



National Bank of Serbia

2011

January-June

SEMI-ANNUAL  
MONETARY POLICY REPORT



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**NATIONAL BANK OF SERBIA**

**Belgrade, Kralja Petra 12,**

**Tel.: +381 11 3027-100**

**Belgrade, Nemanjina 17,**

**Tel.: +381 11 333-8000**

**[www.nbs.rs](http://www.nbs.rs)**

**Number of copies: 55**

**ISSN 2217-6535**

## **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 and the semi-annual by 30 September<sup>1</sup>.

Pursuant to the By-Law of the National Bank of Serbia<sup>2</sup>, 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 Semi-Annual Monetary Policy Report, January–June 2011* was adopted by the NBS Executive Board at its meeting of 28 September 2011.

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

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<sup>1</sup> 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).

<sup>2</sup> RS Official Gazette, No 71/2010.

## **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.

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# I Monetary policy framework

The National Bank of Serbia (NBS) has been implementing fully fledged inflation targeting since early 2009, though elements of the strategy were gradually introduced into practice since 2006. In December 2008, the Monetary Policy Committee<sup>3</sup> 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 prevailing circumstances.

The inflation targeting regime has so far been adopted by a number of central banks worldwide<sup>4</sup> 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<sup>5</sup> 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 end of year targets are set as follows:

- December 2009:  $8 \pm 2\%$ ,
- December 2010:  $6 \pm 2\%$ ,
- December 2011:  $4.5 \pm 1.5\%$ ,
- December 2012:  $4 \pm 1.5\%$ .

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 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

<sup>3</sup> In line with the Law on Amendments and Supplements to the Law on the National Bank of Serbia (RS Official Gazette, No 44/2010), the Executive Board assumed all powers of the Monetary Policy Committee.

<sup>4</sup> 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.

<sup>5</sup> *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.

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 the period January–June 2011

From August 2010 to April this year, the NBS kept tightening its monetary policy stance with a view to stabilising inflation around the target in the medium term. In June, however, it started a cycle of monetary easing, judging that the new agricultural season and the drop in food prices would tip the scales in favour of disinflationary pressures in the coming period.

From January to April, the key policy rate was raised by 100 bp, from 11.5% to 12.5%. Monetary policy was tightened in order to prevent second-round effects of food price growth, i.e. its spill-over to other prices through higher inflation expectations. The food price growth (processed food and fruit and vegetables) was caused by global developments, but also by the existing systemic solutions in the domestic food market. When making the decision on monetary tightening, the Executive Board took into account that low aggregate demand continued to generate disinflationary effects despite the unfreezing of pensions and public sector wages and that import prices exerted no upward pressure on inflation thanks to the strengthening of the dinar since late 2010.

Consistent with its commitment to make use of all of its monetary policy instruments in order to bring inflation back within the target band in the medium term, the

National Bank of Serbia issued a new Decision on Banks' Required Reserves in January 2011. The measures envisaged by the new decision did not imply withdrawal of liquidity from the banking system, but a lower release of liquidity than envisaged by the earlier decision.<sup>6</sup>

Due to unexpectedly robust growth in food prices, inflation overshot the target tolerance band in March for the sixth consecutive month. For that reason, the NBS wrote an open letter to the government in April, in accordance with the *Agreement on Inflation Targeting*<sup>7</sup>, explaining the reasons for the divergence, the time needed to bring inflation back within the target band, and the necessary economic policy actions (see Appendix 1, page 31).

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 also expected that inflation would fall primarily in response to the waning cost push pressure on food prices in an environment of average agricultural output, as well as in response to low aggregate demand. In light of the key risks to the projection – movements in the risk premium, food prices and fiscal policy, the Executive Board judged that the key policy rate was at or close to the peak of its then cycle.

<sup>6</sup> The key novel solutions in the reserve requirement policy include: a) differentiation of RR rates by the maturity of liabilities, as practiced by the ECB (up to two years and over two years) and b) allocation of a portion of FX required reserves in dinars by applying differentiated rates. Differentiated rates on dinar RR: 5% on liabilities with maturity up to two years and 0% on those with maturity over two years. Differentiated rates on FX RR: 30% on liabilities maturing within

two years, with 15% allocation in dinars, and 25% on liabilities maturing in over two years, with 10% allocation in dinars.

<sup>7</sup> 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.

The Executive Board also noted the presence of risks calling for a rather cautious reduction of monetary policy restrictiveness, using all instruments of monetary regulation available.

Expecting prevalence of disinflationary pressures in the coming period, the NBS embarked in June on a monetary easing cycle and lowered the key policy rate by 50 bp. Inflationary pressures from food prices subsided more than expected, and the possibility that the nature of their impact would reverse with the onset of the new agricultural season was not to be excluded either. Besides, the disinflationary effect of aggregate demand remained strong, though poised for gradual weakening in response to economic recovery. A further drop in y-o-y inflation rates should lead to a decline in inflation expectations and inflationary pressure on that account. In H2 2011, inflation is likely to continue falling, though remaining probably above the upper bound of the target. Its return within the target band and coming closer to the target midpoint is expected in H1 2012.

## 2 Monetary policy instruments

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

### Open market operations

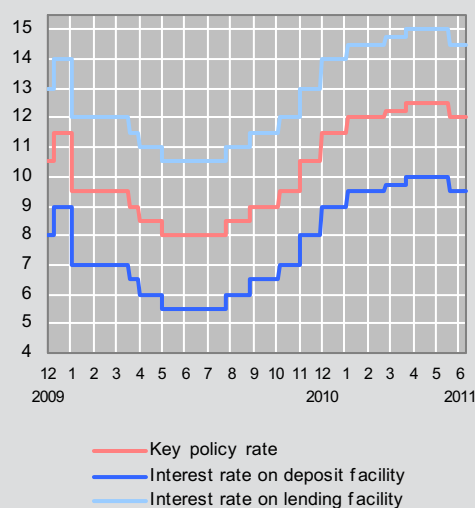
Two-week repo operations at the NBS's key policy rate are the main instrument for implementing open market operations.

With a view to achieving medium-term price stability, the NBS Executive Board changes the level of the key policy rate in accordance with current economic developments and inflation projection. The key policy rate is the operating target for short-term money market interest rates. Its role of the operating target is supported by the corridor of interest rates on deposit and lending facilities.

Summary of change in the key policy rate from its end-2010 level of 11.5%:

– an increase from January to April by a total of 1.0 pp: to 12.0% in January, to 12.25% in March and to 12.5% in early April;

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



Source: NBS.

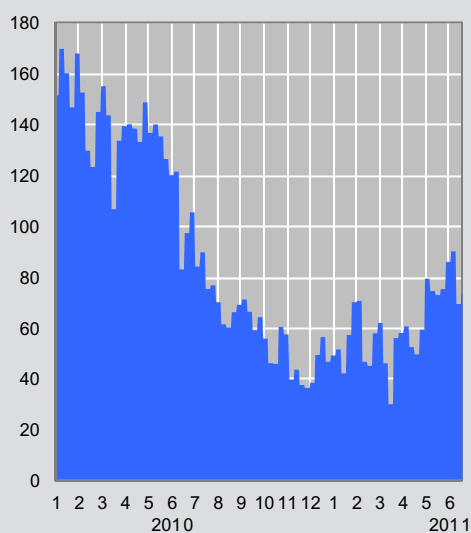
– a cut in June by 0.5 pp to 12.0%, and no change until end-H1.

The NBS implemented open market operations by trading in own securities. To mop up excess liquidity in the banking system in 2011, the NBS issued one series of treasury bills in the nominal amount of RSD 500 bln for the purposes of repo sale. The issue of one series of high nominal value corresponds to the practice in previous years, which facilitates liquidity management for banks and enables a more adequate management of securities of the same series.

During H1 2011, 26 repo sale auctions were held. Two-week repo auctions at the fixed rate were organised on a weekly basis. The sales volume totalled RSD 802.8 bln, and exceeded that in H2 2010 (RSD 762.5 bln).

Reflecting higher volumes of sale of NBS securities, their average stock in banks' portfolio rose in H1 from RSD 60.8 bln to 61.1 bln. Relative to end-2010, the stock of securities in banks' portfolio increased by RSD 27.0 bln to RSD 73.9 bln.

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



Source: NBS.

## Deposit and lending activities

In the course of H1 2011, banks kept overnight deposits with the NBS in accordance with the *Decision on Terms and Conditions of Depositing Excess Liquidity with the National Bank of Serbia*. There were no amendments to the Decision during that period.

The average stock of bank deposits with the NBS equalled RSD 2.3 bln. The lowest average monthly stock was recorded in March (RSD 1.28 bln) and the highest in May (RSD 3.44 bln).

The NBS amended the *Decision on the Conditions and Manner of Extending Daily Liquidity Loans to Banks against Collateral of Securities* in 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 excluded 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.

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, while setting no limits on the residual maturity of coupon dinar securities of the Republic of Serbia. The amendments further defined the percentage of the nominal value of collateral securities up to which, depending on their residual maturity, liquidity loans may be extended.

The disbursement of daily liquidity loans increased in H1 2011. Banks used this facility in the form of **intra-day** and **overnight** loans. In Q1, intraday loans were used by 16 and overnight by six banks. Overall, the disbursement of intraday loans amounted to RSD 390 bln, while that of overnight loans was much lower – RSD 5.5 bln.

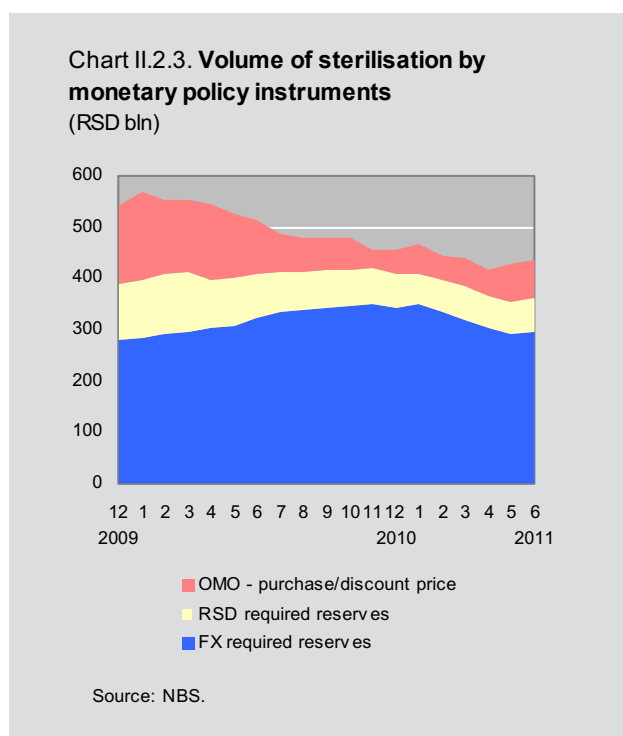
## Reserve requirements

Pursuant to the *Monetary Policy Programme of the National Bank of Serbia for 2011*, the NBS uses all instruments within its scope of authority to achieve the medium-term inflation target. In accordance with this, it continued using reserve requirements as a supporting monetary policy instrument.

To contain inflation expectations and prevent the second-round effects of food price growth, on 18 January, the Executive Board adopted the Decision on Banks' Required Reserves, tightening its monetary policy stance.

The new Decision (implemented as of 17 February) introduced differentiated reserve ratios, linked to different maturity of liabilities, on both the dinar and foreign exchange reserving base. 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%.

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



As these measures had uneven effects across banks, transition periods were stipulated (18 February–17 March and 18 March–17 April) to enable phased-in harmonisation of required reserves calculation and allocation. Full implementation of the Decision began on 17 April.

Required reserves allocated in dinars rose in H1 by RSD 4.9 bln – from RSD 60.4 bln in January to RSD 65.3 bln in June. At the same time, required reserves allocated in foreign exchange (leasing excluded) decreased by EUR 374.7 mln – from EUR 3,250.1 mln to EUR 2,875.4 mln.

Leasing required reserves declined in H1 by EUR 34.3 mln – from EUR 90.7 mln on 17 January to EUR 56.4 mln to 17 June.

## Foreign exchange market operations

In accordance with the *Monetary Policy Programme of the National Bank of Serbia for 2011*, the NBS implements a managed float exchange rate regime and has the right to use interventions in the foreign exchange market as a supporting monetary policy instrument.

