# 7. Monetary Trends and Policy

**The macroeconomic environment in Q2 gave out divergent signals on the type of monetary policy the NBS should be conducting. The recession over the previous four quarters and the slow economic recovery in Q2 indicated a need to implement an expansive monetary policy. However, strong depreciation pressure as well as a moderate, but relatively consistent, speeding up of inflation indicated the need to implement a restrictive monetary policy. Also, the autonomous trends in creating money on the basis of operations on the foreign currency market changed direction. At the end of Q2 and during Q3 the restrictiveness of the monetary policy was additionally reinforced by raising the key policy rate and the change of currency structure of the mandatory reserves in the direction of raising the Dinar participation in those reserves. The registered repayment of the debts of the economy in Q2 was temporary and a rise in newly placed credits to the economy was evident at the start of Q3 while cross-border credits continued their upward trend for the third quarter in a row. The sources for new bank placements were reduced in Q2 despite the rise in enterprise and household deposits following a decision by business banks to use a significant portion of their funds to pay foreign debts. The National Bank of Serbia moved from reverse repo transactions in the middle of last year to standard repo transactions which means that now repo transactions are being used to inject liquidity in the market. That change is the NBS response to the altered circumstances because foreign currency transactions were used to date to withdraw liquidity due to the low inflow/outflow of capital while in the past foreign currency transactions were used to create liquidity. In conditions of speedier inflation, standard repo transactions which are used to create added liquidity are indicating a need for great caution by the NBS. The problems with the liquidity of the Serbian economy and the continuing depreciation of the Dinar have additionally increased the participation of NPLs. Except the slight decrease in the second half of 2009. NPLs recorded a constant growth over the past four years without any indication of a possible change in the future.**

## Central Bank: Balance and Monetary Policy

*Drop of reserve money continues in Q2 …*

*… due to NBS need to intervene on interbanking foreign currency market*

In the second quarter, similar to the previous quarter, fiscal policy was very expansive (see section on fiscal policy), which resulted in a significant creating of money on that basis. On the other hand, the NBS decided on a restrictive monetary policy which in Q2 was primarily reflected in the sale of foreign currency, which was used to withdraw Dinars, and eased the depreciation pressure. The view is that this choice by the NBS in conditions of a highly Euro-oriented economy such as the Serbian is justified because a possible strong depreciation of the Dinar would soon spill over to prices whose stability is the main goal of the NBS. Besides, a strong depreciation of the Dinar would have a negative effect on the economy, the population and the state most of who are indebted in foreign currency or have Dinar loans which are indexed against the Euro. In conditions of a high euroisation of credits, a strong depreciation of the Dinar would certainly spill over to the credit crisis.

*Level of net own reserves lowered in Q2 …*

*… as consequence of sale of foreign currency with the aim of stabilizing the exchange rate*

Due to the depreciation pressure which continued in Q2, the NBS intervention on the interbank foreign exchange market (IFEM) was intensified. Including the 823 million Euro the NBS used to slow down the depreciation trend, the overall funds used since the start of the year rose to 1.28 billion Euro (Table T7-1). The sale of foreign currency led to a drop in the NBS net own reserves in Q2 by 28% compared to the value of reserve money at the start of the year which had a negative effect on the level of the reserve money. On the other hand, business banks made a great withdrawal of funds from the repo stock at the NBS which had a positive effect on the creating of reserve money and compensated the negative effects of the sale of foreign currency on the IFEM. Along with the spending of part of the deposits which the state had in accounts with the NBS, the overall effect on the level of reserve money was a growth of 31% compared to the value of reserve money at the start of the year.

