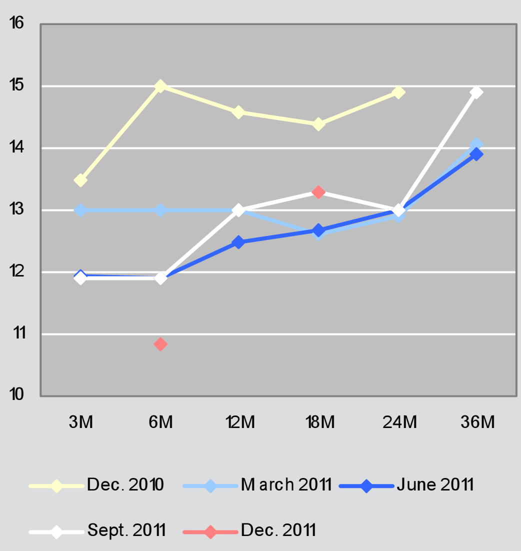
[19] Weights used: 0.8 for the euro and 0.2 for the dollar.

11.2% for 6-month maturity, down by 1.6 pp and 2.4 pp y-o-y respectively.

Rates in the primary market of government securities were determined by non-resident demand and developments in the global financial market. Despite increases in the key policy rate in the first four months of 2011, rates on government securities fell more sharply in H1 than H2 when the process of monetary policy easing started. This was due to the escalation of the public debt crisis in some euro area members in H2, which elevated risk aversion and dampened foreign investor demand for government securities.

In addition to its regular T-bill issues, the government issued for the first time dinar bonds with a fixed coupon rate and semi-annual coupon payment for 3-year maturity, thus enabling the further development of the government securities market. Besides, the benchmark dinar yield curve for up to 3-year maturity was formed, which positively affected the development of dinar financial instruments.

Chart III.4.2 **Interest rates in the primary market of government securities**
(weighted average values, p.a., %)



Source: Ministry of Finance.

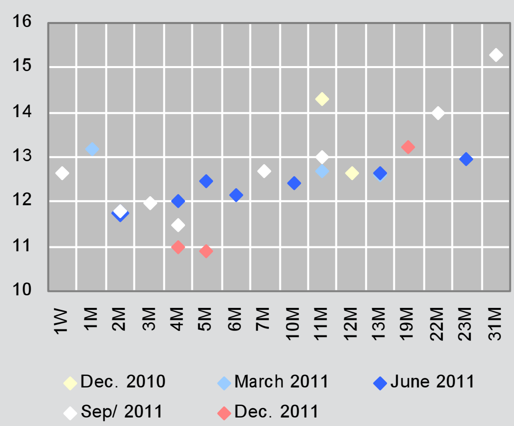
Auctions of euro-denominated government securities were also held for the first time – with the maturity of 53 weeks, 18 months, 3 and 15 years. Performance at shorter-maturity auctions was almost maximum, but only partial for longer maturities. Effective rates on these securities ranged from 4.48% to 5.85%.

In 2011, investor interest in secondary trading in government securities increased, which raised the degree of development of this market. Trading in dinar securities totalled RSD 58.3 bln. Somewhat more than a half of trading (RSD 29.9 bln) was initiated by primary trading, i.e. relates to trading concluded up to two business days after primary purchase.

Rates on fresh dinar loans reflected the key policy rate trends, particularly in case of household loans with interest cut by 2.1 pp in 2011. Rates on dinar corporate loans displayed a somewhat softer decline (0.5 pp) as funds earmarked for subsidising the interest on these loans were depleted in the first five months.

Though slightly oscillating, interest rates on fresh FX or FX-indexed loans stayed broadly unchanged throughout the year, only to fall sharply in the last two months as the new Financial Services Consumers Protection Law entered into force. Rates were cut on most earlier approved loans, chiefly due to changed terms for CHF-indexed lending.

Chart III.4.3 **Yield curve in the secondary market of government securities***
(weighted average values, p.a., %)

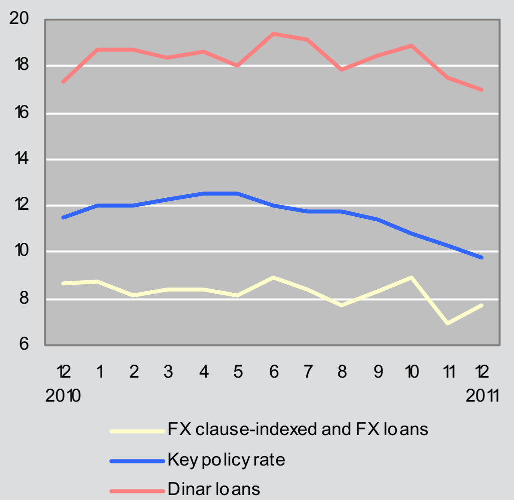


* All trade transactions above RSD 5 mln in the secondary market of government securities, performed up to two business days after the primary purchase.

Source: Ministry of Finance, based on data of the Central Securities Depository and Clearing House.

Deposit rates recorded similar movements as lending rates in 2011. Rates on dinar term deposits were lowered by 1 pp to 9.7%, while those on FX term deposits stayed generally the same (4.7% vs. 4.6% in December 2010).

Chart III.4.4 **Interest rates on new corporate and household loans***
(weighted average values, p.a., %)



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

Source: NBS.

Banks offered the highest rates in the November 'savings week' – the rate on the most common type of saving – up to 1-year euro deposits equalled 5.2% in November, only to be cut to 4.7% in December.

Stock exchange trends

Both Belgrade Stock Exchange (BSE) indices tumbled in 2011. BELEX15, the index of the most liquid shares, fell by 23.4%, while the general BELEXline index lost 23.8%.

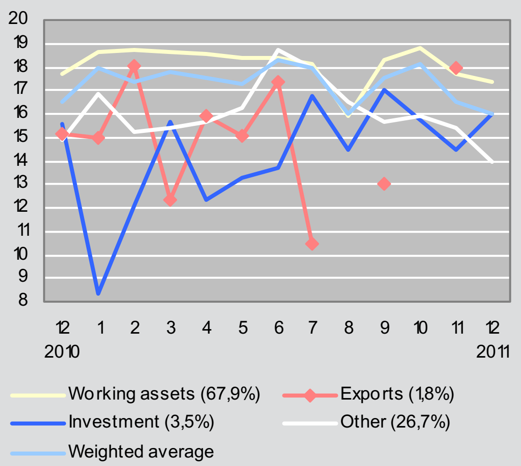
Early-2011 saw a decline in country risk premium and positive assessments by credit rating agencies, which heightened foreign investor interest in shares. As a consequence, BELEX15 and BELEXline gained 26.6% and 16.6% by end-May respectively.