To ease excessive daily volatility of the exchange rate in H1 2011, the NBS sold to banks EUR 30 mln and bought from them EUR 45 mln.

Appreciation pressures that emerged in late 2010 continued in Q1 2011, largely in response to lower country risk premium and buoyed capital inflow from portfolio investment. During this period, banks purchased substantial amounts of foreign exchange from nonresidents, who, in turn, used dinars to purchase RS securities. The strengthening of the dinar in Q1 was also aided by the restrictive monetary policy measures – key policy rate hikes and changes in the reserve requirement policy. As a result, the dinar appreciated by a nominal 2.5% during this period.

The NBS intervened in the foreign exchange market only once in Q1. This happened in January when the NBS bought EUR 5 mln from banks.

The dinar continued to rise in April, gaining 5.9% nominally against the euro in the first four months of the year.

During May, the NBS bought EUR 40 mln from banks and the dinar strengthened by 2.7%.

Economic troubles of eurozone periphery, the rise in country risk premium, and the government's decision not to rollover the issue of 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. To ease excessive daily volatility of the exchange rate, the NBS intervened in the foreign exchange market in June, for the first time in 2011, by selling EUR 30 mln in total.

Acting as the price-taker, the NBS implemented interventions via the *Reuters Dealing System*.

In the year to June, the dinar appreciated against the euro by 3% in nominal terms.

## Foreign exchange swaps

In early March, the NBS reinstated its three-month foreign exchange swap auctions, as a regular instrument



for supplying foreign exchange/dinar liquidity. These weekly auctions aim to bolster interbank swap trading and the development of FX hedging instruments.

From 1 March to 30 June, the NBS organised 13 swap auctions of sale (first leg) and 13 swap auctions of purchase of foreign exchange (first leg). In the former, the NBS sold to banks EUR 33.5 mln (43.8% implementation rate), whereas in the latter, it bought from banks EUR 79 mln (38.5% implementation rate).

### Auctions of short-term dinar loans

As of February, the NBS has been organising monthly auctions of short-term dinar loans against collateral of securities in order to facilitate bank liquidity management. No short-term dinar loans were approved in any of the five auctions organised.

### Other interest rates

Other interest rates charged by the NBS on loans, other investments and receivables, and paid on banks' balances with the central bank are prescribed by the *Decision on Interest Rates Applied by the National Bank of Serbia in Implementation of Monetary Policy*.

In the latter half of June, the Executive Board adopted a new decision on interest rates to ensure compliance of regulations under its remit with the amended Law on the National Bank of Serbia. The new decision envisaged an obligation of the NBS to use the key policy rate as a point of reference when setting other interest rates applied in the implementation of monetary policy. The new Decision however retained the earlier concept with regard to the level and relative relationship between interest rates.

To accommodate the changes introduced by the amended law, which placed the determining of the manner of calculation, collection and payment of interest on investment and other receivables of the NBS to the remit of the Executive Board, the NBS also adopted in June a new *Decision on the Manner of Calculation, Collection and Payment of Interest by the National Bank of Serbia*.

The substance of the Decision, however, underwent no major changes relative to the earlier one.

## 3 Implementation of inflation targets in the period January–June 2011

Though changing direction, y-o-y inflation kept running above the upper bound of the target tolerance band throughout H1 2011. Namely, after rising in the first four months of the year and peaking in April at 14.7% y-o-y, inflation started to fall, settling at 12.7% in June (June target  $5.3 \pm 1.8\%$ ).

The main reason behind inflation target overshooting was the robust growth in food (processed food, fruit and vegetables) and regulated prices. Overall in H1, consumer prices went up by 6.8%, their rise in Q1 however being much higher than in Q2 (5.5% and 1.2%, respectively).

Inflation movements in Q1 were largely determined by the growth in food prices (10.6%). Processed food prices went up by 8.0%, reflecting chiefly the cost-push pressure stemming from high prices of primary agricultural commodities (wheat, corn, etc). On the other hand, growth in prices of non-food products and services<sup>8</sup> moderated amid stabilisation of inflation expectations, appreciation of the dinar in late 2010 and early 2011, and dampened demand for these products and services as a result of lower purchasing power. Due to the food price growth, the rise in the food component of core inflation was much sharper than the decline in its non-food component, wherefore overall core inflation stepped up in Q1.<sup>9</sup>

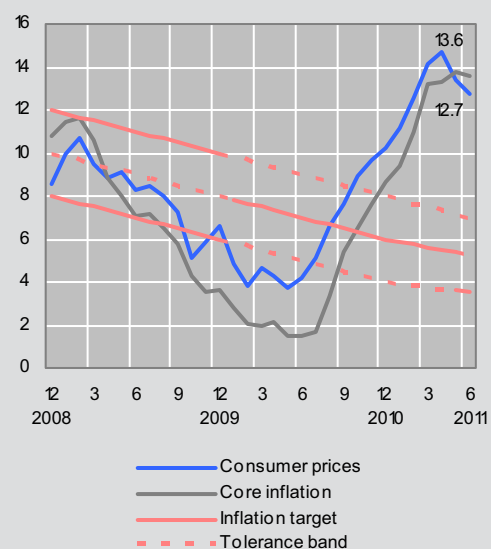
Fruit and vegetable prices increased 25.3% in Q1, which is much more than seasonally expected for that time of the year. The Global Food Price Index touched a new high in that period, exceeding the historical record set in mid-2008. The cost-push pressure on food prices weakened in Q2. Together with the base effect, this contributed to the drop in y-o-y inflation from May onwards.

As the prices of some primary commodities, such as wheat and corn, grew at a faster pace in Serbia than abroad, and the fruit and vegetable prices were running

<sup>8</sup> Non-food core inflation fell from 2.6% in Q4 2010 to 0.7% in Q1 2011.

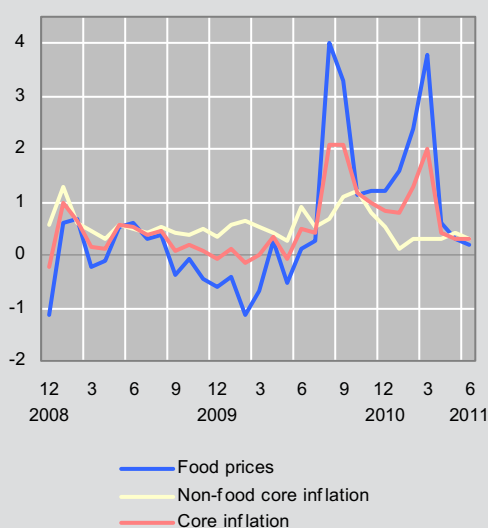
<sup>9</sup> Core inflation is an indicator of movements in market-based prices. It excludes regulated prices, prices of petroleum products, fruit and vegetables.

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



Sources: Statistical Office and NBS.

Chart II.3.2. **Core inflation by component**  
(monthly growth, %)



Source: NBS.

exceptionally high, Q2 saw a turnaround in food price movements and a drop in inflationary pressure on that account. Reflecting good weather conditions, fruit and vegetable prices dropped already in April, which is atypical for that time of the year.

The prices of primary agricultural commodities also went down<sup>10</sup>, alleviating the cost-push pressure on food producers. In response to this and the gradual waning of the effects of last year's food price increases, the prices of processed food products stabilised in Q2. Moreover, prices of food (processed food products, fruit and vegetables) had a disinflationary impact in Q2 (-0.3 pp).

Headline and core inflation slowed down accordingly. The rise in food prices within core inflation slackened significantly – from 8.0% in Q1 to 1.0% in Q2.

Non-food component of core inflation recorded in Q2 the same growth rate as the food component (1.0%), though

Table II.3.1. **Growth and contribution of CPI components to y-o-y inflation in H1 2011**

	Growth rates (%)	Contribution (%)
<b>Total</b>	<b>6.8</b>	<b>6.8</b>
<b>Core inflation</b>	<b>5.2</b>	<b>3.6</b>
<b>Fruits and vegetables</b>	<b>13.9</b>	<b>0.8</b>
<b>Regulated prices</b>	<b>9.1</b>	<b>1.9</b>
Electricity	13.5	0.9
Household gas	0.0	0.0
Utilities-housing services	5.1	0.2
Social welfare services	0.3	0.0
Transportation services (regulated)	13.7	0.1
PTT services	0.0	0.0
Cigarettes	16.0	0.6
Medicines	6.4	0.2
Other	0.3	0.0
<b>Petroleum products</b>	<b>11.1</b>	<b>0.4</b>

Sources: Statistical Office and NBS.

<sup>10</sup> Global prices of wheat and corn fell in June to around 25% and 20%, respectively. The new wheat and corn crop traded 25–35% lower than last year's.



somewhat higher than a quarter earlier (0.7%). At monthly level, non-food core inflation growth was stable, ranging from 0.3 to 0.4%.

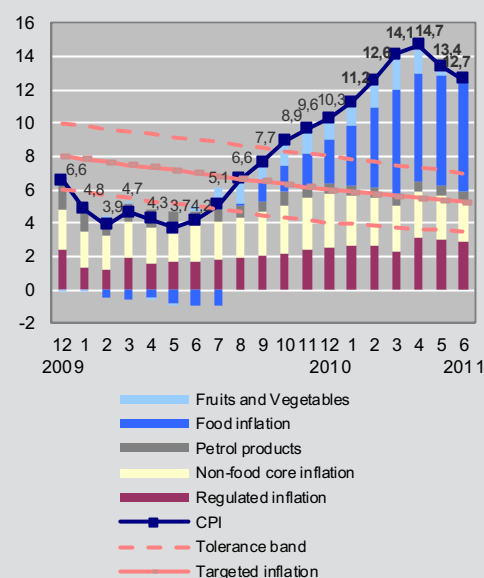
Food price growth amounted to 9.1% in the first half of 2011. At the same time, the rise in prices of non-food products and services was much weaker, measuring 1.7%.

Regulated prices increased by 9.1% in H1 (1.9 pp contribution), exceeding the upper limit of the growth range planned for the year as a whole ( $7\pm 2\%$ ). Nearly half of the regulated price growth may be put down to the April hike in electricity prices (0.8 pp). Significant growth was also recorded for prices of cigarettes, transport services, medicaments and utilities. Though no major regulated price growth is expected in H2, it is quite certain that the agreed regulated price growth limit will be exceeded for the third year in a row.

Prices of petroleum products rose 11.1% in H1 (0.4 pp) – 5.6% in Q1 and 5.1% in Q2. Despite the increase in excise duties on petroleum products early in the year and the 25.1% leap in prices of crude oil in Q1, petroleum products recorded no major growth thanks to the appreciation of the dinar against the dollar and liberalisation of petroleum product imports. In Q2, crude oil prices slowed, and even headed down, but the prices of petroleum products increased despite the strengthening of the dinar. At the close of Q2, excise duties on domestic and foreign fuels were equated.

Judging the inflationary pressure from food prices to be on the downside, and taking into account the possibility of their disinflationary impact with the onset of a new

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



Source: NBS.

agricultural season, the NBS lowered the key policy rate in June and July. Inflation being on a downward path, further decline in its y-o-y rates is expected to bring down inflation expectations, providing an additional boost to the disinflation process. In H2 2011, inflation will continue to fall, though probably remaining above the upper bound of the target tolerance band. Its return within the target band and trending closer to the target midpoint is expected in H1 2012.



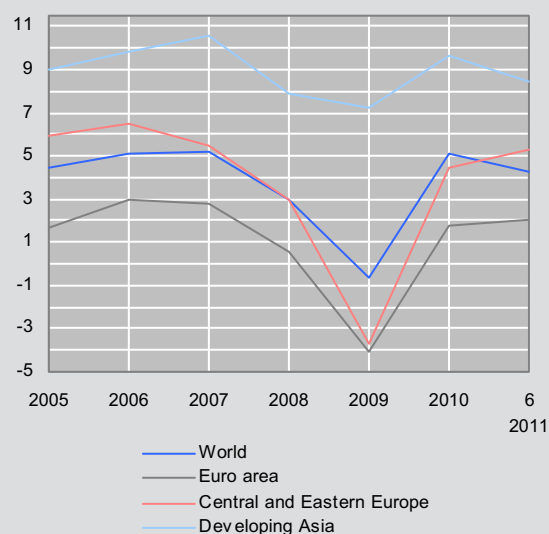
## III Macroeconomic environment

### 1 International environment

Post-crisis recovery of the global economy continued in H1 2011, albeit at a slower pace than in H2 2010. Uneven regional distribution remained its dominant feature. Economies least affected by the crisis, the so-called emerging markets, grew strongly, while those advanced continued to suffer the effects of the crisis such as high unemployment, sluggish economic growth (save Germany, but only in Q1), low investment activity and depressed consumer demand. Furthermore, the deepening of eurozone debt crisis and fears of default by some of its members increased investor risk aversion, heightening uncertainty and feeding through into wider spreads between German bonds and those of riskier countries.