## Table T7-1. Serbia: NBS instruments and foreign reserves 2009-2012

| | 2009 | | 2010 | | | | 2011 | | | | 2012 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun |
| Repo stock (in milions of euros) | 1,721.12 | 1,593.79 | 1,406.63 | 1,037.51 | 626.87 | 449.00 | 549.77 | 746.09 | 1,000.42 | 1,174.84 | 1,055.98 | 111.98 |
| NBS interest rate | 12.00 | 9.50 | 9.00 | 8.00 | 9.00 | 11.50 | 12.25 | 12.00 | 11.25 | 9.75 | 9.50 | 10.00 |
| Repo rate adjusted for inflation | 8.05 | 12.16 | -5.54 | 2.95 | -6.65 | 7.56 | -17.51 | 16.11 | 8.61 | 19.40 | -3.97 | -3.53 |
| Repo rate adjusted for changes in the exchange rate | 11.51 | -31.19 | -2.30 | -19.45 | 3.20 | 21.90 | 13.99 | -7.14 | 25.90 | 6.51 | -19.08 | -12.16 |
| NBS interventions on FX market (in milions of euros) | 18.20 | -80.90 | -631.50 | -785.00 | -595.20 | -321.50 | 5.00 | -30.00 | -30.00 | -30.00 | -488.50 | -1278.8 |
| **INCREASE** | | | | | | **cumulative, in % of opening H[5)]** | | | | | | |
| NBS own resreves[2)] | 9.6 | 20.8 | -15.3 | -31.2 | -57.5 | -61.0 | -8.9 | 14.0 | 26.8 | 73.9 | -17.6 | -45.4 |
| NDA | -38.4 | -40.9 | -0.3 | 4.5 | 30.6 | 33.6 | -0.7 | -15.5 | -28.6 | -51.8 | 2.4 | 61.3 |
| Government, dinar deposits[1)] | 1.0 | -13.0 | 2.7 | 4.8 | 7.9 | 3.1 | -4.6 | -3.3 | 3.6 | 2.7 | -5.1 | 6.1 |
| Repo transactions[3)] | -22.6 | -19.9 | 4.9 | 14.2 | 35.4 | 42.5 | -6.9 | -15.3 | -32.2 | -47.5 | 2.2 | 53.7 |
| Other items , net[4)] | -16.7 | -8.1 | -7.9 | -10.4 | -8.6 | -7.9 | 10.9 | 3.1 | 0.0 | -7.0 | 5.3 | 1.5 |
| H | -28.8 | -20.1 | -15.6 | -26.7 | -26.9 | -27.3 | -9.6 | -1.5 | -1.8 | 22.1 | -15.2 | 15.9 |
| o/w: currency in circulation | -2.3 | 1.8 | -3.9 | -3.2 | -2.3 | -1.5 | -5.8 | -4.2 | 1.3 | 12.4 | -3.3 | -4.0 |
| o/w: excess liquidity | -16.5 | -16.5 | -13.7 | -12.5 | -8.6 | -6.8 | -3.8 | 2.5 | -5.5 | 6.3 | -13.6 | -1.6 |
| | | | | | | **in millions of euros, cumulative from the beginning of the year** | | | | | | |
| NBS, net | 681.73 | 1,446 | -183 | -389 | -990 | -1,059 | 56 | 282 | 1,374 | 2,203 | -1,070.60 | -2,087.45 |
| Gross foreign reserves | 1,371.41 | 2,477 | -135 | 5 | -637 | -654 | 16 | 308 | 1,426 | 2,334 | -1,138.11 | -2,090.09 |
| Foreign liabilities | -689.68 | -1,031 | -49 | -393 | -353 | -405 | 41 | -26 | -52 | -131 | 67.51 | 2.64 |
| IMF | -747.41 | -1,104 | -47 | -386 | -356 | -408 | 37 | -32 | -59 | -132 | 58.24 | -6.44 |
| Other liabilities | 57.72 | 74 | -2 | -7 | 3 | 3 | 4 | 6 | 7 | 1 | 9.27 | 9.07 |
| | | | 0 | | | | | | | | | |
| NBS, NET RESERVES-STRUCTURE | | | 0 | | | | | | | | | |
| 1. NBS, net | 681.73 | 1,446 | -183 | -389 | -990 | -1,059 | 56 | 282 | 1,374 | 2,203 | -1,070.60 | -2,087.45 |
| 1.1 Commercial banks deposits | -280.43 | -725 | -115 | -393 | -377 | -374 | 22 | 226 | 109 | -462 | 459.45 | 740.45 |
| 1.2 Government deposits | -82.21 | -54 | -80 | 39 | 22 | 18 | -232 | -258 | -1,009 | -455 | 263.40 | 488.43 |
| 1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2) | 319.09 | 668 | -378 | -743 | -1,346 | -1,415 | -154 | 250 | 474 | 1,286 | -347.74 | -858.58 |

Source: NBS.

1) „State" includes all levels of government: republic to local government level.

2) Definition of NBS net own reserves in section 8 „Monetary Trends and Policy", Frame 4, *QM* No. 5.

3) This category includes NBS bills and repo transactions.

4) Other domestic net assets include: domestic loans (net debts of banks, not including bills and repo transactions; net debts of the economy) along with other assets (capital and reserves; and balance items: other assets and other liabilities) and corrected by exchange rate differentials.

***NBS key policy rate raised in Q2 …***

***… as well as Dinar share of foreign exchange required reserves***

Following the raising of the key policy rate in June by 50 base points, the NBS made two more corrections of the key policy rate in July and August by 25 base points bringing the current rate to 10.5%. A session of the NBS Executive Board on June 7 decided to change the Decision on Mandatory Reserves by increasing reserve ration on Dinar liabilities with a foreign currency clause to 50% for all maturities. It also raised, for the second time that year, the Dinar share of allocations under foreign exchange required reserves under differentiated rates. For sources of funding with maturity of up to two years, the rate was raised from 20% to 27% while for sources with maturity of over two years, rate was raised from 15% to 19%. Those measures were taken by the NBS in an effort to sterilize a part of the Dinar liquidity of the banking sector and ease the pressure on the exchange rate which was obviously destabilized from the start of the year and increase the foreign currency offer on the interbank market.