However, as the sovereign debt crisis deepened in the euro area in H2, investor risk aversion went up and BELEX15 and BELEXline precipitated down (39.5% and 34.7% respectively).

Trading in shares amounted to RSD 24.4 bln in 2011, up by 33.4% on 2010, with BELEX15 shares making up 47.4% of the total.

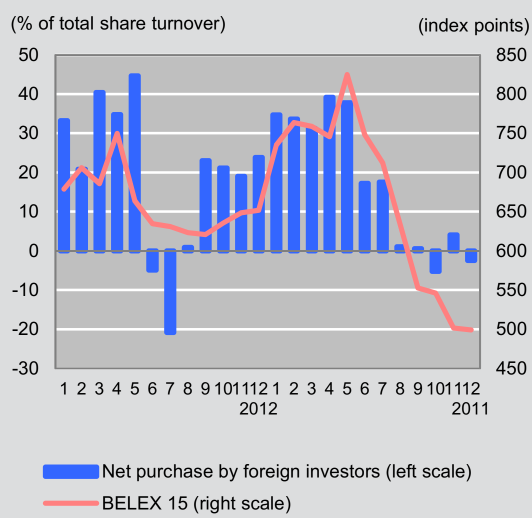
Trading in frozen FX savings bonds dropped by 10.4% from 2010. More than a half related to 2016-series bonds

Chart III.4.5 **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.

Chart III.4.6 **BELEX 15 and foreign investor activity at the Belgrade Stock Exchange**

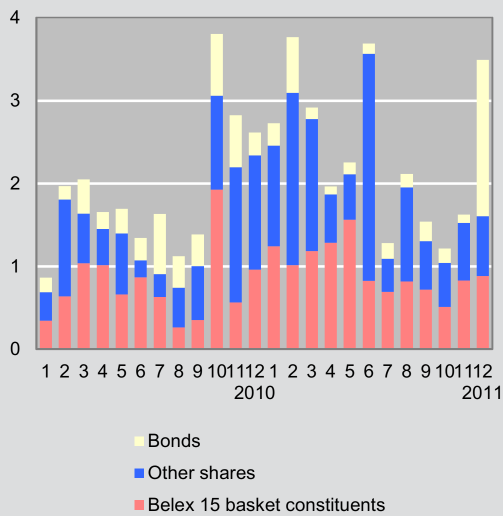


Source: Belgrade Stock Exchange.

(51.9%). The yield to maturity rates moved from 4.5% to 5.8% by end-2011, vs. 4.0%–4.3% by end-2010.

BSE market capitalisation contracted by RSD 116.0 bln to RSD 817.5 bln by the year-end (25.7% of GDP). This was due to plummeting stock prices and redemption of frozen FX savings bonds (A 2011-series).

Chart III.4.7 **Structure of trading at the Belgrade Stock Exchange**
(RSD bln)



Source: Belgrade Stock Exchange.

Monetary aggregates

Total reserve money rose by nominal 13.1% and real 5.7% in 2011. In absolute terms, total reserve money increased by RSD 70.4 bln, with its dinar component up by RSD 38.9 bln.

Throughout 2011, reserve money was issued via FX and withdrawn via dinar transactions.

NFA rose by RSD 198.1 bln. An increase was also noted for FX reserves – mainly due to government borrowing via the sale of eurobonds in international markets, the sale of euro-denominated bonds in the domestic market, disbursement of loans from banks and international financial institutions. Inflows by far exceeded regular outflows under the settlement of government's external liabilities, redemption of frozen FX savings and NBS's interventions in the IFEM.

NDA contracted by RSD 128.2 bln. Dinar reserve money, issued chiefly by spending of government's FX deposits by the year-end, was withdrawn mainly through open market operations. Though the cycle of key policy rate cuts began in June, investment in NBS bills via repo operations was attractive for banks throughout the year. The stock of these securities amounted to RSD 120.6 bln by the year-end, up by RSD 73.7 bln on end-2010.

In terms of the structure of dinar reserve money, cash in circulation gained RSD 22.4 bln and bank reserves RSD 17.2 bln, mainly due to rising bank excess reserves. Balances in local government accounts with the NBS remained broadly unchanged on end-2010.

The decline in money supply was halted in 2011. Dinar monetary aggregates M1 and M2 rose by nominal 16.0% and 18.9% respectively, or by 8.4% and 11.1% in real terms. This was due to an increase in balances in dinar accounts and cash in circulation. Balances in dinar accounts of all sectors went up, with a greatest increase observed for corporate and household accounts. The year 2011 saw a record annual rise in dinar household saving (RSD 6.0 bln), chiefly in November and December.

The broadest monetary aggregate M3 rose 10.3% in nominal and 3.1% in real terms. NFA of the banking sector drove the creation of M3, while NDA acted in the opposite direction. Within NDA, growth in government deposits and an increase in capital and loan loss provisions impacted on the withdrawal of M3, while bank lending activity, primarily corporate and household lending, led to its creation. Though it was drawing down on its accounts with the NBS by the year-end, the government acted in the direction of money withdrawal.

Growth in FX deposits of non-monetary sectors was due to rising household saving and an increase of balances in companies' FX accounts partly due to the inflow from sale of "Delta Maxi Group". Insurance companies and pension funds purchased 15-year euro-denominated government securities, which drove down FX deposits of these organisations.

M3 coverage by NBS FX reserves rose from 77.5% at end-2010 to 84.1% at end-2011, while the coverage by total banking sector FX reserves declined from 90.6% to 89.7%.

Table III.4.1 **Balance sheet of the National Bank of Serbia**
(in RSD mln)

	December 2010	December 2011	Changes in 2011
Net foreign assets	**892,721**	**1,091,348**	**198,627**
Net FX reserves	893,497	1,091,587	198,090
Gross FX reserves	1,055,151	1,261,730	206,579
IMF loans	-161,654	-170,143	-8,489
Other net foreign assets	-776	-239	537
Net domestic assets	**-355,382**	**-483,625**	**-128,243**
Net domestic NBS loans	-149,570	-267,380	-117,810
Net loans to government[1)]	-106,392	-147,501	-41,109
Government loans	1,319	1,275	-44
Government deposits	-107,711	-148,776	-41,065
Net claims on banks	-46,504	-120,245	-73,741
Loans to banks	404	350	-54
Repo operations	-46,900	-120,550	-73,650
Other securities	-8	-45	-37
Loans to non-bank financial institutions	5,519	5,565	46
Loans to other sectors	3,404	2,486	-918
Term and restricted deposits	-5,597	-7,685	-2,088
Other net assets	-205,812	-216,245	-10,433
Reserve money	**537,338**	**607,722**	**70,384**
Dinar reserve money	188,162	227,067	38,905
Currency in circulation	91,750	114,190	22,440
Dinar reserves of banks	87,412	104,625	17,213
Required reserves	65,079	71,247	6,168
Excess reserves	22,333	33,378	11,045
Other deposits of other sectors	1	0	-1
Local government deposits	8,998	8,253	-745
FX bank deposits	349,177	380,654	31,477

1) Excluding local government authorities.
Source: NBS.