The US economy grew at a slower pace than expected in H1. Growth was held back by the hefty prices of food and gasoline, which dampened consumer demand – the main generator of US economic activity. According to preliminary estimates, US economic growth measured less than 1% y-o-y. This feeble growth, far from any real recovery is not sufficient to close the yawning negative output gap, let alone solve the problem of high unemployment. The unemployment rate has been rising steadily ever since April 2011. It reached 9.2% in June, and though still below its October 2009 high of 10.1%, its rising trend raises concern. It is due to this bout of weakness that the Fed will maintain its accommodative monetary policy stance for a while. As a matter of fact, it recently announced that the policy rate will be kept at 0.25% until mid-2013. As regards the eurozone, its economic growth gathered momentum in Q1, but then lost steam in the quarter that followed. Germany registered the strongest growth in Q1 owing to buoyed exports and investment. Improved conditions in the German labour market also played a role in propping up the domestic economy. However, already in Q2 growth slowed to a

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



Source: IMF Outlook.

crawl. Positive developments in Q1 were also observed in France, where investment climate improved, but unemployment remained high. Similar to Germany, France saw its economy grinding to a halt in Q2. On the other hand, Greece, Ireland and Portugal found themselves in deep financial woes due to high public debt levels. They requested and received financial assistance packages from the European Financial Stability Facility set up for those purposes. Debt crisis in the eurozone might easily spread to larger countries, the likes of Italy and Spain. The yields on their sovereign bonds increased significantly amid higher risk, and the ECB was forced to intervene recently by buying them. The situation in Asia is completely different. Its economy is booming, led notably by China. China is set for 9.5% growth in 2011 and its robust demand has been

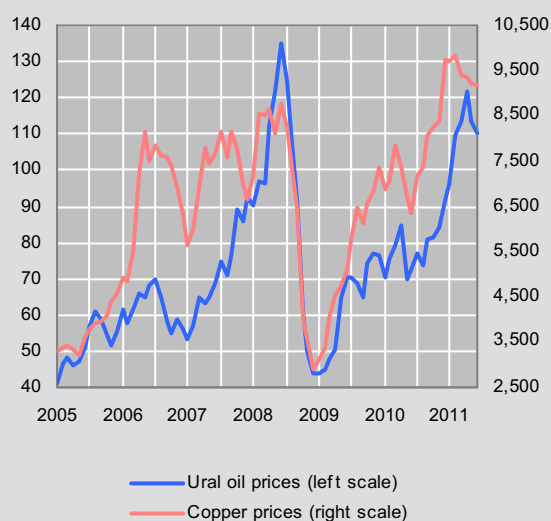
oiling the wheels of export-oriented South-East Asian economies. The Japanese economy, on the other hand, is set for a contraction in H1 2011 as a consequence of the devastating earthquake that hit the country in March.

The pressures caused by the debt crisis of peripheral eurozone members built up during H1. The mounting of their budget deficits and public debt levels intensifies concern among financial market participants as to whether these countries will be able to settle their liabilities on time. Finally, financial markets concluded that Greece, as the most imperilled country of the region, needed some kind of debt restructuring. Thus, the EU and the IMF approved a new bailout package to Greece in the amount of EUR 159 bln. The deal involves some participation of private sector investors (mostly European commercial banks). The IMF warned that urgent action was needed to prevent eurozone contagion, leading possibly to another bout of recession and collapse of the financial markets. The crisis in the eurozone periphery took its toll on the common currency, which lost against the Swiss franc, as a safe haven, around 10% since the start of the year. Despite volatility in H1, the euro remained relatively stable against the dollar thanks to the ECB's tight monetary policy (up by around 7% since the start of the year).

Y-o-y CPI inflation edged up in the majority of countries in Q1, reflecting chiefly the rising prices of food and energy. The months-long rise in food prices ended in late Q1, but its effects continued to be felt throughout Q2 in both advanced and emerging economies. Inflation growth in the latter was sparked also by vigorous economic growth and narrowing of the output gap, whereas in the case of the former, or to be more specific the United States and the UK, core inflation remained low, while headline inflation continued up. This led their monetary authorities to conclude that the rise in food prices was only temporary and that monetary policies should remain accommodative.

Central banks of most advanced countries, except the ECB, maintained accommodative stance in H1 2011. Against the background of low core inflation and high unemployment, the Fed kept its policy rate record low (0.25%). In early November 2010, the Fed started the second round of quantitative easing (QE2). The QE2 program, within which the Fed bought USD 600 bln of Treasury securities, ended in June 2011. Similar monetary policy has been conducted by the Bank of England. The ECB, by contrast, embarked on a gradual monetary policy tightening in a bid to maintain the stability of prices in the eurozone and to prevent the spill-over of second-round effects of food and energy price growth to headline inflation. The ECB raised the policy rate by 25 bp in April and July to its current level

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

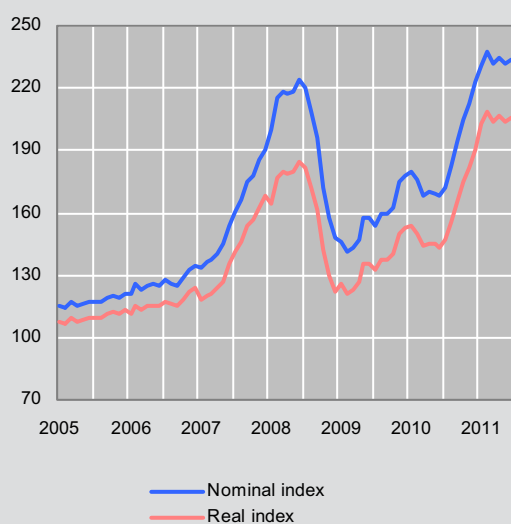


Source: Bloomberg.

of 1.5%. The Bank of Japan continued implementing zero rate policy, needed to stimulate price growth and economic activity which suffers the consequences of the massive earthquake. On the other hand, faced with strong economic growth and heightened inflationary pressures, the central banks of emerging market economies started tightening their monetary policy stance already by the end of last year. The Central Bank of China raised its policy rate in H1 2011 and took a number of administrative measures to curb excessive credit growth, while the renminbi mildly appreciated against the dollar. Faced with heightened inflationary pressure, the central banks of some Central and East European countries also tightened their monetary policy stance. Perhaps the fastest shift to tightening was that of the National Bank of Poland, which lifted the policy rate three times during H1 to its current level of 4.50%.

Oil prices displayed great volatility in H1. At one point, oil reached USD 120, for speculative reasons, but then plunged to below USD 100 due to uncertainty over the sustainability of the global economic recovery. This uncertainty heightened still further with the release of data on a serious slowdown in eurozone growth in Q2 and weaker than expected growth of the US economy in H1. Add to this tighter monetary policy implemented by the Chinese central bank in an effort to cool the economy, and all major factors contributing to the expectations of a downfall in oil prices are there. The price of Ural oil currently stands at around USD 109.

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



Source: FAO, UN.

After levelling off at record USD 10,148 per tonne in mid-February, the red metal prices fell back by around 8% until end-Q1. In Q2, copper prices lost 2.4%. The continuing drop in prices is due mainly to reduced demand from China, the world's largest copper importer, resulting from the government's economy cooling measures.

Similar movements were recorded for iron prices, which fell by 9% until end-H1 from their record high touched in February. The reasons were the same as with copper – reduced demand from China, the world's largest iron importer.

The price of gold rose by around 10% in the same period in response to stronger investor demand prompted by higher risk aversion and weaker confidence in the dollar and the euro. Lack of market confidence in the public debt sustainability of some eurozone members and the downgrade of US credit rating gave an additional impetus to the price of gold, which hit its historical high in early H2.

After surging relentlessly for months, the Global Food Price Index fell in March 2011. Food prices stabilised in Q2 and are not expected to rise in the remainder of the year. Taking this and the expected lower fuel prices into account, inflation growth may be reasonably expected to slow down in H2 in advanced and emerging economies alike.

## 2 International transactions

### Balance of payments and foreign exchange reserves

The key features of Serbia's balance of payments in H1 2011 were as follows: no growth in the current account deficit from the same period a year earlier; a mild increase in the deficit on trade in goods and in inflows from current transactions and FDI; a considerable rise in portfolio investment in respect of sale of government bonds; higher outflow under long- and short-term credits of banks and enterprises, with a certain increase in disbursement of long-term loans by the government and a rise in NBS foreign exchange reserves.

The current account deficit remained practically unchanged from H1 2010 (EUR 1,382 mln vs. EUR 1,375 mln), while the deficit on trade in goods widened mildly (7.9%) despite faster growth in exports (23.3%) relative to imports (17%). Export to import cover ratio increased by 3.1 pp y-o-y to 68.6%. Exports went up in response to growing demand in Serbia's export markets, notably those in the EU, but also as a result of the rising prices of our export products. The fastest y-o-y growth rate was recorded for imports of equipment. The value of imports of intermediate goods increased on account of both higher physical volume and higher prices. The strongest growth was registered for import prices of energy and metals. Imports of consumer goods rose by a negligible 3%.

As the volume of foreign trade increased, so did the receipts from services. Up by 15.4%, they exceeded expenditure by EUR 40 mln.

Interest earnings on deposits and securities contracted by EUR 17 mln mainly due to a reduction in earnings on foreign securities. Payment of regular interest on foreign loans rose EUR 20.6 mln, while outflow in respect of repatriation of profits abroad fell by EUR 43.4 mln. In consequence, the negative income balance was maintained at the same level as in the matching period a year earlier (EUR 364.6 mln). Net current transfers (mainly remittances) of EUR 1,487 mln rose by 8.8%, and the coverage of the deficit on the balance of goods and services and interest by net inflow from current transfers (52.0%) was higher than in the same period last year (50.3%).

FDI in Serbia gained EUR 74.5 mln y-o-y. As in 2010, most FDI was channelled in the production of metals

(18.8%), real estate (15.5%), trade (13.2%), bank recapitalisation (11.0%) and telecommunications (3.4%). Net inflow from portfolio investment increased strongly to EUR 751.5 mln on account of sale of RS bonds to nonresidents (EUR 733.4 mln).

Net disbursement of other investment (loans and deposits) shrank by EUR 52.0 mln amid increased net repayment of short- and long-term loans by banks and enterprises. Banks net repaid EUR 824.4 mln, almost entirely debt under short-term loans, while enterprises net repaid EUR 383.3 mln under long-term loans.

With such movements on the financial account and the current account deficit unchanged from the same period last year, foreign exchange reserves (according to the balance of payments methodology) rose by EUR 200.0 mln in H1 2011. At the current exchange rate, foreign exchange reserves declined by EUR 34.8 mln. At the

same time, foreign exchange reserves of banks went down by EUR 405.3 mln.

On 30 June 2011, NBS foreign exchange reserves stood at EUR 9,967.0 mln, covering M1 by 431.1%, short-term debt by 1,031.6% and imports in the duration of seven and a half months.

Again dominant in the FX reserves structure were foreign securities (84.4% or EUR 8,408.6 mln), followed by holdings on accounts abroad – deposits and current accounts (9.1% or EUR 907.7 mln), foreign cash (2.0% or EUR 194.2 mln), and gold and SDR (4.6% or EUR 456.5 mln).

The National Bank of Serbia's interest earnings on deposits, SDR, call and current accounts amounted to EUR 2.9 mln, while earnings from coupons on foreign securities came at EUR 73.3 mln.