At its next session on July 12, the NBS decided that instead implementing the key policy rate on two week repo selling transactions of bonds (reverse repo) the rate would be implemented on one week repo purchasing transactions of bonds (standard repo). With that decision, the NBS practically changed its role to date with the NBS now buying Dinar state bonds from business banks and the business banks buying them back for the value of previously borrowed funds increased by interest. The key policy rate under the new decision sets the lowest interest rate under which business banks buy back bonds. By using that model, the NBS now creates the liquidity of the banking sector by buying bonds instead of selling it as was the case to date. That change in the manner in which repo operations function caused a large drop in repo stocks in Q2. In July, repo stocks based on reverse transactions dropped to zero. The transfer to standard repo transactions means that the NBS now buys bank bonds and injects fresh liquidity on that basis. For now those operations are modest – late in July, the NBS created liquidity from two billion Dinars based on repo bank bonds.

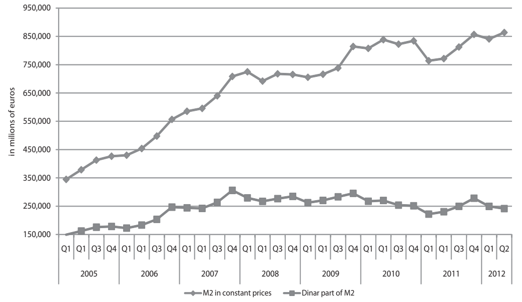
The transfer from the reverse to the standard repo is the consequence of altered macroeconomic circumstances, primarily the change of direction in the effects of transactions on the foreign currency market on creating money. In the previous decade, money was mainly created on the basis of transactions on the foreign currency market in amounts which were greater than the realistic demand for money – which is confirmed by the relatively high inflation in that period. With the aim of suppressing inflation and easing the pressure on the foreign currency market, the NBS issued reverse repo bonds withdrawing surplus liquidity. From the start of the year, the situation on the foreign currency market was significantly changed – foreign currency offer is significantly lower than the demand and Dinar money was withdrawn on the basis of foreign currency transactions. In those circumstances, Dinar liquidity dropped and a need appeared for the NBS to implement standard repo transactions to raise liquidity. However, the NBS should carefully monitor trends on the foreign currency market in future as well as state operations to adequately react in order to create or withdraw liquidity. Due to the high inflation in Serbia and low real demand for Dinars, the NBS needs to exercise great caution to prevent a start of the depreciation of the Dinar and speeding up of inflation through the creating of added liquidity.

The decisions by the new NBS leadership to raise the key policy rate and increase the restrictiveness of the monetary policy shows that, most probably, following the forced resignation of the governor there would be continuity in monetary policy instead of the announced turnabout. That primarily means that keeping inflation under control would continue to be the main goal of the NBS instead of a "stimulating" of the economy. Of course, pressure can be expected on the NBS in future to create added liquidity in order to get the economy moving or solve the problem of lack of liquidity which masks the problem of the insolvency of part of the Serbian economy.

The invoking of other central banks by the advocates of an expansive fiscal policy is quite inadequate because the conditions in which monetary policy is implemented in Serbia is essentially different and the results of an expansive policy would be different. Serbia has had a dual currency system for several decades which has been partly legalized and in which the Dinar is the inferior currency against the Euro. In the overall money mass, the Dinar accounts for less than 30% and there is a tendency to lower that percentage. The real level of demand for the Dinar is low which means that monetary policy, that is the increase in the offer of the Dinar does not lead to a growth in savings and loans in Dinars but to a growing demand for foreign currency. The rising demand for foreign currency leads to a depreciation of the Dinar which transfers with some delay to the growth of inflation. The rise in the exchange rate and subsequently inflation lowers the real value of the Dinar money mass although its nominal value is higher. That is exactly what happened in the first half of the year when expansive fiscal policy led to an increase in the nominal Dinar money mass but with its real value in Euro and Dinars dropping.