Table III.4.2 **Monetary survey**
(in RSD mln)

	December 2010	December 2011	Changes in 2011
Net foreign assets	**507,330**	**670,091**	**162,761**
Bank net foreign assets	-385,391	-421,257	-35,866
Net domestic assets of the banking sector	**853,447**	**830,353**	**-23,094**
Net domestic loans	1,722,549	1,817,840	95,291
Net claims on government	65,644	29,538	-36,106
Government loans	193,983	199,356	5,373
Government deposits	-128,339	-169,818	-41,479
Loans to other resident sectors	1,656,905	1,788,303	131,398
Loans to other financial institutions	35,433	43,758	8,325
Loans to the corporate sector	1,030,757	1,115,437	84,680
Loans to households	571,946	602,630	30,684
Loans to local government authorities	18,106	25,714	7,608
Loans to non-profit and other organisations	663	765	102
Other net assets	-869,102	-987,488	-118,386
Money supply M3	**1,360,777**	**1,500,444**	**139,667**
Money supply M2	410,495	487,914	77,419
Money supply M1	253,286	293,694	40,408
Currency in circulation	91,750	114,190	22,440
Transaction deposits	161,536	179,504	17,968
Dinar savings and term deposits	157,209	194,220	37,011
FX deposits	950,282	1,012,530	62,248

Source: NBS.

Bank lending

Under the composite measure[20], lending activity rose at a weaker pace in 2011 relative to the year before, with the slowdown being more manifest in H2. The growth was due to rising domestic loans – their share in GDP was down by 1.3 pp to 54.2% in 2011.

Domestic lending to non-monetary sectors rose by real 7.8%[21] in 2011, in response to slower growth in lending to companies (5.4%) and households (5.5%), and a faster rise in loans to public enterprises (42.6%). Borrowing by local authority bodies was similar to 2010 levels.

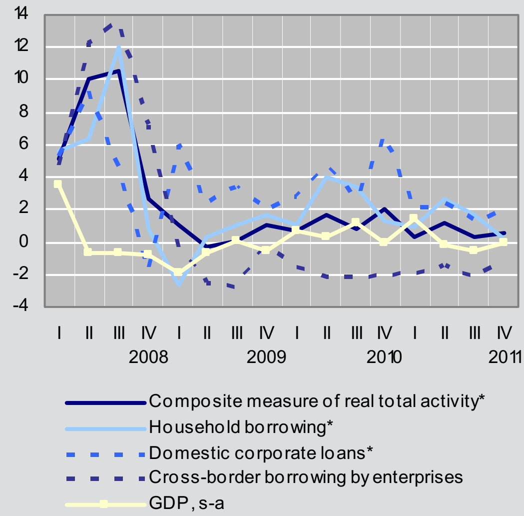
Bank claims on non-monetary sectors under loans rose by RSD 121.6 bln nominally, or by RSD 123.4 bln excluding the exchange rate effect.

In the course of 2011, banks generally tapped domestic sources of funding. The majority of funds were provided from rising corporate and household deposits, mainly in foreign currency. Slower growth in lending resulted in the narrowing of the loan-to-deposit ratio from 125.4% in 2010 to 125.6% in 2011. On the other hand, a part of available funds was channelled by banks to safer investment (repo and government securities). The contribution of foreign sources to lending was positive throughout the year, though smaller than that of domestic sources. Due to lesser disbursement of external loans, net external borrowing by banks contracted despite a reduction in external claims.

Companies generally used current asset loans which accounted for almost a half of all newly approved corporate loans in 2011. Investment loans were also popular – their share in fresh loans growing throughout the year. In H1, export loans were also on a rise. Though industrial and trade companies accounted for the major portion of bank claims, their share declined relative to end-2010, while claims on companies in transport and communications sectors went up. Among the newly approved household loans, housing loans were predominant. The disbursement of consumer loans slightly declined, while borrowing under cash loans and current account overdrafts increased.

Lending activity in 2011 was affected by several recommendations and measures adopted in the course of the year. To temporarily ease the loan repayment burden on the private sector and help the economy overcome illiquidity problems, the government announced in H1 recommendations to be implemented by banks on a voluntary basis. The idea was to give households an option of repaying interest only for the duration of up to two years. A similar incentive with a one-year grace period was proposed for the corporate sector, implying the extension of the loan repayment period by one year. In order to mitigate risks in the financial system, the NBS adopted a set of measures in May setting additional requirements in relation to FX and FX-indexed lending whereby only euro-indexation was permitted, mandatory downpayment for non-housing loans was set at 30%, while the maximum amount of mortgage FX and FX-indexed loans was limited to 80% of the value of the property mortgaged. As the implementation of the new Financial Services Consumers Protection Law began in December 2011, original disbursement terms of some earlier approved housing loans were changed, while at the same time longer-maturity housing loans without currency clause were added to bank offers.

Chart III.4.8 **Loans and GDP**
(quarterly rates, %)



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

Source: NBS.

[20] As an indicator of total borrowing, it includes domestic lending to non-monetary sectors and corporate cross-border borrowing.

[21] Deflated by inflation, excluding the exchange rate effect.

The share of dinar corporate loans contracted partly due to the suspension of subsidised dinar liquidity lending by mid-2011. On the other hand, the households' exposure to FX risk declined as the share of dinar household loans increased on end-2010.

As subsidised lending was particularly pronounced in H2 2011, the funds earmarked for interest subsidising were depleted for most types of loans already by mid-year. Total RSD 107.9 bln in these loans were approved in 2011, half of the amount approved in 2010. Since fewer funds are envisaged for subsidised lending in 2012, the impact of this segment on lending activity will be significantly smaller than in earlier years.