The sale of euro-denominated RS securities generated an inflow of EUR 395.1 mln earmarked for budget deficit financing. Disbursement of loans for the Republic of Serbia, through NBS foreign exchange reserves, accounted for an inflow of EUR 336.9 mln – EUR 292.6 mln from Societe Generale, Paris (program budget support) against guarantee issued by the World Bank, and EUR 44.3 mln from EIB (development of SMEs, rehabilitation of roads, bridges, schools and regional and municipal infrastructure).

A total of EUR 51.7 mln flowed in through a drawdown of the funds made available under the last credit tranche within the Stand-by Arrangement with the IMF.

A substantial foreign exchange inflow also came from payment transactions with Kosovo and Metohija (EUR 136.4 mln). Namely, pursuant to the Law on Temporary Performance of Some Payment Transactions in the Territory of FRY<sup>11</sup>, banks are required to sell to the NBS any foreign exchange inflow arising from residents' business operations with Kosovo and Metohija.

Inflow from grants amounted to EUR 39.2 mln, up by EUR 7.7 mln on the same period last year.

In the year to June, NBS interventions in the IFEM resulted in a net inflow of EUR 25 mln, whereas in the same period last year an outflow of EUR 1.4 bln was registered in that respect.

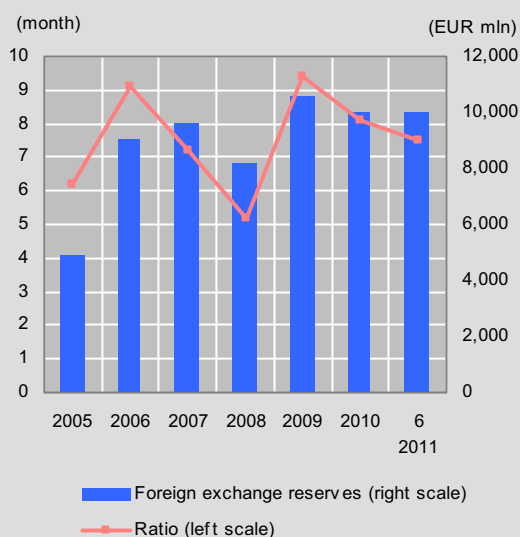
Table III.2.1. Serbia's balance of payments  
(in EUR mln)

	I – VI 2010	I – VI 2011
<b>CURRENT ACCOUNT – BALANCE</b>	-1,375	-1,382
<b>CURRENT TRANSACTIONS BEFORE GRANTS – BALANCE</b>	-1,424	-1,471
<b>1. Goods (1.1 – 1.2)</b>	-2,357	-2,544
1.1. Exports of goods f.o.b	3,335	4,113
1.2. Imports of goods f.o.b.	-5,691	-6,657
<b>2. Services (2.1 – 2.2)</b>	-13	40
2.1. Receipts	1,171	1,352
2.2. Expenditure	-1,185	-1,312
<b>3. Balance of goods and services (3.1 – 3.2)</b>	-2,370	-2,504
3.1. Exports of goods and services	4,506	5,465
3.2. Imports of goods and services	-6,876	-7,969
<b>4. Income</b>	-372	-365
4.1. Receipts	215	201
4.2. Expenditure	-587	-566
<b>5. Current transfers</b>	1,367	1,487
5.1. Receipts	1,501	1,661
5.2. Expenditure	-134	-174
<b>CAPITAL ACCOUNT</b>	0	-1
<b>FINANCIAL ACCOUNT</b>	1,294	1,194
1. Direct investment – net	420	566
1.1. Abroad (claims)	-102	-30
1.2. In Serbia (liabilities)	522	596
2. Portfolio investment – net	73	766
2.1. Assets (claims)	-2	14
2.2. Liabilities (liabilities)	75	752
3. Other investments	114	62
3.1. Assets (claims)	-150	217
3.2. Liabilities (liabilities)	264	-155
4. Reserve assets	688	-200
<b>ERRORS AND OMISSIONS</b>	81	189
<b>OVERALL BALANCE</b>	-688	200

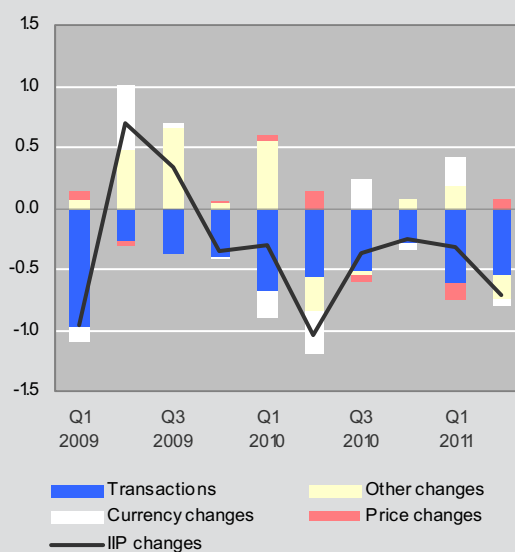
Sources: NBS (ITRS), Statistical Office.

<sup>11</sup> FRY Official Gazette, No 9/01.



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

Source: NBS.

**Chart III.2.2. Change in Serbia's IIP (EUR bln)**

Source: NBS.

Net withdrawal from required reserve accounts of banks came at EUR 407.1 mln in H1, while in the same period last year allocations of required reserves reached EUR 182.2 mln, net.

A total of EUR 220.4 mln was paid out of foreign exchange reserves for the settlement of liabilities to foreign creditors and EUR 168.1 mln for the settlement of liabilities under frozen foreign exchange savings.

## International investment position

Serbia's net international investment position (IIP) was EUR -25,865.8 mln at end-June 2011, reflecting a higher volume of residents' financial liabilities relative to their investment abroad. The IIP to GDP ratio arrived at 85.2% in H1 2011, down by 0.5 pp since early in the year.

Net IIP rose EUR 1,041.1 mln or 4.2% on account of net foreign capital inflow from transactions (EUR -1,171.6 mln), changes in the value of foreign debt securities constituting reserve assets (EUR -53.4 mln) and other changes not arising from transactions (EUR -12.6 mln).

The rise was partly offset by positive valuation changes (EUR 196.6 mln).

Foreign financial assets reached EUR 15,641.0 mln by end-June, down by EUR 279.6 mln on end-2010. Capital outflow under transactions was positive though marginal (EUR 4.5 mln). Valuation changes, fluctuations in prices of reserve assets, and other negative changes (arising mostly from the acceptance of barter, offset or compensation for payment under trade credits) pushed down foreign assets.

The stock of resident FDI abroad amounted to EUR 2,959.5 mln, up by EUR 20.7 mln in H1 2011. Portfolio investment reached EUR 71.8 mln, down by EUR 4.2 mln. Other investment came at EUR 2,642.7 mln, down by EUR 261.1 mln chiefly in response to the withdrawal of domestic bank deposits from accounts abroad. FX reserves equalled EUR 9,967.0 mln – their negative change resulted in a EUR 35.0 mln drop in total foreign assets.

Foreign liabilities stood at EUR 41,506.8 mln at end-June, up by EUR 761.5 mln in H1. Foreign liabilities rose in response to capital inflows from transactions (EUR

1,176.1 mln) whose effect was partly neutralised by negative valuation and other changes (EUR -378.6 mln and -36.0 mln respectively).

Relative to end-2010, the stock of non-resident FDI in Serbia was EUR 16,238.9 mln, up by EUR 499.0 mln. Portfolio investment rose EUR 672.0 mln to EUR 2,055.9 mln, as a result of the non-resident share in RS securities purchase. Other investment declined EUR 409.5 mln to EUR 23,212.1 mln due to significant foreign debt repayment (EUR 943.3 mln – the withdrawal of short-term deposits and non-resident credit lines accounted for EUR 836.0 mln) and an EUR 21.8 mln reduction in debt under SDR allocation arising from valuation changes. Trade credits and demand deposits picked up by EUR 423.9 mln and EUR 131.7 mln respectively.

## External debt

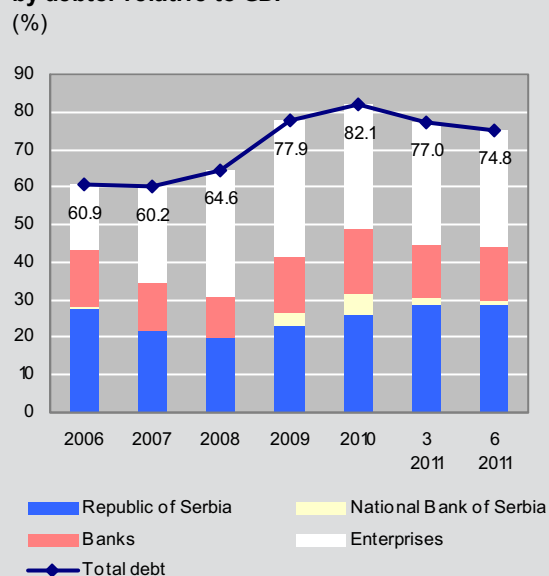
By end-June 2011, Republic of Serbia's external debt stood at EUR 22,734 mln, down by EUR 1,052 mln or 4.4% on end-2010. The decline was due to a reduction in short-term debt of banks and total debt of enterprises. Under the impact of exchange rate changes, i.e. euro's appreciation against the dollar, SDR and other currencies, external debt contracted EUR 257.5 mln over the review period. The ratio of external debt to GDP came at 74.8% by end-June, which is an improvement of 7.3 pp relative to end-2010.

In H1 2011, public sector external debt<sup>12</sup> rose EUR 61 mln or 0.7% and reached EUR 9,138 mln or 40.2% of total debt at end-June. Its share in GDP dropped 1.2 pp to 30.1%.

Private sector external debt fell EUR 1,113 mln or 7.6% to EUR 13,596 mln on end-2010. Its share in GDP declined 6 pp to 44.8%.

In H1 bank external debt (EUR 4,308 mln) was down EUR 785 mln or 15.4% relative to end-2010 owing to the reduction in debt under short-term deposits and credit lines (from EUR 1,731 mln to EUR 895 mln). Bank long-term debt rose EUR 51 mln to EUR 3,413

Chart III.2.3. Republic of Serbia's external debt by debtor relative to GDP



Source: NBS.

mln at end-June. The stock of enterprise external debt (EUR 9,288 mln) contracted EUR 329 mln or 3.4% on end-2010.

Broken down by activity, net long-term borrowing (higher disbursements than repayments of principal) was recorded in the banking sector (EUR 40.8 mln), transport and storage (EUR 36.0 mln), mining (EUR 33.8 mln), and construction (EUR 7.2 mln), while net repayment (lower disbursements than repayments of principal) was observed in all other sectors.

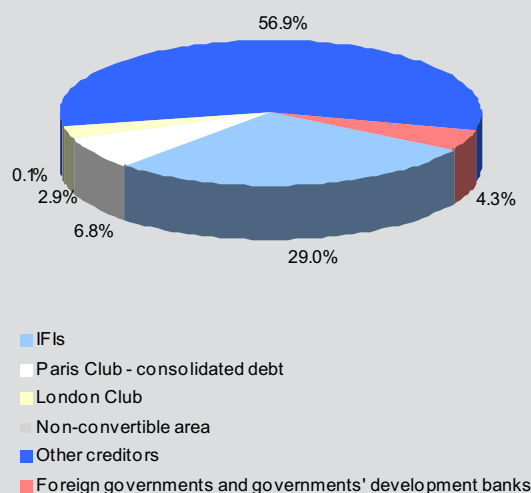
In terms of the currency structure at end-June, the euro accounted for 77.3%, the dollar 9.4%, SDR 8.5%, Swiss franc 4.1%, and clearing dollar 0.1%. The share of other currencies was 0.6%.

The maturity structure of external debt improved in H1 – the share of long-term in total external debt rose 3.5 pp to 95.7% at end-June. The external liquidity indicators improved – the external debt to exports ratio reached

<sup>12</sup> According to the IMF methodology, external debt of the Republic of Serbia also includes liabilities under public debt, which, in addition to rescheduled old debt and new government borrowing, include liabilities of the National Bank of Serbia, unregulated liabilities of the Republic of Serbia, the clearing debt, as well as a part of the non-government guaranteed debt of the local self-government and government funds and agencies.



**Chart III.2.4. Republic of Serbia's external debt by foreign creditor**  
(as at 30 June 2010)



Source: NBS.