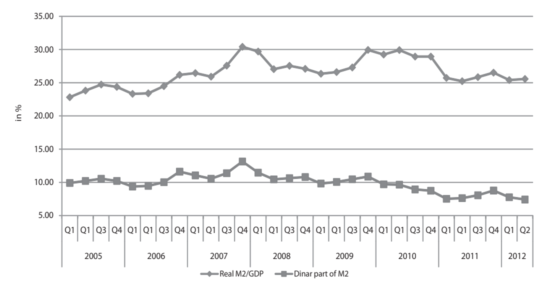
The effect of a possible monetary expansion would a rise in the exchange rate and inflation instead of a growth of savings and loans in Dinars and getting the economy moving. The effect of possible expansive policy on the Dinar exchange rate would be especially strong in circumstances when the offer of foreign currency was very low which, is the case in 2012. In those circumstances, the benefits for privileged credit users would be higher then the expenses while the expenses would be greater than the benefits for other people. The monetary policy in Serbia is forced to balance on a very thin line between the intention to stimulate the economy and the risk of speeding up inflation. It is relevant that the key problems in the Serbian economy are systemic in nature and that they cannot be solved through an expansive monetary and fiscal policy – a drop in economic activity in the first half of the year, despite a very expansive fiscal policy, confirms that convincingly.

**Graph T7-2. the state of the money mass in constant prices, 2005–2012**




Source: calculation *QM*

**Graph T7-3. Serbia: money mass trends as percentage of GDP, 2005-2012**




Source: calculation *QM*

## Monetary System: money mass structure and trends

***Increased state spending and withdrawal of banks from repo placement in Q2 … … had a positive effect on the growth of the money mass***

The real level of the money mass was increased in Q2 by 12% y-o-y (in Q1 the real growth was 10.1% y-o-y, Table T7-4). Following the exchange rate differences adjustment due to the depreciation of the Dinar the y-o-y rate is negative and stands at –1.2%, with a drop being registered with households of –2.4% y-o-y while the drop for enterprises stands at 0.5% y-o-y. The rise of the M2 in Q2 viewed in the light of the value of the monetary aggregate at the end of last year is 6%. The money mass was created by Dinar channels, the spending of state deposits in the NBS and the withdrawal of repo placements of business banks while the net side (that is transactions on the foreign currency market) caused a drop in liquidity because of a deficit in the current and capital balance.

The increase in the y-o-y rate of growth of the M2 which in Q2 stood at 18.1% nominally (in Q1 a rise of 14% y-o-y) is owed over 80% to the rise in foreign currency deposits whose y-o-y rate of growth stood at 14.96%. In the same period, the rate of growth of savings and term deposits of 0.78% y-o-y as well as the base M1 with 2.39% y-o-y, decreased their contribution to the growth of M2 to about 17.5% of the overall (in Q1 the total contribution stood at 33.7% of the overall growth of M2).

**Table T7-4. Serbia: monetary survey, selected indicators, 2009–2012**

| | 2009 | | | | 2010 | | | | 2011 | | | | 2012 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mar | Jun | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun |
| **y-o-y, in %** | | | | | | | | | | | | | | |
| M2[1)] | 6.5 | 12.1 | 10.4 | 21.3 | 19.9 | 22.1 | 20.1 | 13.1 | 8.0 | 3.7 | 8.1 | 10.1 | 14.0 | 18.1 |
| Credit to the non-government sector[2)] | 33.8 | 27.7 | 22.3 | 16.1 | 14.4 | 25.0 | 27.1 | 27.2 | 19.3 | 11.6 | 8.3 | 7.7 | 14.4 | 14.0 |
| Credit to the non-government sector[2)], adjusted[3)] | 20.9 | 13.9 | 7.7 | 10.2 | 10.4 | 16.2 | 16.8 | 19.9 | 16.7 | 13.0 | 11.8 | 8.1 | 8.6 | 4.6 |
| Households | 7.4 | 1.5 | 4.4 | 3.7 | 7.9 | 16.1 | 18.7 | 18.9 | 25.1 | 20.6 | 17.8 | 5.7 | 5.7 | 3.3 |
| Enterprises | 28.7 | 20.9 | 9.3 | 13.6 | 11.6 | 16.3 | 15.8 | 20.4 | 12.8 | 9.4 | 8.8 | 9.3 | 10.1 | 5.3 |
| **real y-o-y, in %** | | | | | | | | | | | | | | |
| M2[1)] | -2.7 | 3.5 | 2.9 | 13.8 | 14.5 | 17.1 | 11.4 | 2.4 | -5.4 | -8.0 | -1.2 | 2.7 | 10.1 | 12.0 |
| Credit to the non-government sector[2)] | 22.2 | 17.9 | 14.0 | 9.0 | 9.1 | 19.9 | 17.9 | 15.0 | 4.5 | -1.0 | -1.1 | 0.5 | 10.5 | 8.1 |
| Credit to the non-government sector[2)], adjusted[3)] | 10.2 | 4.3 | -0.5 | 3.2 | 5.3 | 11.3 | 7.8 | 7.9 | 1.8 | 0.2 | 2.2 | 0.9 | 4.9 | -1.2 |
| Households | -2.1 | -7.1 | -3.6 | -2.9 | 2.9 | 11.1 | 9.6 | 16.8 | 9.2 | 7.0 | 7.8 | -1.3 | 2.0 | -2.4 |
| Enterprises | 17.3 | 10.7 | 1.0 | 6.4 | 6.5 | 11.3 | 6.9 | 3.7 | -1.6 | -3.0 | -0.4 | 2.1 | 6.3 | -0.5 |
| **in bilions of dinars, end of period** | | | | | | | | | | | | | | |
| M2[1)] | 1,015.4 | 1,061.7 | 1,087.2 | 1,204.0 | 1,217.8 | 1,296.2 | 1,306.0 | 1,360.8 | 1,315.6 | 1,344.8 | 1,412.2 | 1,498.0 | 1,499.7 | 1,588.6 |
| M2[1)] dinars | 378.1 | 401.1 | 417.0 | 436.8 | 403.7 | 417.9 | 403.0 | 410.5 | 382.7 | 402.0 | 433.8 | 486.5 | 445.0 | 444.6 |
| Fx deposits (enterprise and housholds) | 637.3 | 660.6 | 670.2 | 767.2 | 814.0 | 878.2 | 903.0 | 950.3 | 932.9 | 942.8 | 978.3 | 1,011.5 | 1,054.7 | 1,144.0 |
| **cumulative, in % of opening M2[4)]** | | | | | | | | | | | | | | |
| M2[1)] | 2.3 | 6.9 | 9.5 | 21.3 | 1.1 | 7.7 | 8.5 | 13.1 | -3.3 | -1.2 | 3.8 | 10.1 | 0.1 | 6.1 |
| NFA, dinar increase | 2.2 | 0.4 | 3.6 | 8.9 | -0.9 | -0.6 | -1.7 | -5.3 | -1.9 | -1.4 | 9.5 | 11.9 | -5.6 | -4.5 |
| NDA | 0.1 | 6.5 | 6 | 12.4 | 2.1 | 8.3 | 10.2 | 18.4 | -1.4 | 0.2 0.5 | -5.7 -2.0 | -1.8 | 5.7 | 10.5 |