Table III.4.3 **Subsidised loans**
(in RSD bln)

	2010	2011
Government Programme of Measures to Ease the Effects of the Global Financial Crisis		
Loans approved	**185.1**	**93.9**
Liquidity	124.6	74.2
Investment	24.2	16.8
Consumer	9.2	3.0
Dinar cash	27.1	0.0
Subsidised housing loans		
	8.8	**6.3**
Subsidised housing army loans		
	0.9	**1.2**
Subsidised farmers' loans		
	8.1	**6.5**

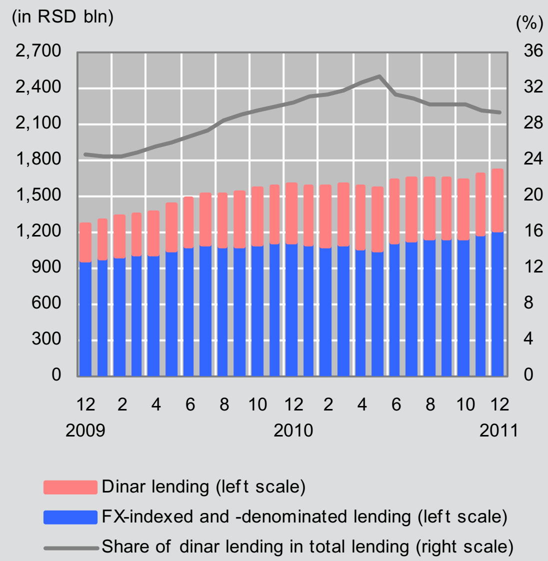
Sources: Ministry of Economy and Regional Development, National Mortgage Insurance Corporation and Ministry of Agriculture, Forestry and Water Management.

Measured by the share of NPLs, the loan repayment capacity deteriorated in 2011. Total NPL share (by the gross principle) was up by 2.1 pp to 19.0% in December (10.4% by the net principle). The share of corporate NPLs rose by 1.6 pp to 22.3% (up 2.8 pp to 24.6% in case of companies). Household loan arrears rose by 0.1 pp to 7.9% in December (together with entrepreneurs it went up by 0.2 pp to 9.4%).

5. Dinarisation

The dinarisation strategy rests on three inter-connected pillars. The first pillar calls for strengthening the macroeconomic environment by delivering low and stable inflation, a stable financial system and sustainable economic growth. The second pillar consists of measures geared at promoting dinar-denominated instruments and markets, with a special emphasis on the development of the dinar bond market. The third pillar aims to promote hedging against the existing currency risks in the non-bank sector and to discourage further build-up of these risks.

Chart III.5.1 **Share of dinar lending in total corporate and household lending**



Source: NBS

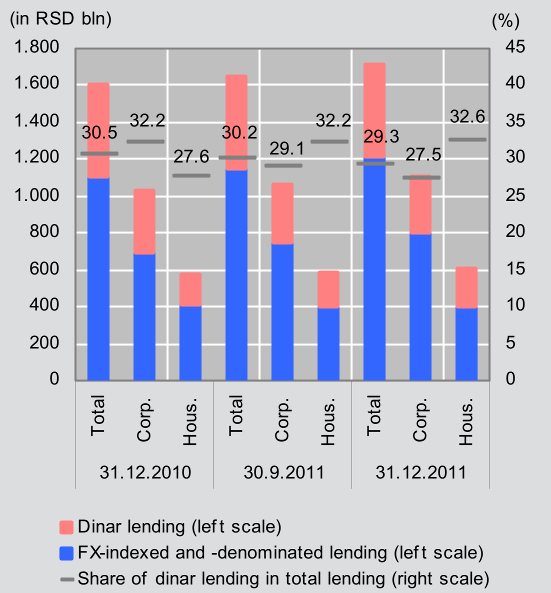
The share of dinar in total corporate and household lending is the key indicator used by the NBS to monitor the degree of dinarisation of the Serbian financial system.[22] Based on this indicator, the degree of dinarisation was reduced from 30.5% at end-2010 to 29.3% at end-2011. However, diverging developments were recorded through the year. The share of dinar in total corporate and household lending was rising until

[22] Supplementary indicators of the degree of dinarisation are the following: the share of dinar in total corporate and household new loans, share of dinar deposits in total corporate and household deposits, and the share of dinar debt in total public debt, with a special emphasis on the currency and maturity structure of government securities. For more information see the *Report on Dinarisation of the Serbian Financial System* published quarterly on NBS's website: http://www.nbs.rs/internet/english/90/dinarizacija.html/.

May (with its highest recorded value of 33.3%), only to gradually decline thereafter (except in October). Broken down by sector, the degree of dinarisation up to August was higher in the corporate than the household sector. Opposite trends ensued – in 2011 the degree of dinarisation rose by 4.9 pp in the household and declined by 4.7 pp in the corporate sector.

The degree of dinarisation in 2011 was strongly affected by subsidised dinar government loans and NBS measures. The NBS supported the dinarisation process through monetary policy instruments (required reserves, liquidity loans, FX swap auctions), prudential measures (extension of the scope of first-degree liquid receivables of banks[23],

Chart III.5.2 **Lending by sector**



Source: NBS

downpayment requirement for FX and FX-indexed loans, a cap on mortgage FX and FX-indexed loans, loan indexation to euros only, preference given to dinar loans in bank offers, no restriction on payments in foreign currency related to transactions in financial derivatives) and educational activities (hedging conferences).

[23] With the inclusion of 90% of fair value of RS dinar securities with minimum 90-day maturity (securities traded and available for sale).

6. Aggregate demand

Table III.6.1 **GDP distribution***

	Growth rates (%)	Contribution to GDP growth (pp)
GDP, at market prices	**1.6**	**1.6**
Domestic demand	2.1	2.4
Total final consumption	-2.0	-1.9
Investment	24.2	4.3
Net exports (exports - imports)	-5.4	-0.8

* NBS estimate.
Sources: Statistical Office and NBS.

According to the estimate of the Serbian Statistical Office, GDP grew by 1.6% in 2011.

GDP growth was driven primarily by a rise in total investment, notably of the private sector, while the contribution of net exports was significantly smaller. Total final consumption and net exports declined.