206.3%, down 29.9 pp on end-2010. At end-June, the ratio of total repayments under external debt to goods and services exports amounted to 30.9%.

Total debt to international financial institutions reached EUR 6,585 mln or 29.0% of total debt. Consolidated debt to the Paris Club creditors amounted to EUR 1,547 mln or 6.8% of the total. Debt to the London Club creditors was EUR 667 mln or 2.9%. Debt to foreign governments and development banks of foreign governments reached EUR 989 mln or 4.3%, while the non-convertible currency debt (clearing debt) amounted to EUR 21 mln or 0.1%. Debt to other foreign creditors was EUR 12,925 mln or 56.9% of the total and included debt to foreign banks and other financial institutions, suppliers, strategic partners and other enterprises.

### 3 Foreign exchange market and exchange rate

In H1, the dinar gained 3.0% against the euro in nominal terms. The upward trend continued until May (total 8.8%), only to be followed with weakening in June (5.4%). The dinar strengthened most in response to capital inflow from portfolio investment. A favourable interest rate differential, declining risk premium, improved credit rating in March<sup>13</sup> (by Standard&Poor's), and recommendations by investment firms to invest in dinars and dinar securities resulted in elevated foreign currency inflow. A further boost to the dinar came from restrictive monetary policy measures – increases in the key policy rate and amendments to required reserve regulations.

Depreciation pressures in June were prompted by heightened market uncertainty surrounding the debt crisis in the eurozone periphery, elevated risk premium, and government's decision not to renew the issue of 6-m euro-indexed bills (c. EUR 200 mln) – the issue of euro-denominated securities was announced instead. In June, the dinar lost 1.6% against the euro on average.

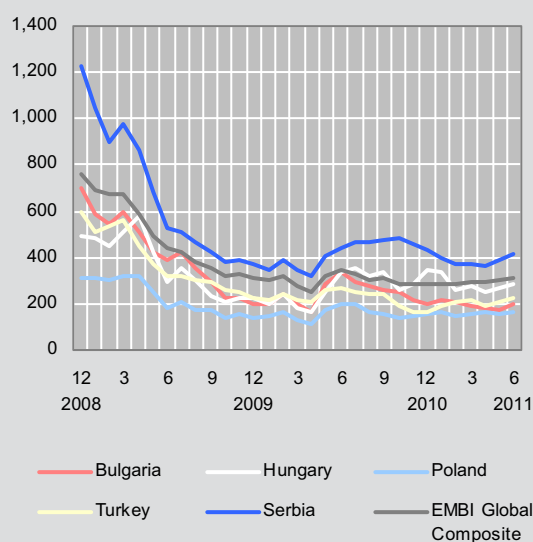
The country's risk premium<sup>14</sup> continued down in the first five months of 2011. It however rose anew with the flare-up of the public debt crisis in eurozone peripheral countries in May. EMBI rose for all countries in transition, though somewhat more for Serbia – 415 bp by end-June.

Average daily trading volumes in the interbank FX market – IFEM (without the NBS), amounted to EUR 65.9 mln in H1. In contrast to earlier years, dinar's depreciation did not weigh down on trading. Namely, trading volumes picked up in May, which is indicative of more efficient functioning of the Serbian FX market. Higher trading volumes were followed with higher daily volatility of the exchange rate. Nonetheless, the dinar remains less volatile in 2011 than other floating currencies such as the Polish zloty, Hungarian forint and Turkish lira. Increased liquidity in the IFEM and somewhat higher fluctuations of the dinar exchange rate

<sup>13</sup> In March, *Standard & Poor's* raised Serbia's credit rating from BB- to BB while maintaining a stable credit outlook.

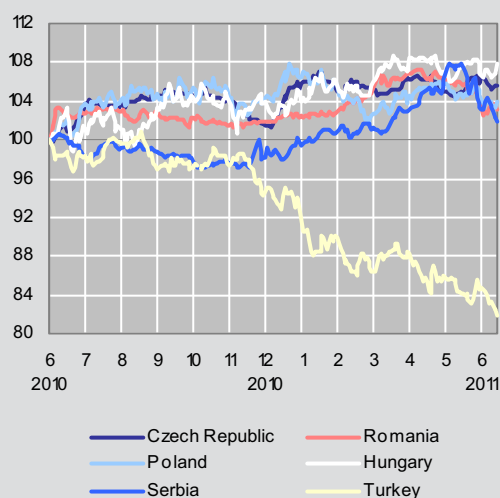
<sup>14</sup> Measured by EMBI (Emerging Markets Bond Index).

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



Source: JP Morgan.

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



\* Growth represents appreciation.

Sources: NBS and websites of central banks.

should positively affect the use of FX hedging instruments and the dinarisation process. At 3-m FX swap auctions<sup>15</sup>, the NBS bought EUR 79.0 mln and sold EUR 33.5 mln. In H1, the NBS intervened in the IFEM purchasing EUR 45.0 mln and selling EUR 30.0 mln.

Given the appreciation of the dinar against the euro and of the euro against the dollar, the dinar gained 12.2% against the dollar in nominal terms. Along with nominal appreciation of the effective exchange rate of the dinar (4.8%)<sup>16</sup> and a faster rise in domestic than foreign prices, H1 saw effective appreciation of the dinar of 9.9% (8.2% and 16.4% against the euro and dollar respectively).

## 4 Money market trends

### Interest rates

BEONIA generally trended below the key policy rate, reflecting significantly improved banking sector liquidity. By the end of the review period, it was on average 0.8 pp lower than the key policy rate<sup>17</sup>. Average daily trading volumes in the money market amounted to RSD 7.3 bln, down 8.2% y-o-y. Such circumstances resulted in banks' increased interest in repo investment.

Movements in shorter maturity BELIBOR rates mirrored the key policy rate. Relative to end-2010, these rates rose slightly, ranging from 12.4% for BELIBORTN to 13.1% for 2-m maturity. Longer maturity rates followed the movements in effective rates on T-bills – they touched 13.2% for 3-m and 13.4% for 6-m maturity.

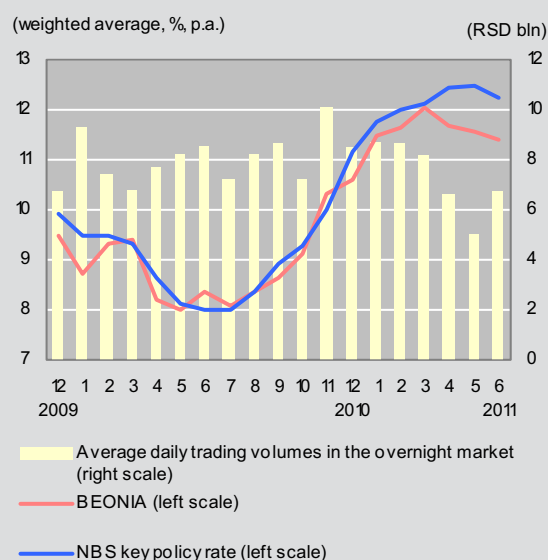
Effective rates on up to one-year T-bills declined in H1, apart from April when the key policy rate was raised and the economic turmoil in some eurozone members deepened. The effective rates went down in May, partly in response to the reduced issue of short-term bills. Demand outstripped supply at almost all auctions in the review period. By end-H1 the effective rates underperformed the key policy rate – they reached 12.0% and 11.9% for 3-m and 6-m maturity respectively.

Relative to shorter-maturity rates, those on longer-maturity government securities recorded a steeper drop

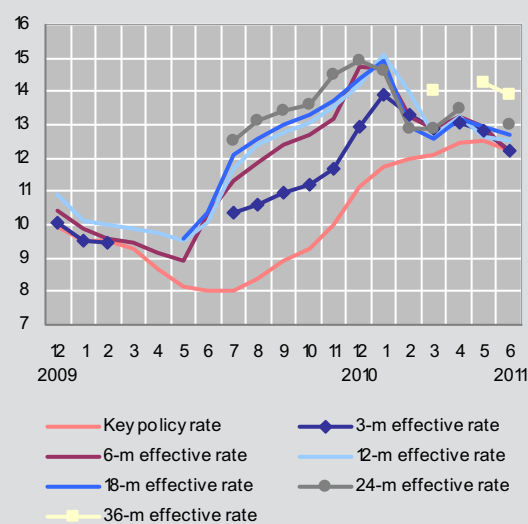
<sup>15</sup> One-week auctions are organised anew from March, with a view to encouraging interbank swap FX trade and developing the FX hedging instrument market.

<sup>16</sup> Weights used are 0.8 for the euro and 0.2 for dollar.

<sup>17</sup> The average quarterly deviation over the past two years was -0.2 pp.

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

Source: NBS.

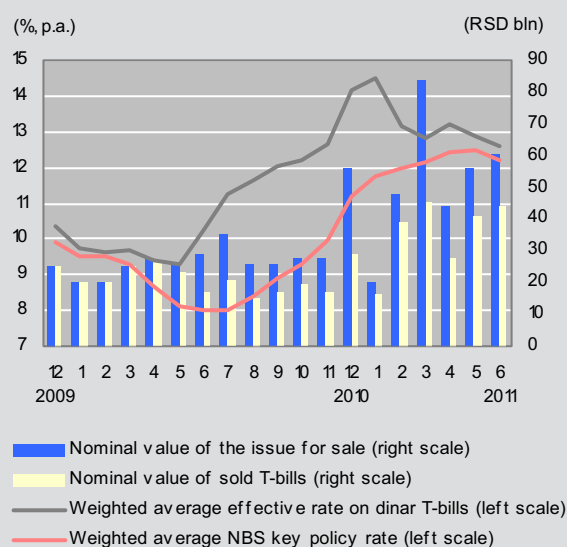
**Chart III.4.2. Effective rates on T-bills and key policy rate**  
(weighted average, %, p.a.)

Sources: Ministry of Finance and NBS.

in early year, underpinned by heightened interest of foreign investors. Therefore, the yield curve attained an inverse slope by end-Q1. The volume of long-term securities issue increased in Q2. However, foreign investor participation decreased, which halted the drop in effective rates on these securities.<sup>18</sup> In March, the Government issued 3-year securities for the first time. As investors did not show much interest, the rates on these securities touched 14.1% at the first auction, and 14.3% and 13.9% at repeated May and June auctions.

Consistently with the above trends, the end-H1 yield curve had a normal slope at a much lower level than in December 2010.

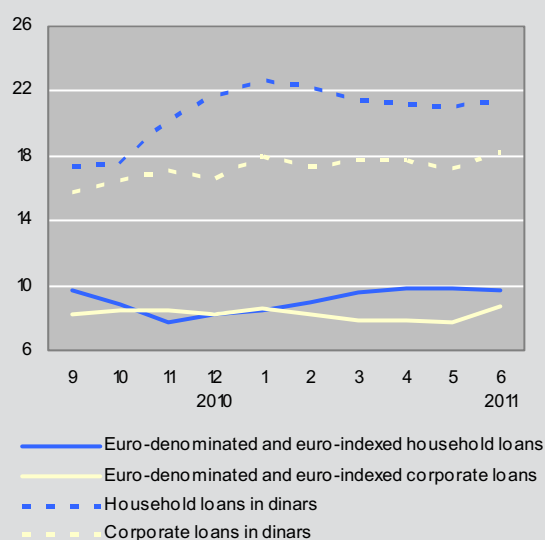
The first auctions of euro-denominated securities were held in February. Performance at the 53-week auction was maximum, while that for 15-years was mediocre. The same type of securities were sold again in June at 5.9%, with similar results. An auction of 3-year securities was held in May – it closed at 5.0%, with somewhat more than half of the offered amount sold. No euro-indexed bills were issued in 2011. Securities issued by end-2010 fell due on 1 July.

**Chart III.4.3. Trends in the primary market of dinar government securities and trends in the key policy rate**

Source: Ministry of Finance.

<sup>18</sup> By end-June, effective rates ranged from 12.5% for 53-w securities to 13% for 2-y securities.

**Chart III.4.4. Bank interest rates on newly extended loans**  
(p.a., %)



Total trading in the secondary market amounted to RSD 43.9 bln and EUR 202.6 mln. Of this amount, RSD 21.7 bln related to securities sold on the day of the primary trade settlement. By end-June, rates of return until maturity moved from 11.8% for the remaining 2-m maturity to 12.4% for the remaining 10-m maturity.