Source: NBS

1) Money mass: components – v. Analytical and convention notes *QM*.

2) Credit to non-state sector – credits to the economy (including local government) and households.

3) Trends are adjusted for exchange rate differences. Adjustments made on assumption that 70% of loans to non-state sector (both households and the economy) are indexed against the Euro.

4) Starting M2 means the state of the M2 at the start of one and the end of the previous year.

## Banking sector: placements and sources of finance

***The economy and the population in Q2 repaid debts to domestic banks ...***

***Growth of cross-border loans to the economy continues through Q2***

The credit placement of the banking sector to the economy and the population in Q2 recorded a drop of 173 million Euro (table T7-5). While the population increased its debts to 42 million Euro, the economy reduced its debts to 214 million Euro and influenced the overall drop in loan placements. We should stress that the net debt reduction of the economy was affected by the writing off of some non-performing loans by several banks. In July that trend ended and there was a growth in new loans to the economy of 237 million Euro. Also, the economy increased its foreign debts based on a rise in cross-border credits. The growth of cross-border credits which started again two quarters earlier, stood at 132 million Euro in Q2 (in Q1 cross-border loans rose by 115 million Euro). Based on these debts, the overall drop in credit activity in Q2 in the economy was partly eased and stood at –41 million Euro. Along with the lower credit placements, business banks withdrew 916 million Euro in Q2 from REPO placements and in July withdrew an additional 107 million Euro which brought the repo stock down to the lowest level since we have been monitoring its movements[1]. Part of the withdrawn repo funds were used by

1 Reason for withdrawal of funds from REPO placement is mostly due to NBS decision to move from reverse repo transactions to standard repo transactions.

the banks to cover the Dinar share of allocations under foreign exchange required reserve which the NBS raised in April. On the other hand, auctions of treasury bonds brought in more than 620 million Euro from the banking sector. A part of those funds were used to finance earlier issues which have fallen due and the other part to finance state spending in this period. For the same reason, the state withdrew funds in Q2 from accounts with business banks and that raised the net indebtedness by 257 million Euro which partly eased the overall drop in placements by the banking sector in Q1 to 833 million Euro.