Domestic demand

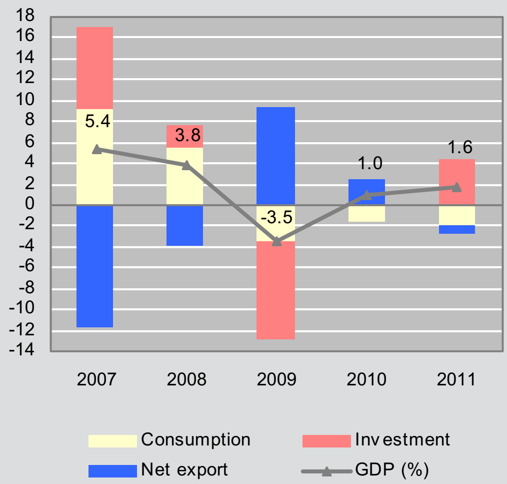
The contribution of domestic demand to GDP growth was 2.4 pp in 2011. Domestic demand stepped up in 2011 as a result of rising investment activity. In contrast, final consumption went down, chiefly on account of declining household consumption with dented government consumption also playing part. Within investment activity, gross private sector investment in fixed assets increased, while government investment declined.

Net external demand

A slower real rise in exports than imports (4.1% vs. 4.5%) resulted in a negative contribution of net external demand to GDP growth in 2011 (-0.8 pp).

Euro-denominated exports rose by 14.0% in 2011. The slowdown in economic activity of Serbia's main trade partners led to a slower rise in exports in H2. The highest

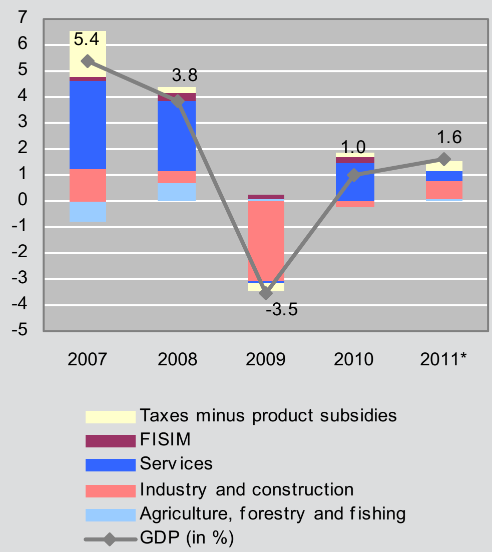
Chart III.6.1 **Contribution to GDP growth – expenditure side***
(in percentage points)



* NBS estimate.

Sources: Statistical Office and NBS.

Chart III.7.1 **Contribution to GDP growth – production side***
(in percentage points)



* NBS estimate.

Sources: Statistical Office and NBS.

share in exports was recorded for food, basic metals and chemical products, while the key export markets were Germany, Italy, Bosnia and Herzegovina.

Euro-denominated imports (14.6%) rose a bit faster than exports. Intermediate goods remained the dominant import item (63.0%). The strongest growth relative to 2010 was recorded for imports of equipment, mainly as a result of the investment cycle initiated in 2011 in some export-oriented branches.

At end-2011, exports were 12.4% above and imports 6.1% below their pre-crisis levels.[24]

7. Economic activity

The main drivers behind the 1.6% growth of the Serbian economy in 2011 were the expansion of industrial output (0.5 pp) and a rise in the information and communications sector (0.6 pp). Improved performance was also recorded in construction (0.3 pp) and the sector of transport and storage, real estate business and other catering activities (0.1 pp each), and agricultural production (0.1 pp). The strongest negative contribution came from retail and wholesale trade (-0.7 pp).

The strongest GDP growth was recorded in Q1 (1.4% s-a [25]). It however weakened in Q2 and Q3 (-0.2% and -0.6% s-a respectively), only to mildly pick up in Q4 (0.1% s-a). The slowdown in economic growth during the year can be partly attributed to the influence of the deepening debt crisis in some euro area members.

Gross value added of industrial output rose on account of manufacturing, and the sectors of mining and electricity, gas, steam and air conditioning supply.

The index of the physical volume of manufacturing declined in 2011. The main negative contribution was made by the production of coke and petroleum products (due to the overhaul of the Pančevo oil refinery), furniture and other means of transport. The major positive contribution came from bolstered production of metal products apart from machinery, and the production of pharmaceutical products and preparations.

Following a decline in 2010, gross value added of the agricultural sector picked up by 0.9% in 2011. The

[24] H1 2008.

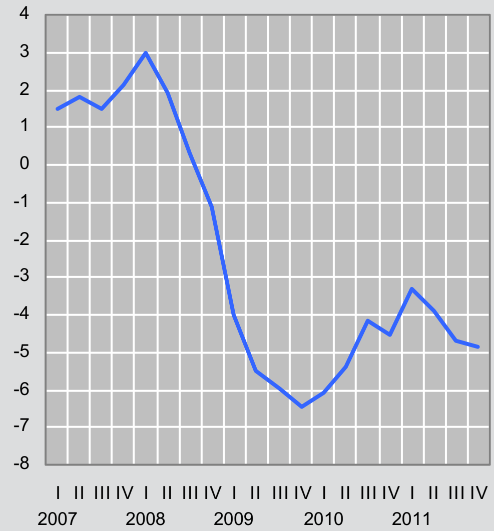
sharpest rise was recorded for fruit growing, and the steepest fall in the production of grains and industrial plants.

Gross value added of the information and communications sector grew by 8.4% in 2011, mainly owing to a rise in mobile telephony traffic and the production of software. A rise was also recorded for construction (7.7%).

The key negative contribution to GDP growth in 2011 was made by the retail and wholesale trade sector (5.5%). A drop in retail trade was the most noticeable in H2 and stayed at a low level throughout 2011 (ending the year at 26.7%, below the pre-crisis level[26]).

According to NBS estimates, widening of the output gap in 2011 points to the continuation of strong disinflationary pressures stemming from low aggregate demand.

Chart III.7.2 **Output gap***
(percentage deviation from trend)



* NBS estimate based on Kalman filter.

Table III.7.1 **Economic activity in 2011***

	Growth rates (%)	Contribution to GDP growth (pp.)
Gross domestic product (GDP)	**1.6**	**1.6**
Agriculture, forestry and fishing	0.9	0.1
Mining and quarrying	9.0	0.1
Manufacturing	0.6	0.1
Electricity, gas, steam and air conditioning supply	9.7	0.3
Water supply; sewerage, waste management and remediation act.	1.9	0.0
Construction	7.7	0.3
Wholesale and retail trade; repair of motor vehicles and trailers	-5.5	-0.7
Transportation and storage	3.1	0.1
Accommodation and food service activities	1.8	0.0
Information and communication	8.4	0.6
Financial and insurance activities	1.0	0.0
Real estate activities	0.5	0.1
Professional, scientific and technical activities	1.5	0.0
Administrative and support service activities	-0.2	0.0
Public administration and defence; compulsory social security	0.8	0.0
Education	0.7	0.0
Human health and social work activities	-1.8	-0.1
Arts, entertainment and recreation	5.6	0.1
Other service activities	14.7	0.1
Activities of households as employers; services-producing act. for own use	1.9	0.0
Gross value added by activities	1.5	1.3
FISIM	0.3	0.0
Gross value added (GVA)	1.6	1.3
Taxes on products minus subsidies on products	1.9	0.3

* NBS estimate.
Sources: Statistical Office and NBS.