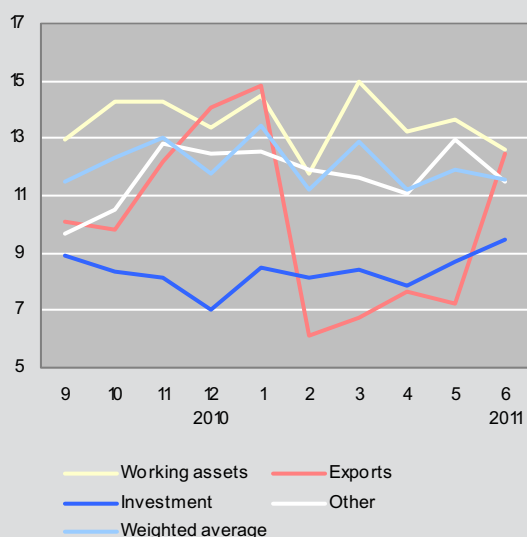
Rates on newly approved dinar household loans fell 0.3 pp to 21.5%. The rate on euro-indexed loans was up from 8.3% to 9.7%. The price of fresh housing and consumer loans was down 0.3% and 2.5% respectively, which may be linked to more intensive activity on the subsidised market.

Relative to end-2010, the price of dinar corporate and euro-indexed loans was up 1.7 pp and 0.4 pp respectively. In terms of purpose, the highest increase was recorded for rates on investment loans.

Rates on the most expensive forms of borrowing (revolving loans, credit card and current account overdrafts) declined in both sectors – the sharpest drop, however, was noted for credit card debt.

Relative to end-2010, rates on dinar household deposits remained largely unchanged (10.7%), while rates on euro-term deposits and euro-indexed term deposits were somewhat lower (by 0.4 pp) and stood at 4.2%. Rates on dinar corporate deposits were up 1.0 pp (to 12.4%), while those on new euro- or euro-indexed deposits were somewhat higher (3.8%).

**Chart III.4.5 Interest rates on dinar corporate loans**  
(p.a., %)



## Monetary aggregates

### Reserve money

In H1, total reserve money contracted 9.2% nominally or 15% in real terms. In absolute amount, total reserve money declined RSD 49.5 bln, of which dinar reserve money was down RSD 5.6 bln.

In the course of H1, dinar reserve money was created via FX transactions, while dinar transactions acted in the opposite direction.

Temporary payment operations with Kosovo and Metohija, the monetisation of funds from FX government accounts, along with the renewal of 3-m FX swap auctions and net FX purchases in the IFEM impacted on growth in reserve money.

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

	Dec. 2010	June 2011	Changes in H1 2011
<b>Net foreign assets</b>	<b>892,721</b>	<b>866,392</b>	<b>-26,329</b>
Net FX reserves	893,497	866,204	-27,293
Gross FX reserves	1,055,151	1,021,233	-33,918
IMF loans	-161,654	-155,029	6,625
Other net foreign assets	-776	188	964
<b>Net domestic assets</b>	<b>-355,382</b>	<b>-378,585</b>	<b>-23,203</b>
Net domestic NBS loans	-149,570	-206,472	-56,902
Net loans to government <sup>1)</sup>	-106,392	-137,684	-31,292
Government loans	1,319	1,310	-9
Government deposits	-107,711	-138,994	-31,283
Net claims on banks	-46,504	-69,191	-22,687
Loans to banks	404	5,102	4,698
Repo operations	-46,900	-73,880	-26,980
Other securities	-8	-413	-405
Loans to public enterprises	0	0	0
Loans to non-bank financial institutions	5,519	5,069	-450
Loans to other sectors	3,404	2,500	-904
Term and restricted deposits	-5,597	-7,166	-1,569
NBS savings bills	0	0	0
Other net assets	-205,812	-172,113	33,699
<b>Reserve money</b>	<b>537,339</b>	<b>487,808</b>	<b>-49,531</b>
Dinar reserve money	188,162	182,512	-5,650
Currency in circulation	91,750	84,286	-7,464
Dinar reserves of banks	87,412	92,181	4,769
Required reserves	65,079	65,355	276
Excess reserves	22,333	26,826	4,493
Other deposits of other sectors	1	0	-1
Local government deposits	8,999	6,045	-2,954
FX bank deposits	349,177	305,296	-43,881

<sup>1)</sup> Excluding local government authorities.

Source: NBS.

The largest portion of reserve money was withdrawn via open market operations. Investment in repo securities was attractive for banks throughout the review period. Despite the June cut in the key policy rate, banks stepped up investment in repo securities<sup>19</sup>. The growth in funds on dinar government accounts with the NBS gave a further boost (though to a lesser extent) to reserve money withdrawal.

In terms of the structure of dinar reserve money, cash in circulation contracted RSD 7.5 bln, and local government deposits held with the NBS – RSD 3.0 bln relative to end-2010. Bank reserves were up RSD 4.8 bln as a result of higher excess reserves. Required reserves allocated in dinars remained broadly the same on end-2010.

### Monetary aggregates M1, M2 and M3

Money supply contracted in H1 relative to end-2010, which is expected given the traditionally higher level of money supply by a year-end.

A respective decrease in dinar monetary aggregates M1 and M2 was 6.5% and 2.1% in nominal terms, or 12.4% and 8.3% in real terms. This was chiefly due to the reduction in cash in circulation and balances in transaction accounts. Dinar savings and term account balances increased, due to rising balances in accounts of local government authorities and other financial institutions. Dinar corporate account balances contracted, while the level of dinar household saving remained unchanged from end-2010.

The broadest monetary aggregate – M3, lost 1.2% nominally or 7.5% in real terms, partly in response to appreciation of the dinar. A rise in FX deposits was primarily due to growing household savings, which was particularly pronounced in June when yet another new series of frozen FX savings bonds were redeemed. Insurance companies and pension funds invested in the purchase of 15-year, euro-denominated government bonds, which reflected on the reduction in FX deposits of these organisations.

<sup>19</sup>The initiated relaxation of monetary policy did not affect the banks' commitment to invest in repo securities. In fact, the average monthly values of the repo stock show an increase.

The coverage of money supply M3 by NBS FX reserves contracted from 77.5% at end-2010 to 75.9% in June 2011 – with banks' FX reserves included, it declined from 90.6% to 84.9%.

Net domestic assets acted in the direction of M3 creation and net foreign assets in the direction of its withdrawal. Corporate and household lending by banks contributed most to M3 creation. The Government acted in the opposite direction – mainly due to rising FX and dinar deposits with the NBS. On the other hand, increased borrowing in foreign currency (mainly on account of the issue of euro-denominated securities and the disbursement of the Société Générale budget-support loan) was compensated with the reduction in dinar liabilities, which excludes the government influence on M3 creation. A reduction in net foreign assets of banks and the NBS negatively affected the M3 creation.

## Bank lending

Lending rose at a slower pace relative to H1 2010.

Corporate and household lending rose 4.5%<sup>20</sup> in real terms. Y-o-y, corporate lending rose more slowly (from

8.4% to 4.9% in real terms) than household (from 5.6% to 3.6%).

Bank claims under loans and interest on the non-financial sector rose RSD 47.2 bln nominally (2.9%) or RSD 75.8 bln (4.7%) excluding the exchange rate effect.

Banks generally tapped domestic sources of funding. Most funds were provided from rising deposits, chiefly FX household savings. Lending activity was partly financed from liquidity released under the amended required reserves arrangements, while enhanced investment in repo securities pushed in the opposite direction. A marginal rise in net external borrowing gave a positive (though modest) boost to the lending potential.

Liquidity loans were again the most dominant form of corporate lending. A rise in new investment and export loans is a positive signal of future trends in economic activity. Broken down by sector, most loans were extended to enterprises from the transport and industry sectors. Housing loans were predominant within new household loans. Household borrowing under consumer loans, use of credit cards and current account overdrafts remained broadly unchanged.

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

	December 2010	June 2011	Changes in H1 2011
<b>Net foreign assets</b>	<b>507,330</b>	<b>488,003</b>	<b>-19,327</b>
Bank net foreign assets	-385,391	-378,390	7,001
<b>Net domestic assets of the banking sector</b>	<b>853,448</b>	<b>856,770</b>	<b>3,322</b>
Net domestic loans	1,722,550	1,736,194	13,644
Net claims on government	65,644	35,946	-29,698
Government loans	193,983	194,303	320
Government deposits	-128,339	-158,357	-30,018
Loans to other resident sectors	1,656,906	1,700,248	43,342
Loans to other financial institutions	35,433	39,780	4,347
Loans to the corporate sector	1,030,758	1,056,932	26,174
Loans to households	571,946	584,032	12,086
Loans to local government authorities	18,106	18,574	468
Loans to non-profit and other organisations	663	930	267
Other net assets	-869,102	-879,424	-10,322
<b>Money supply M3</b>	<b>1,360,777</b>	<b>1,344,772</b>	<b>-16,005</b>
Money supply M2	410,495	401,969	-8,526
Money supply M1	253,286	236,880	-16,406
Currency in circulation	91,750	84,286	-7,464
Transaction deposits	161,536	152,594	-8,942
Dinar savings and term deposits	157,209	165,089	7,880
FX deposits	950,282	942,803	-7,479

Source: NBS.

<sup>20</sup> Deflated by inflation, excluding the exchange rate effect.



Table III.4.3. Subsidised loans in 2010 and 2011

(in RSD bln)

	2010	H1 2011
<b>Government Programme of Measures to Ease the Effects of the Global Financial Crisis</b>		
<b>Loans approved</b>	<b>185.1</b>	<b>86.0</b>
Liquidity	124.6	75.3
Investment	24.2	8.4
Consumer	9.2	2.4
Dinar cash	27.1	0.0
<b>Subsidised housing loans</b>	<b>8.4</b>	<b>2.2</b>
<b>Subsidised housing army loans</b>	<b>0.9</b>	<b>0.2</b>
<b>Subsidised farmers' loans</b>	<b>8.1</b>	<b>-</b>

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

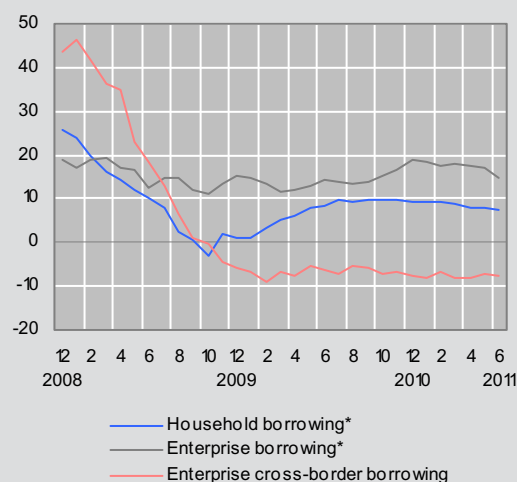
In April, the Government issued recommendations to banks with a view to temporary reducing the burden of household debt repayment. In June, it issued recommendations to help the corporate sector overcome illiquidity problems. Banks were suggested to approve a grace period to loan beneficiaries (up to one year to the corporate sector and two years to households) and to charge only interest during the grace period, while at the same time extending the term of loan repayment by one/two years.

To mitigate risks in the financial system, the NBS adopted a set of measures in May prescribing additional requirements in terms of FX and FX-indexed lending to natural persons. As a result, only euro-indexation is allowed, the downpayment for non-housing loans is set at 30%, while housing FX and FX-indexed loans are capped at 80% of the value of the property mortgaged.

The share of dinar in total loans rose throughout H1 – until June, when it contracted to 31.4% in response to dinar's depreciation in June. Excluding the exchange rate effect in June, the share of dinar in total lending equalled 32.5%. Attempts to avoid NBS's additional requirements in relation to FX and FX-indexed lending, which came into

Chart III.4.6. Real bank claims under loans and enterprise cross-border borrowing

(y-o-y growth rates, %)



\* Deflated by inflation, excluding the effect of exchange rate changes.

Source: NBS.

effect on 30 June<sup>21</sup>, triggered a step-up in housing and consumer lending, and a rise in FX and FX-indexed household loans in June. Furthermore, a smaller amount of subsidised dinar liquidity loans extended to the corporate sector contributed to a reduced share of dinar loans.