**Table T7-5. Serbia funding, credit and investment activity, adjusted[1] trends, 2009-2012**

| | 2009 | | | | 2010 | | | | 2011 | | | | 2012 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mar | Jun | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun | Sep | Dec | Mar | Jun |
| | in millions of euros, cumulative from the beginning of the year | | | | | | | | | | | | | |
| **Funding(-, increase in liabilities)** | 958 | 61 | -1,171 | -2,790 | 7 | -117 | -68 | -1,495 | 603 | 69 | -822 | -1,083 | 672 | 692 |
| Domestic deposits | 235 | -336 | -691 | -1,633 | 131 | -233 | -236 | -836 | 206 | -148 | -844 | -1,169 | 589 | 146 |
| Households deposits | -40 | -270 | -551 | -1,314 | -137 | -323 | -500 | -1,020 | -92 | -295 | -483 | -655 | -49 | -189 |
| dinar deposits | 46 | -2 | -30 | -89 | 30 | 21 | 25 | 12 | 24 | 13 | -68 | -182 | 30 | 69 |
| fx deposits | -87 | -268 | -521 | -1,225 | -167 | -343 | -525 | -1,032 | -116 | -308 | -416 | -473 | -79 | -258 |
| Enterprise deposits | 276 | -67 | -140 | -319 | 268 | 89 | 264 | 184 | 298 | 147 | -361 | -513 | 638 | 336 |
| dinar deposits | 171 | 5 | -174 | -284 | 213 | 84 | 232 | 151 | 176 | 13 | -128 | -350 | 362 | 304 |
| fx deposits | 105 | -72 | 34 | -35 | 55 | 5 | 32 | 33 | 122 | 134 | -233 | -164 | 275 | 31 |
| Foreign liabilities | 299 | 186 | -558 | -1,271 | -196 | 40 | 90 | -563 | 580 | 634 | 678 | 545 | 3 | 345 |
| Capital and reserves | 424 | 212 | 78 | 114 | 72 | 77 | 78 | -96 | -183 | -416 | -656 | -459 | 80 | 200 |
| **Gross foreign reserves(-,decline in assets)** | -407 | -449 | -5 | 311 | 53 | -120 | 197 | 430 | -720 | -674 | -517 | -923 | -199 | 371 |
| **Credits and Investment[1]** | 156 | 1,057 | 1,980 | 2,844 | 397 | 1,279 | 1,281 | 2,285 | 309 | 1,270 | 2,158 | 2,771 | 409 | -424 |
| Credit to the non-government sector, total | 226 | 381 | 696 | 1,183 | 411 | 1,264 | 1,669 | 2,434 | 216 | 1,030 | 1,554 | 1,940 | 309 | 136 |
| Enterprises | 331 | 465 | 700 | 1,097 | 319 | 897 | 1,142 | 1,756 | 191 | 766 | 1,189 | 1,607 | 375 | 161 |
| Households | -104 | -84 | -4 | 86 | 91 | 368 | 527 | 678 | 25 | 263 | 365 | 333 | -36 | -25 |
| Placements with NBS (Repo transactions and treasury bills) | 40 | 256 | 694 | 625 | -125 | -445 | -839 | -1,010 | 86 | 268 | 529 | 720 | -28 | -944 |
| Government, net[2] | -105 | 421 | 590 | 1,036 | 112 | 460 | 451 | 861 | 7 | -28 | 75 | 111 | 128 | 385 |
| **MEMORANDUM ITEMS** | | | | | | | | | | | | | | |
| Required reserves and deposits | -191 | -225 | -185 | 36 | 54 | -182 | -188 | -115 | -157 | -429 | -210 | 391 | -552 | -418 |
| Other net claims on NBS[3] | -385 | -380 | -481 | -158 | -287 | -272 | -195 | -229 | 17 | 123 | 2 | 110 | -199 | -20 |
| *o/w: Excess reserves* | -409 | -394 | -501 | -177 | -279 | -252 | -173 | -220 | 22 | 123 | -3 | 100 | -187 | 45 |
| Other items[4] | -166 | -158 | -254 | -99 | -147 | -331 | -692 | -565 | -136 | -195 | -246 | -601 | 150 | 222 |
| Effective required reserves (in %)[5] | 30 | 28 | 26 | 25 | 26 | 24 | 24 | 23 | 23 | 21 | 21 | 24 | 22 | 23 |

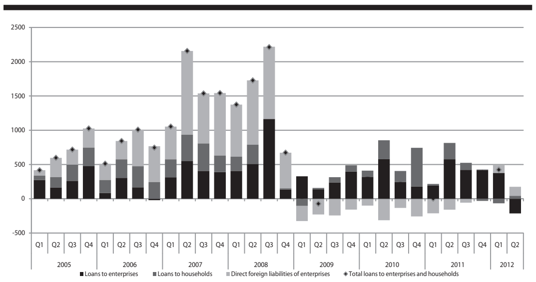
Source: NBS

1) The calculation of growth is based on the assumption that 70% of overall placements is indexed against the Euro. Growth for original Dinar values of deposits are calculated using the average exchange rate for the period. For foreign currency deposits – as the difference in the situation calculated by the exchange rate at the ends of periods. Capital and reserves are calculated using the exchange rate at the ends of periods and do not include the effects of exchange rate changes from the calculations of the remainder of the balance.