[25] All s-a data presented in the 'Economic activity' section are NBS estimates.

[26] H1 2008.

8. Wages and employment

The year 2011 saw net wages rise by 11.2% in nominal terms. Nominal net wages grew somewhat faster in the private than in the public sector (11.0% and 9.3%, respectively). With 0.1% growth, real net wages slowed down relative to 2010 (1.0%). Observed by sector, electricity, gas, steam and air conditioning supply, mining and information and communication were the most important contributors to wage growth.

The average nominal net wage paid out in Serbia in 2011 was RSD 37,976, while the average for the public sector came at RSD 43,503. Expressed in euros, the average net wage in 2011 equalled EUR 372.5, which is an increase from the year before (EUR 330.1).

A drop in real gross wages combined with a boost in productivity in 2011 pushed unit labour costs in industry down by 3.9%. This went across the board, in all three industry sectors, with mining providing the greatest negative contribution due to decreasing production costs in exploitation of crude oil and natural gas.

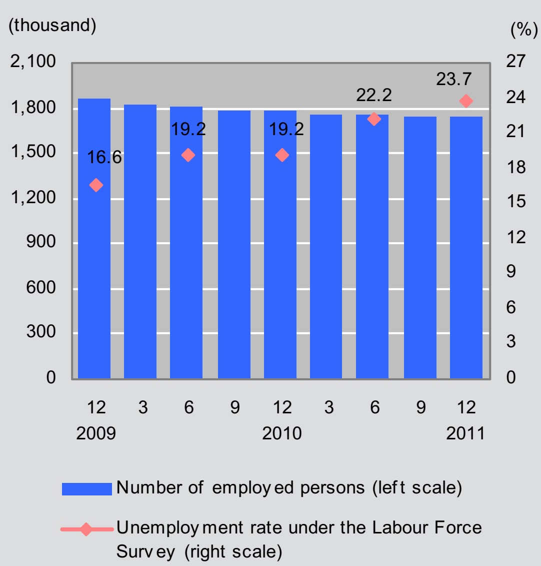
Negative trends in the labour market continued into 2011. The National Employment Service data show unemployment rising by 15,667 compared to the year-ago period, with increases recorded both in the category of persons whose employment contracts ended and the first-time job seekers.

According to the Republic Statistical Office, total employment also shrunk in 2011, by 39,094 persons, or 2.2%. The greatest cuts in employment were recorded for entrepreneurs and in the manufacturing sector.

The Labour Force Survey showed a 23.7% unemployment rate in November, i.e. a 4.5 pp increase relative to October 2010. Persons whose employment contracts ended and the first-time job seekers added a respective 2.8 pp and 1.7 pp to the unemployment figure.

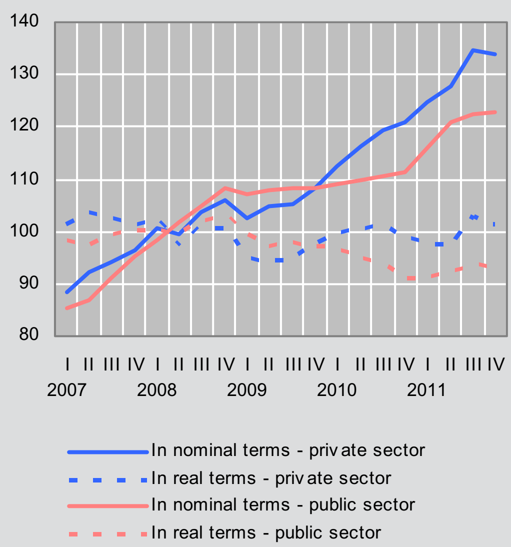
The same survey reported a slump in formal employment – from 37.7% in October 2010 to 35.3% in November 2011. Informal employment rate[27] dropped in the same period from 19.6% to 17.8%. Also, 2011 saw long-term unemployment[28] rising from 13.8% to 17.6%. Evidently,

Chart III.8.1 **Employment and unemployment rate**



Source: Statistical Office.

Chart III.8.2 **Average net wages**
(s-a, H1 2008 = 100)



Source: Statistical Office.

[27] Informal employment rate captures employees in unregistered companies, employees in registered companies without the formal employment contract and social and pension insurance and unpaid assisting family members.

[28] Long-term unemployment rate represents the percentage of persons unemployed for a year or longer in total active population.

modest economic recovery in 2011 did not suffice to reverse negative labour market trends.

9. Inflation expectations

Inflation expectations of all sectors trended above the upper bound of the target tolerance band throughout 2011. In Q4, all sectors were revising their expectations down in response, inter alia, to a continuous fall in inflation towards its target level. Hence, the difference between the expected and targeted inflation narrowed down, and by end-2011, one year-ahead inflation expectations were close to the upper bound of the target tolerance band.

According to the Bloomberg survey which covers representatives of the financial sector, one year-ahead inflation expectations rose in Q1, only to stabilise at 8.0% over the next two quarters. Inflation expectations improved in Q4 and settled at 6.0% by the year-end.

As indicated by the Gallup survey, financial sector inflation expectations were 7.4% in the first four months of 2011. Expectations varied between 8.1% to 9.4% over the next five months, only to return to the early-year level in October. Judging by the results of the Ipsos[29] survey, available from November, financial sector inflation expectations stood at 7.6% in December. Expectations of the corporate sector, trade unions and households varied throughout the year, but began to decline in Q4 – by the year-end inflation expectations of all three sectors came at 8.5%, 9.3% and 10.0% respectively.

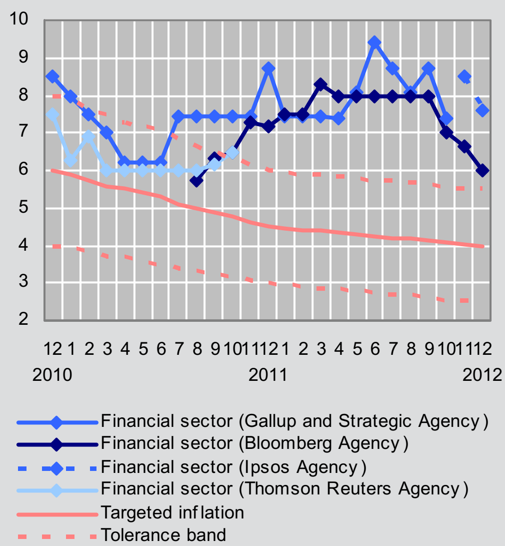
10. Fiscal policy

Consolidated budget deficit was RSD 158.4 bln in 2011 or 5.0% of GDP, up by 0.3 pp on 2010. A real decline in budget revenue in 2011 exceeded that in expenditure.