Activity in the subsidised market continued in H1 and was particularly dynamic in Q2. Since the early year, banks approved RSD 88.4 bln in subsidised loans. Most loans were extended within the Government's Programme to Ease the Adverse Effects of the Global Economic Crisis (RSD 86.0 bln), with liquidity loans holding the dominant share (87.6%). As funds earmarked for interest subsidising are depleted, activity in the subsidised market is likely to dip down, unless additional funds are provided for these purposes through the budget revision.

## 5 Aggregate demand

Aggregate demand rose in Q1 and stagnated in Q2 – GDP growth rate reached 1.4% s-a in Q1 and 0.0% in Q2 2011.<sup>22</sup>

<sup>21</sup> Start of application of the NBS's Decision on Measures for Safeguarding and Strengthening Stability of the Financial System.

<sup>22</sup> NBS estimate for Q2 based on the Statistical Office flash estimate of y-o-y growth.

Table III.5.1. **GDP distribution**

	Quarterly growth rates (%)		Contribution to quarterly GDP growth (pp)	
	2011			
	Q1	Q2*	Q1	Q2 *
<b>GDP, at market prices</b>	<b>1.4</b>	<b>0.0</b>	<b>1.4</b>	<b>0.0</b>
Domestic demand	4.9	-0.2	5.4	-0.3
Total final consumption	-0.9	-0.9	-0.9	-0.8
Investment	42.5	2.6	6.3	0.6
Net exports (exports - imports)	35.3	-1.6	-4.0	0.2

\* NBS estimate.

Sources: Statistical Office and NBS.

Q1 GDP growth was prompted by rising domestic demand (contribution: 5.4 pp), due mainly to heightened private sector investment, while foreign demand exerted a negative impact on GDP growth (-4.0 pp).

Domestic demand is estimated to have recorded a negligible fall in Q2 (0.2%), mainly due to dented final consumption. On the other hand, a faster decline in demand for import goods and services than the decline in exports resulted in a mild rise in net exports (1.6%). In terms of the impact on GDP movements in Q2, a positive contribution arising from net external demand (0.2 pp) was offset by the negative contribution of domestic demand (-0.2 pp).

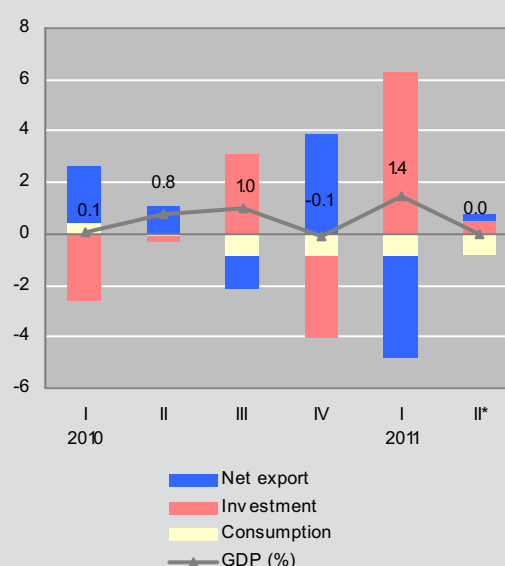
According to Statistical Office data, y-o-y GDP growth was 3.4% in Q1 and 2.2% in Q2<sup>23</sup>. This was due to rising domestic demand and investment, whilst the impact of net external demand was negative.

## Domestic demand

Domestic demand rose in Q1 (4.9%) and declined slightly in Q2 (0.2%).

A rise in domestic demand was due to rising private sector investment (in fixed and current assets), while household consumption and government investment declined.

A drop in domestic demand in Q2 was due to a further decline in final consumption, mainly that of households. Besides, private fixed investment declined as well. In contrast, investment in current assets continued up, while government's investment stagnated.

Chart III.5.1. **Contribution to GDP growth – expenditure side**  
(in percentage points)

\* NBS estimate.

Sources: Statistical Office and NBS.

## Net external demand

Q1 saw a faster s-a rise in imports than exports, which is why foreign trade negatively affected GDP movements. Growth in commodity exports was most due to base metals (iron, steel and non-ferrous metals) and food. On the other hand, imports were boosted by producer goods (equipment and intermediate goods), while imports of consumer goods declined.

A somewhat faster s-a drop in imports than exports positively affected economic activity in Q2. The decline in the exports of goods was prompted by shrinking exports of base metals (iron and steel) and food. Imports dropped primarily on account of producer goods (mainly intermediate). Imports of consumer goods declined further.

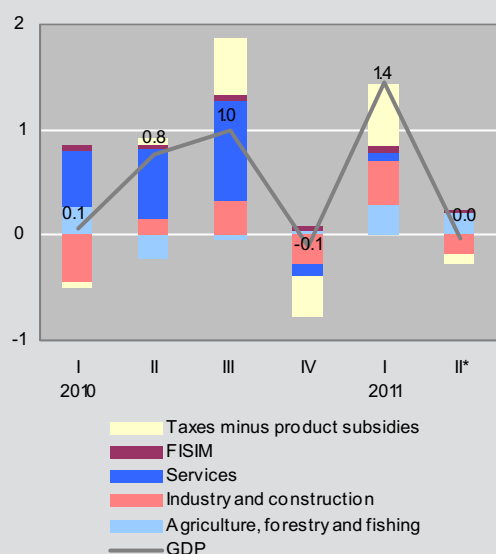
## 6 Economic activity

Q1 GDP rose 1.4% s-a, mainly in the sectors of industrial output (3.6%), agricultural output (3.3%) and transport

<sup>23</sup> Statistical Office flash estimate.



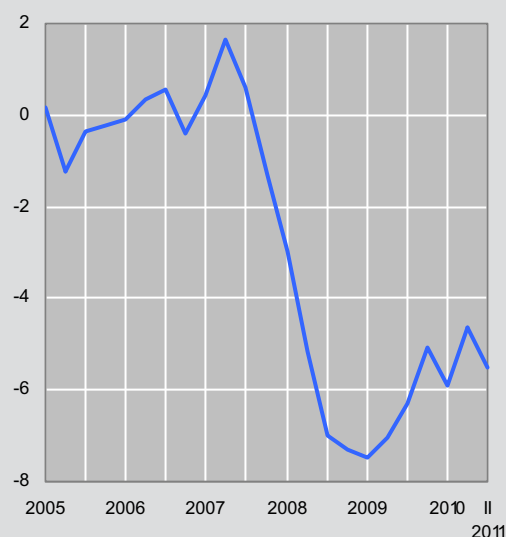
**Chart III.6.1. Contribution to GDP growth – production side**  
(in percentage points)



\* NBS estimate.

Sources: Statistical Office and NBS.

**Chart III.6.2. Output gap**  
(percentage deviation from trend)



\* NBS estimate.

and storage (1.3%). A negative impact on economic activity came from further contraction in retail and wholesale trade (-1.2%), initiated at end-2010. NAVA rose 1.1% s-a, while y-o-y growth accelerated to 3.0%.

Industrial output was propped by manufacturing, as well as by the sectors of mining and electricity, gas and steam supply.

The strongest boost to manufacturing was provided by the production of base metals, motor vehicles and trailers, including metal products. Manufacturing slackened on account of the production of tobacco products, furniture, coke and petroleum products (the overhaul of the Pančevo refinery, initiated in March, weighed down on the output of the Serbian Oil Industry).

Economic activity is estimated to have stagnated in Q2 (GDP growth rate of 0.0% s-a). Growth in NAVA slowed to 0.6% s-a. Y-o-y GDP growth slackened to 2.2%, while NAVA rose 1.4%. As a result, economic activity remains below its pre-crisis levels.<sup>24</sup>

Economic stagnation in Q2 was mainly due to the contraction in manufacturing (1.8%) and a further fall in the volume of trade (2.1%). Reflecting a drop in manufacturing, total industrial output declined (0.9%). However, growth in the remaining two sectors – electricity, gas and steam supply, and mining, recorded mainly in May, prevented a steeper downturn in industrial output.

Manufacturing contracted primarily in response to sagging production of motor vehicles and trailers, as well as food. Production of base metals declined as one blast furnace in Smederevo US Steel was shut in early May. In contrast, the sharpest increase was noted for the production of coke, petroleum products, and basic pharmaceutical products and preparations.

Though economic growth measured by NAVA indicated the narrowing of the negative output gap in Q1, the expected slowdown in NAVA in Q2 signals widening of the gap and the further build-up of disinflationary pressures chiefly on account of aggregate demand.

<sup>24</sup> The pre-crisis period: H1 2008.

Table III.6.1. **Economic activity**

	Quarterly growth rates (%)		Contribution to quarterly GDP growth (pp.)	
			2011	
	Q1	Q2*	Q1	Q2 *
<b>Gross domestic product (GDP)</b>	<b>1.4</b>	<b>0.0</b>	<b>1.4</b>	<b>0.0</b>
Agriculture, forestry and fishing	3.3	2.3	0.3	0.2
Mining and quarrying	5.3	0.9	0.1	0.0
Manufacturing	2.4	-1.8	0.3	-0.2
Electricity, gas, steam and air conditioning supply	2.3	0.6	0.1	0.0
Water supply; sewerage, waste management and remediation act.	0.7	-0.1	0.0	0.0
Construction	-0.8	0.0	0.0	0.0
Wholesale and retail trade; repair of motor vehicles and trailers	-1.2	-2.1	-0.1	-0.2
Transportation and storage	1.3	1.9	0.1	0.1
Accommodation and food service activities	-0.4	3.0	0.0	0.0
Information and communication	0.0	1.4	0.0	0.1
Financial and insurance activities	1.2	1.2	0.0	0.0
Real estate activities	0.9	0.3	0.1	0.0
Professional, scientific and technical activities	0.3	-0.6	0.0	0.0
Administrative and support service activities	0.9	0.1	0.0	0.0
Public administration and defence; compulsory social security	1.0	-0.2	0.0	0.0
Education	0.0	0.2	0.0	0.0
Human health and social work activities	-0.5	0.1	0.0	0.0
Arts, entertainment and recreation	-0.3	-1.5	0.0	0.0
Other service activities	0.6	-2.1	0.0	0.0
Activities of households as employers; services-producing act. for own use	-2.1	-0.7	0.0	0.0
Activities of extraterritorial organisations and bodies				
Gross value added by activities	1.2	0.1	1.0	0.1
FISIM	1.5	0.7	0.0	0.0
Gross value added (GVA)	1.1	0.0	0.9	0.0
Taxes on products minus subsidies on products	3.4	-0.5	0.6	-0.1

\* NBS estimate.

Sources: Statistical Office and NBS.

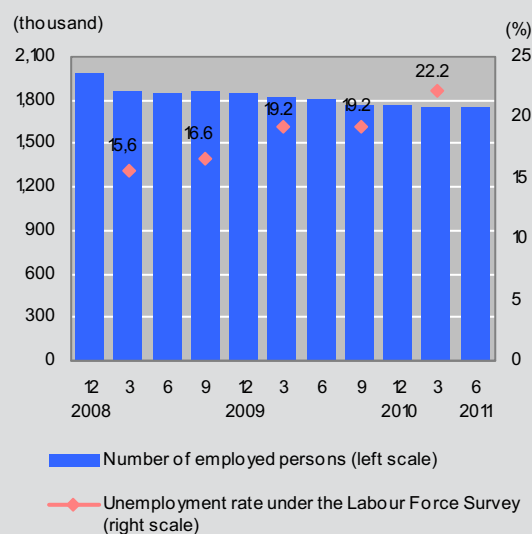
## 7 Wages and employment

Nominal wages rose in H1. In real terms, they picked up slightly in Q1 and stagnated in Q2.

Nominal wage growth was recorded in Q1 in most sectors – 6.2% s-a. The sharpest growth in net wages was observed in the sectors of mining, electricity, gas and steam supply, professional, scientific and technical activities, and real estate activities. Real wages were up 2.3% s-a in most sectors.

Nominal wages rose 3.5% in the private and 4.2% in the public sector. Real growth was marginal in both sectors (0.3% and 0.6% respectively).