2) NBS bonds include state and NBS treasury bonds which are sold at repo rates and a rate set on the market for permanent auction sales with a due date of more than 14 days.

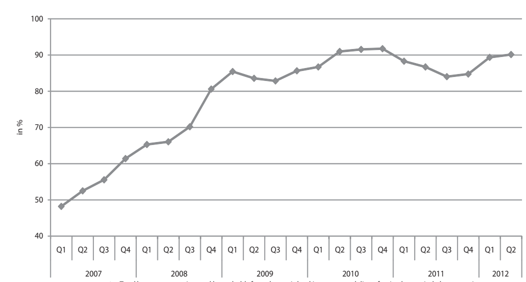
3) Net state crediting: loans approved to the state lowered by the amount of state deposits in business banks; the negative sign means a higher rise in deposits than in credits. The state includes all levels of government: republic and local level.

**Graph T7-6. Serbia: credit to enterprises and to households - impact on aggregate demand, 2005-2012**




Source: Calculation *QM*
See footnote 1 in Table T7-5.

**Graph T7-7. Serbia: overall credit debt in % of GDP, 2007-2012**




Source: Calculation *QM*

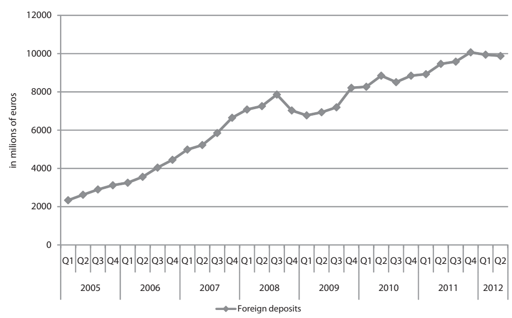
***Drop in sources for new placements continues in Q2…***

In Q2, the sources for new placements by banks dropped additionally by 20 million Euro with a significant change in its structure. Unlike the previous quarter, the population and the enterprises increased the value of the funds in accounts for domestic and foreign currency deposits with business banks. Deposits by the population increased by 140 million Euro while the enterprises with 302 million Euro had a positive effect on the creating of sources for new bank placements.

***… despite increase in deposits by enterprises and population***

Despite the increase of deposits by the enterprises and population, banks in the same period decreased their funds by 342 million Euro on the basis of foreign debts while at the same time they withdrew an added 120 million Euro from capital and reserve accounts. That neutralized the positive effect of the growth of deposits by the population and enterprises which caused

**Graph T7-8. Serbia: level of foreign currency deposits, 2005-2012**




Source: NBS

the drop in sources for new bank placements. The structure of sources of financing changed in the direction of increasing the importance of domestic sources of financing and lowering of the importance of foreign sources of financing. The growth of the population's deposits in banks shows that despite political instability and problems in a group of domestic banks, the trust of the population in the banking system in the first half of the year was relatively high. That is also shown by the fact that the population increased the level of deposited funds in its accounts with business banks in July when the bankruptcy of the Agrobank was reported on heavily by the media.

**Table T7-9. Serbia: the share of non-performing loans in total loans by type of debtor, 2008-2012**

| | 2008 | 2009 | | | | 2010 | | | | 2011 | | | | 2012 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec. | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Apr |
| | balance at the end of period | | | | | | | | | | | | | | | |
| Corporate | 6.86 | 11.05 | 14.86 | 13.24 | 12.14 | 11.62 | 14.18 | 13.83 | 14.02 | 14.39 | 16.23 | 17.44 | 17.07 | 17.72 | 18.47 | 18.02 |
| Entrepreneurs | 3.66 | 5.28 | 8.93 | 10.21 | 11.21 | 12.19 | 13.73 | 15.7 | 15.8 | 15.66 | 15.75 | 16.99 | 17.07 | 16.05 | 15.72 | 15.98 |
| Individuals | 3.78 | 5.36 | 6.19 | 6.63 | 6.69 | 6.37 | 6.79 | 7.04 | 6.71 | 6.79 | 7.1 | 7.4 | 7.24 | 7.57 | 7.69 | 8.04 |