Total revenue amounted to RSD 1,302.5 bln, down by 4.1% in real terms from 2010. A real drop in revenue was prompted by lower VAT (-3.4%), income tax (-2.3%) and customs receipts (-21.1%) and non-tax revenues (-9.5%).

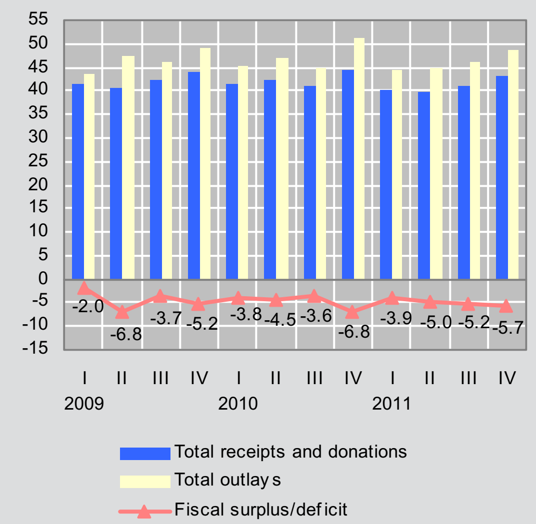
Expenditure totalled RSD 1,460.9 bln, down by 3.2% on 2010. A real drop was recorded for capital

Chart III.9.1 **One-year ahead expected and targeted inflation**
(%)



Source: NBS.

Chart III.10.1 **Public revenue and expenditure***
(% of GDP)



* IMF Methodology.

Source: Calculated based on Ministry of Finance data.

[29] Since November 2011, instead of Gallup, the Ipsos agency has been conducting a survey on inflation expectations for the NBS. The survey covers financial and corporate sectors, households and trade unions. In addition to bank representatives, the financial sector now includes respresentatives of insurance companies.

expenditure (-4.7%), subsidies (-6.9%) and outlays for the purchase of goods and services (-0.9%). A real rise relative to 2010 was recorded for the wage bill (0.1%) and interest expenses (18.0%).

Budget deficit in 2011 was partly financed by domestic borrowing, which resulted in limited fiscal expansion, i.e. a smaller effect of fiscal policy on demand. As the total sale proceeds of government dinar securities amounted to RSD 277.4 bln in 2011 (the longest maturity was extended from 24 to 36 months).

According to the NBS estimate, the share of public debt in GDP came at 47.7%[30] by end-2011. Estimating GDP as somewhat higher, the Ministry of Finance placed this ratio at 45.1%. Under the Public Debt Law, public debt figure published by the Ministry of Finance does not include social insurance funds and local government debts. To properly assess the compliance with fiscal rule relating to public debt to GDP ratio (the Budget System Law), it is necessary that social insurance funds and local government debts are included within the general government public debt figure. In light of this, the Fiscal Council cautioned that the statutory cap of 45% of GDP was not only overstepped by end-2011, but that public debt would continue to rise over the medium term unless fiscal consolidation measures were passed in 2012.[31]The Fiscal Council is of the opinion that the Government should adopt a public debt reduction programme at the time of the 2012 budget revision. The same recommendation was given by the IMF mission which stressed that a medium-term fiscal programme aimed to bring public debt to a sustainable level should be adopted promptly after the elections.[32]

[30] The stock of public debt according to data of the Ministry of Finance and GDP estimates of the NBS.

[31] Fiscal Council's Assessment of Fiscal Rules Compliance in 2011, 21 February 2012, and Proposal for Harmonising Different Methodologies of Public Debt Coverage and Measurement in Serbia, 24 February 2012; http://fiskalnisavet.rs/eng/.

[32] The IMF Aide Mémoire following the talks with representatives of the Republic of Serbia, 9 February 2012.

IV. Monetary policy in 2012

The key policy rate was cut by 25 bp to 9.5% in January 2012 and was kept unchanged thereafter. Sluggish economic recovery and dented inflation expectations prompted further monetary policy easing. However, uncertainties in the international environment, a rise in import prices, and fiscal policy at home spelled caution to monetary policy makers.

To ensure smooth operation of the FX market, the NBS intervened from February by selling foreign currency in the interbank FX market. In addition, the NBS adopted amendments to the Decision on Banks' Required Reserves with the National Bank of Serbia, which lowered the FX required reserves ratio (by 1 pp to 29% for up to two-year maturity; by 3 pp to 22% for over two-year maturity) and raised the share of FX required reserves allocated in dinars (by 5 pp – to 20% for funding sources of up to two years, and 15% for sources of over two years). This measure aims to: contribute to the stabilisation of inflation over the projected period, support moderate lowering of borrowing costs and facilitate refinancing, contribute to the stabilisation of the foreign exchange market, and stimulate banks to obtain longer-term sources of funding.

Monetary policy measures support macroeconomic stability and will enable the future government to renew and intensify fiscal consolidation and structural reforms. In line with expected fiscal consolidation and structural reforms, which will contribute to a reduction in external imbalances, the coming period is likely to see a fall in depreciation pressures, but also a weaker short-term pressure of demand, i.e. a short-term slowdown in expected economic growth.

The future path of the key policy rate will largely depend on the speed and intensity of fiscal consolidation to be undertaken by the future government, as well as on the continuation of the arrangement with the IMF. Price and financial stability can be delivered at a lower level of monetary restrictiveness provided fiscal consolidation and structural reforms are more efficient.

The NBS monetary policy in 2012 will be implemented in accordance with the Programme adopted by the NBS Executive Board by end-2011.[32] Monetary policy decisions will be geared at delivering low and stable inflation in the medium run. Hence the gradual lowering of inflation target from 4.5%±1.5 pp to 4.0%±1.5 pp for end-2012. The inflation trajectory until 2012 is consistent with the need to ensure medium-term price stability and reflects the intention to achieve such stability by gradual lowering of inflation, without causing any disruptions to macroeconomic processes.

The NBS will continue to develop and strengthen market instruments of monetary regulation and to create, in cooperation with banks, the preconditions for further enhancement of the interbank money market. Furthermore, in cooperation with the Government, the NBS will actively contribute to the advancement of the dinar government securities market and the development of the dinar money market.