Q2 nominal growth was 2.9% s-a – both in the private and public sectors (1.9% and 4.6% respectively). Real wages, however, stagnated in response to real wages declining in the private (0.6%) and rising in the public sector (2.2%). Growth in public sector wages was due to the unfreezing of wages and the payment of quarterly bonuses, vacation bonuses and wage arrears.

Chart III.7.1. **Employment and unemployment rate**

Source: Statistical Office.

Nominal net wage growth was registered in most industries in Q2. However, observed in real terms, net wages shrank across most sectors, most notably in mining, professional, scientific and technical activities, and trade.

The average net wage paid in the Republic of Serbia equalled RSD 36,540 in H1.

The global economic turmoil hit the Serbian labour market. Despite the incipient economic recovery, the employment figure declined by 21,433 or 1.1% in H1 on account of falling numbers of independent entrepreneurs. Employment also contracted in mining, agriculture and financial sectors. In contrast, a pick-up was recorded in education, retail and wholesale trade, and information and communications.

The April Labour Force Survey reported a rise in the unemployment rate – from 19.2% in October 2010 to 22.2% in April this year. The unemployment figure was up by around 84,000. The structure of the unemployed by the job search duration also deteriorated, with the share of long-term unemployed (one year and longer) in total active job seekers rising 2.5 pp (from 13.8% to 16.3%).

## 8 Inflation expectations

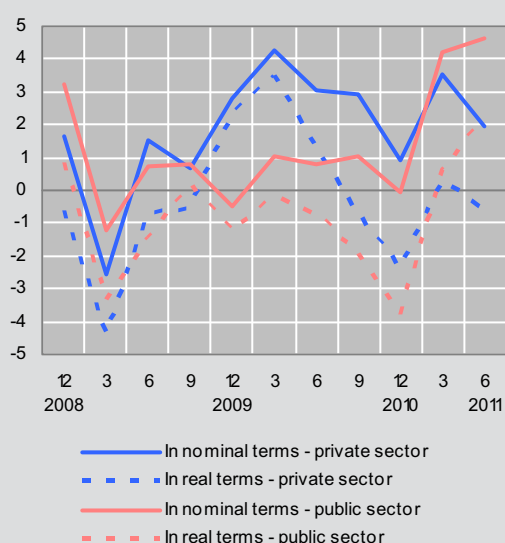
One year-ahead inflation expectations of the financial sector rose in H1 above the upper bound of the target tolerance band.

As indicated by the Bloomberg survey, one year-ahead inflation expectations of financial analysts rose in Q1 – from 7.2% in December 2010 to 8.3% in March 2011. After falling to 8.0% in April, they remained unchanged until end-Q2.

The Gallup survey shows different expectations – those of the financial sector drifted from 8.7% at end-2010 down to 7.4% in the first four months of 2011. Following a pick-up in May and June, inflation expectations stood at 9.4% at end-H1. Corporate and trade union expectations declined in H1, while those of households remained the same.

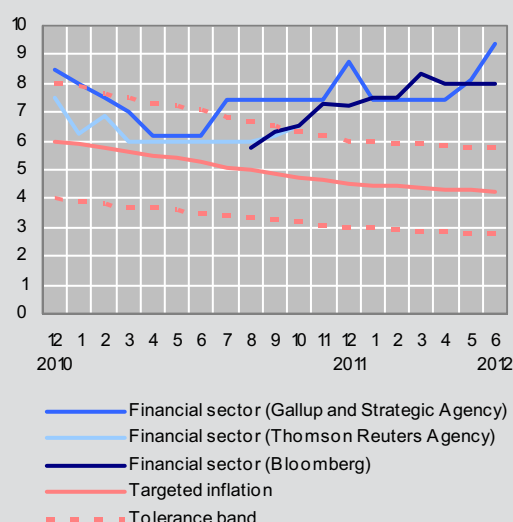
Though y-o-y inflation is sliding down from its April peak, inflation expectations have not diminished. Still, expectations of financial market participants did not mirror the movements in inflation even in the periods of its growth. We believe that a further drop in inflation will incite economic entities to revise downward their

**Chart III.7.2 Average net wages**  
(seasonally-adjusted data, quarterly growth, in %)



Source: Statistical Office.

**Chart III.8.1. One-year ahead expected and targeted inflation**  
(%)



Source: NBS.

expectations, which is likely to aid disinflation in the coming period.

## 9 Fiscal policy

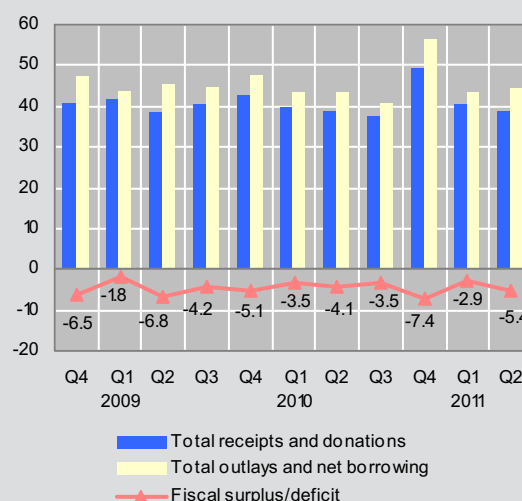
In H1, consolidated budget deficit amounted to RSD 64.7 bln or 4.2% of GDP. Total revenue reached RSD 604.3 bln and expenditure RSD 669.0 bln. The Government net borrowed from domestic creditors, which diminished the fiscal policy monetary effect.

Fiscal revenue displayed more adverse movements than in the same period last year. Y-o-y, total revenue rose 5.9% nominally, but declined 4.6% in real terms. The most important revenue category – VAT receipts, recorded a real 5.0% drop. Excise revenue grew 5.8% in real terms.

Expenditure contracted in real terms too. Y-o-y, consolidated expenditure dropped 4.0%. Wage outlays declined 4.4% in real terms, and transfers to households (including pensions) 8.2%. However, interest expenses picked up 23.4% in real terms in response to the real growth in interest expenses for domestic sources of funding (42.2%).

During 2011, the issuing of government securities continued for the purpose of budget deficit financing. As a result, the stock of public debt reached RSD 304.9 bln in H1.<sup>25</sup> The maturity of dinar securities increased to 36 months, which contributed to the further development of the financial market.

Chart III.9.1. **Public revenue and expenditure\***  
(% of GDP)



\* IMF Methodology.

Source: Calculated based on Ministry of Finance data.

By-end June, Republic of Serbia's total public debt reached EUR 13.3 bln, or 43.7% of estimated GDP over the last four quarters.<sup>26</sup> Since early 2011, public debt rose EUR 1.1 bln or 1.8 pp of GDP. Almost the entire increase in public debt was due to the rising internal public debt (issues of government securities). External public debt rose only EUR 74.1 mln. An increase in public debt was expected given the needs for financing the budget deficit planned at 4.5% of GDP in 2011.<sup>27</sup>

<sup>25</sup> According to public debt statistics, government borrowing is recorded under the nominal value of securities. By the discount value, the stock of public debt under securities amounted to RSD 273.8 bln by end-June. The difference increases with rising maturity of issued securities.

<sup>26</sup> If securities were recorded under the discounted, and not the nominal value, the stock of public debt would be lower by 1.0 pp of estimated GDP in June (42.7% instead of 43.7%).

<sup>27</sup> Budget deficit of 4.5% of GDP in 2011 is envisaged by the new precautionary arrangement with the IMF.

## IV Monetary policy outlook

NBS's monetary policy over the coming period will rely on the principles of the *Memorandum of the National Bank of Serbia on Inflation Targeting as Monetary Strategy*<sup>28</sup> and the *Memorandum of the National Bank of Serbia on Setting Inflation Targets for the Period 2010–2012*<sup>29</sup>, and will be implemented according to the Programme determined by the NBS Executive Board by end-2010.<sup>30</sup>

Monetary policy measures will focus on achieving the inflation target in the medium run. The aim is to gradually reduce inflation without causing macroeconomic disturbances. In achieving the inflation target, the NBS will use its main monetary policy instrument – the 2-week repo interest rate. The rate will be changed in a sustainable, consistent and predictable way, depending on economic developments and inflation projections. In addition, the NBS will use all instruments under its remit to ensure the achievement of the medium-term inflation target.

Y-o-y inflation is expected to decline further and to return within the target tolerance band in H1 2012. Food prices will probably produce the strongest disinflationary effect. Inflationary pressures on account of dinar weakening in June and July are not likely as dinar's appreciation in the first half of the year did not trigger a fall in prices of import products – this means that the exchange rate of the dinar factored by net exporters in their products is probably higher than its current level. Low aggregate demand will produce disinflationary pressures in the

medium run, as indicated by the negative output gap. However, economic recovery will bring about the weakening of this disinflationary factor. A decline in inflation in the coming months will probably dampen inflation expectations, lending a further boost to the disinflation process. Following vigorous growth in H1 2011, regulated prices will rise more moderately until the year-end.

Growing concern about possible adverse effects stemming from the materialisation of risks in some developed countries and currency zones resulted in plummeting shares on global stock exchanges, rising prices of gold and falling commodity prices in world markets. This heightened the uncertainty concerning the speed of further economic recovery at home. As markets will be particularly sensitive to the pursuance of fiscal policy, the Government's readiness to implement fiscal policy within the framework of agreed rules and to conclude the new precautionary arrangement with the IMF is of paramount importance for monetary policy and preservation of macroeconomic stability.

According to estimates of the NBS Executive Board, the future path of the key policy rate will depend on the materialisation of risks in some developed countries and currency zones, and the emergence of fiscal risks at home. Provided fiscal policy is implemented in line with the agreed rules, enough scope would be created for further monetary policy relaxation. The NBS will carefully monitor trends in the international environment and the

<sup>28</sup> Adopted at the meeting of the National Bank of Serbia's Monetary Policy Committee of 22 December 2008.

<sup>29</sup> Adopted at the meeting of the National Bank of Serbia's Monetary Policy Committee of 14 December 2009.

<sup>30</sup> *Decision on the Monetary Policy Programme of the National Bank of Serbia in 2011*, RS Official Gazette, No 95/2010.

realisation of the planned budgetary framework, and will make appropriate decisions in line with estimated effects on the Serbian economy.

In cooperation with the Government, the NBS will continue to implement the dinarisation process which has already yielded visible results and has contributed to strengthening of the interest rate channel and enhanced efficiency of the monetary policy transmission mechanism. Besides safeguarding macroeconomic stability, the NBS will focus on the further development of the dinar money and capital markets, as well as FX hedging instruments.

A stable and competitive financial system is a precondition for efficient functioning of the monetary policy transmission mechanism. The NBS will continue to take all necessary measures to ensure the safety and soundness of financial institutions and maintain the trust in the overall financial system. This will result not only in the efficient mobilisation of savings and allocation of investment, but also in the enhanced resilience to risks inherent in financial operation and to disturbances arising from the international environment.

## **Annex 1 Letter of the NBS to the Government of the Republic Serbia on Reasons Why Inflation Moved Away from the Target**

NATIONAL BANK OF SERBIA

12 April 2011

GOVERNMENT OF THE REPUBLIC OF SERBIA

**Mirko Cvetković, President**

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 on the appropriate policy action to be taken.

### **Why inflation has moved away from the target tolerance band**

Y-o-y inflation rose sharply 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 sharp growth of regulated prices.

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. Therefore, 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 ( $7\pm 2\%$ ).

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 existing 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. In 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 halted the process of relaxation of the rules in that area. Also, 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.

Bearing in mind 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 food 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 sustained 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, using full array of instruments on hand to bring medium-term inflation back to target.



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CIP - Katalogizacija u publikaciji  
Narodna biblioteka Srbije, Beograd

336.7

\*ANNUAL Monetary Policy Report ... /  
National Bank of Serbia. - 2010- . -  
Beograd (Kralja Petra 12) : National Bank of  
Serbia, 2011 (Beograd : Zavod za izradu  
novčanica i kovanog novca Topčider). - 30 cm

Godišnje. - Varijantni naslov: Semi-annual  
Monetary Policy Report. - Ima izdanje na  
drugom jeziku: Godišnji izveštaj o  
monetarnoj politici (Narodna banka Srbije)\* =  
ISSN 2217-6292  
ISSN 2217-6535 = Annual Monetary Policy  
Report (National Bank of Serbia)  
COBISS.SR-ID 185843468