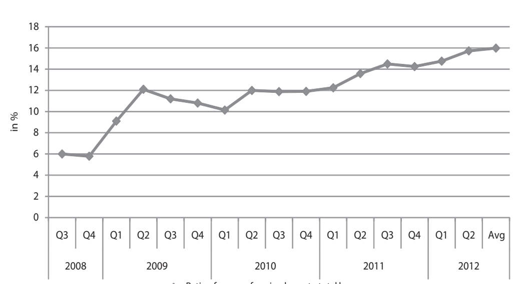
Source: Calculation *QM*

*Participation of non-performing loans increases again in Q2 …*

*… with main growth among companies and firms*

The growth of non-performing loans continued to grow in the first half of the year in the overall approved credits. At the end of June, the overall participation of non-performing loans rose to 15.72% of the overall placement of loans in the Serbian economy (Table T7-9). Falling late with debt payments by more than 90 days, which is taken as the limit to classify loans as non-performing, increased in all three monitored groups of debtors. The greatest influence on the overall growth of the participation of non-performing loans came from corporate sector which saw their participation rise from 17.72% at the end of March to 19.26% at the end of June. A similar rise was registered in the overall sum of loans placed with entrepreneurs while a somewhat smaller growth of non-collectable credits was evident among private individuals. This deterioration does not have any great effect because of the fact that non-collectable loans of entrepreneurs and individuals account for about 18% of overall loans whose repayment is late. If we recall that the participation of non-performing loans prior to 2010 was usually under 10%, the participation of those loans this and the previous year, and the fact that there is a constant growth show that the Serbian economy still has no clear solution to overcome the problem which could grow greater if the depreciation of the Dinar continues making it harder to repay loans which are indexed against foreign currency. The increase of the non-collectable loans is partly the consequence of the economic crisis which has brought difficulties with loan repayment to many solid companies and solvent individuals. Something similar was registered in other countries but in Serbia it intensified because most loans are based on the Euro. The other reason for the high rise in non-collectable loans is the lack of caution by banks during the credit boom (2003-2008), when loans were approved without a detailed check of business performance and company prospects. In that period, banks primarily invested efforts to take over as much of the market as possible while asking for collateral (mainly property) as security for loans. However, starting with the crisis the value of property and its liquidity dropped significantly[2] which resulted in the rise in non-performing loans.

**Graph T7-10. Serbia: ratio of non-performing loans to total loans, 2008-2012**




Source: Calculation *QM*

2 There are indications that the initial value of the property was often exaggerated.

### Frame 1. Expectations to the end of 2012

Although there are just a few months left to the end of the year, there is still some uncertainty about the macroeconomic environment in which monetary policy will be implemented. It is probable, but not certain, that the economy will stagnate (see section on economic activity) but there is great uncertainty about how transactions on the foreign currency market will affect the creating and withdrawal of money. In the coming part of the year we can expect the gradual lowering of the deficit in the current accounts balance to continue but more slowly than expected (lower exports of agricultural and food products, higher electricity imports, contradictory assessments of demand for FIAT automobiles made in Serbia, etc). Significantly greater uncertainty is linked to the assessments of trends in the capital balance. Based on trends from the previous part of the year, as well as Serbia's lower credit rating and the postponing of agreements with the IMF and EU we can expect an outflow of capital or a very modest inflow based on commercial trends in Serbia for the rest of the year. The relatively high deficit in the current balance with a lack of any significant inflow of capital on the basis of commercial transactions would cause a demand for foreign currency higher than the offer. This imbalance could be removed with a high depreciation of the Dinar (which is not very likely) or the spending of NBS foreign currency reserves (which is more likely). It is probable in this scenario that the net effects of transactions on the foreign currency market would result in a drop in Dinar liquidity and that would mean the creating of additional space to reduce the restrictive nature of the monetary policy. However, that space would be relatively modest due to rising inflation and because of the danger of the Dinar depreciating. If the state secures a sufficient amount of foreign currency loans from abroad which would be used to finance the current fiscal deficit or service debt repayments which fall due the situation[1] in the capital balance could change completely. A significant inflow of foreign currency from loans taken out by the state could change the balance between offer and demand on the foreign currency market in favor of foreign currency offer which would result in an appreciation of the Dinar and growth of foreign currency reserves. In this case, the net monetary effect of foreign currency transactions would be higher liquidity which could require the implementation of a restrictive monetary policy. If the state takes out loans in foreign currency in the country, the monetary effect would depend on whether the hard currency used to buy state bonds is secured from abroad or whether investors sell surplus Dinars to the NBS to buy foreign currency to purchase state bonds. If the foreign currency used to buy state foreign currency bonds come from abroad, the monetary effect is the same as if the state took out loans abroad. If the foreign currency is secured in the country by buying currency from the NBS the result would be a withdrawal of Dinars (lower liquidity) but the final monetary effects would depend on whether the state takes out loans to meet its Dinar or foreign currency dues. If the state meets its Dinar dues it could sell foreign currency and create an additional Dinar liquidity but if it met its foreign currency dues the decreased liquidity based on that would be permanent. We should bear in mind that if the state takes out loans in foreign currency that would have a short-term favorable effect on the stabilization of the foreign currency market but is not tenable in the long term because the country's foreign debt and public debt are in a critical zone.

1 The monetary effect would be especially significant if due Dinar payment were financed by the state taking loans in foreign currency.