[32] Decision on the Monetary Policy Programme of the National Bank of Serbia in 2012, RS Official Gazette, No 93/2011; See Appendix 3, page 36.

Appendix 1. Letter of the National Bank of Serbia to the Government of the Republic of Serbia on Why Inflation Departed from the Target, 12 April 2011

Belgrade, 12 April 2011

GOVERNMENT OF THE REPUBLIC OF SERBIA

Mirko Cvetković, Prime Minister

Dear Mr Cvetković,

As inflation has trended for six consecutive months above the target tolerance band, we address you in accordance with the *Agreement between the National Bank of Serbia and the Government of the Republic of Serbia on Inflation Targeting* (Section 6, paragraph 4) in order to explain why inflation has moved away from the target tolerance band, the period within which we expect inflation to return within the target tolerance band, and policy action to be taken to deal with it.

Why inflation has moved away from the target tolerance band

Y-o-y inflation rose strongly in Serbia in H2 2010 and early 2011 – from 4.2% in June 2010 to 14.1% in March 2011.

The NBS Executive Board assesses that the rise in inflation over this period was mainly driven by exceptionally high food price growth and, to a lesser extent, by dinar's depreciation and strong regulated price growth.

Of the 9.9 percentage point rise in y-o-y inflation from June 2010 to March 2011, food contributed as much as 9.0 percentage points. This means that the key determinant of inflation were rising food prices, prompted by weak agricultural output last season and considerable growth in global food prices. Given a high share of food in CPI – 37.8%, inflation in Serbia is particularly sensitive to food price shocks. Moreover, due to the existing systemic solutions, food prices in Serbia are much more volatile compared to the neighbouring countries, which spurred their growth in the last three quarters.

Though to a lesser extent and via rising import prices, inflation was temporarily driven by weakening of the dinar in the May–July 2010 period, which was largely a consequence of escalation of public debt crisis in some of the neighbouring eurozone countries and the ensuing elevation of risk premium in the South-East European region, Serbia being no exception.

Regulated price growth, fairly robust since early 2011, stood as another generator of high inflation. After April adjustments (notably of electricity prices), regulated price growth will already in the first four months move around the upper bound of the growth limit envisaged for the whole year (7±2%).

To contain inflationary pressures in the last eight months, the NBS tightened its monetary stance. However, given the strength and nature of the food shock and manifest volatility of food prices, inflation persisted above the upper bound of the target tolerance band.

The period within which we expect inflation to return within the target tolerance band

The NBS Executive Board will take all actions under its remit to bring medium-term inflation within the target tolerance band. If no unexpected shocks take place, we expect inflation to gradually retreat to target starting from Q3 2011, to move back within the target tolerance band in H1 2012, and come closer to the midpoint by late 2012 (target for end-2012: 4%).

The speed at which inflation will come back to target will largely depend on success of the 2011–2012 agricultural season. If case of an average season, inflation is expected to subside already in mid-2011. An agricultural season weaker than last year could postpone and slow the decline in inflation.

Economic policy action to bring inflation back within the target tolerance band

Since August 2010, the NBS has been taking restrictive measures reflected in successive increases in the key policy rate – from 8% to 12.5%, and amendments to the decision on required reserves that stopped the process of relaxation of the rules in that area. With declining risk premium and more favourable credit rating, the dinar strengthened against the euro in late 2010 and early 2011, which will help bring down inflation.

Confident that food market volatility is the key factor behind current inflationary pressures, we believe you share our opinion that systemic measures and activities should be established and implemented without delay, which would contribute to market stabilisation and significant reduction in food price volatility. Assuming we pursue the planned income policy, this would contribute to the effectiveness of monetary policy measures and help avoid sudden changes in the policy stance triggered by fluctuations in inflation and inflation expectations. Ultimately, this would contribute to macroeconomic stability and sustain economic and employment growth.

As the full effect of past monetary policy measures on inflation is yet to be felt, the NBS will assess whether further monetary tightening is needed, by using any instrument on hand to bring medium-term inflation back to target.

Yours sincerely,

Governor

Dejan Šoškić

Appendix 2. Letter of the National Bank of Serbia to the Government of the Republic Serbia on Why Inflation Departed from the Target, 12 October 2011

Belgrade, 12 October 2011

GOVERNMENT OF THE REPUBLIC OF SERBIA

Mirko Cvetković, Prime Minister

Dear Mr Cvetković,

As inflation has continued to trend for six consecutive months above the upper bound of the target tolerance band, we address you in accordance with the *Agreement between the National Bank of Serbia and the Government of the Republic of Serbia on Inflation Targeting* (Section 6, paragraph 4) in order to explain why inflation has moved away from the upper bound of the target, the policy action that we have taken to deal with it and the period within which we expect inflation to return within the target tolerance band.

Year-on-year inflation picked up in the second half of 2010 and early 2011, from 4.2% in June 2010 to 14.7% in April 2011. Rising food and administered prices pushed up year-on-year inflation to its April peak, after which it trended downward, as announced in our letter of 12 April 2011. In September, inflation came at 9.3%, still exceeding the upper bound of the target tolerance band.

In the last six months inflation declined owing to taken monetary policy measures, the weakening of cost-push pressures on food prices and low aggregate demand.

Monetary policy measures over the last year have been taken cautiously in order to bring inflation back to the target in the medium term without major volatility. They prevented a rise in inflation expectations and, consequently, the pass-through of the inflationary shock from food prices to other prices. Results are also visible in declining monthly inflation rates over the last six months, as well as in mild deflation in the third quarter. These results and the lag effect of monetary policy measures allowed for gradual lowering of the key policy rate since June 2011.

Low aggregate demand will continue to be the disinflationary factor in the coming period, as confirmed by current and expected developments at home and abroad. We expect food prices to be stable and administered price growth slower. Furthermore, we estimate that the disinflation process will also be aided by the nascent decline in inflation expectations and the favourable impact of the precautionary stand-by arrangement concluded with the International Monetary Fund.

The Executive Board of the National Bank of Serbia expects that inflation will continue to decline and that it will enter the target tolerance band in the first half of 2012, as announced in the letter we sent to you on 12 April 2011.

We assess that low and stable inflation in the medium run would also be aided by continued implementation of initiated structural measures, which should ensure higher stability of agricultural and food prices, as well as the process of restructuring of public enterprises and balanced growth in administered prices within the previously agreed limits.

Yours sincerely,

Governor

Dejan Šoškić

Appendix 3. Decision on the Monetary Policy Programme of the National Bank of Serbia 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
Belgrade

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.

[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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