

7. Monetary Trends and Policy

The second quarter saw a growth in primary money (after more than a year of decrease) after which, in the previous three months, the primary money level dropped slightly. The NBS net reserves rose by 35.7% from the starting H cumulatively in the previous six months. Due to a decrease in inflationary pressure, the NBS lowered the key policy interest rate which now stands at 10%. The real growth rate of M2 in Q2 and Q3 is negative and the situation is similar with loans to the economy corrected with changes to the exchange rate. The level of the money mass was increased by 5% from the initial M2 in Q3 which is due to the rise on the net side of assets by 11.8% from the initial M2. In Q3 the rise of loans to the enterprises and the households stood at 524 million Euro which is a deceleration following the placement of 814 million Euro in Q2. The weaker credit activity by the domestic banking sector is partly due to the exhaustion of funds planned for this year within the segment of subsidized loans for liquidity. On the other hand, source for new placement by banks are increasing primarily thanks to a growth of foreign currency deposits by the economy. The trend of a growth of non-performing loans continues in Q2 and Q3 but cause for concern is the fact that the speed of growth has been getting faster since the start of the year.

Central Bank: Monetary Policy and Balance

Following the growth in Q2 the primary money level in Q3 stagnated ...

... while the NDA continues to decrease

Following a drop at the start of the year, the *primary money* level in Q2 increased by 8.1% from the initial H while Q3 saw a slight drop of 0.3% from the initial H. In the past six months, the primary money increased on the basis of a rise in the cash in circulation while the free bank reserves decreased. The increase of the *primary money* represents a change in the trend compared to the five previous quarters in which there was a constant drop in primary money (in 2010 the overall drop was 27.3%. Table T7-1). A similar trend was noted with the NBS net reserves which rose by 22.9% from the initial H at the start of the year in Q2 and increased again in Q3 by 12.8% from the initial H. On the other hand, the net domestic assets (NDA) continued to drop by 14.8% in Q2 from the initial H while in Q3 it dropped additionally by 13.1% from the initial H. The key reason for the drop in the NDA is the growth of the REPO placement of banks which cumulatively stood at 25.3% from the initial H for Q2 and Q3.

Table T7-1. Serbia: NBS – Currency Purchases and Sterilization, 2008–2011¹⁾

	2008		2009		2010				2011		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep		
FLOW	in millions of dinars, cumulative from the beginning of the year										
NBS own reserves ²⁾	27,211	64,094	-37,703	-76,916	-141,888	-150,330	-15,940	24,996	47,955		
NBS own reserves (in euros)	312	668	-378	-743	-1,346	-1,415	-154	250	474		
NDA	122,232	-126,108	-712	11,197	75,454	82,943	-1,223	-27,692	-51,224		
Government, dinar credits	81	398	5	-9,946	-9,942	-9,975	-6	-9	-11		
Government, dinar deposits	8,638	-40,135	6,554	11,738	19,401	7,687	-8,285	-5,902	6,396		
o/w: municipalities	-909	3,130	1,450	1,322	2,270	-1,280	835	2,953	2,642		
Repo transactions ³⁾	127,517	-61,506	12,105	34,979	87,176	104,772	-12,401	-27,385	-57,627		
Other items, net ⁴⁾	-14,004	-24,865	-19,376	-25,574	-21,181	-19,541	19,469	5,604	18		
H	149,443	-62,014	-38,415	-65,719	-66,434	-67,387	-17163	-2,696	-3,269		
o/w: currency in circulation	13,007	5,566	-9,663	-7,841	-5,771	-3,719	-10,409	-7,464	2,417		
o/w: excess liquidity	1,602	-14,227	-33,665	-30,871	-21,232	-16,873	-6,754	4,492	-9,837		
INCREASE	cumulative, in % of opening H⁵⁾										
NBS own reserves ²⁾	20.3	20.8	-15.3	-31.2	-57.5	-61.0	-8.9	14.0	26.8		
NDA	91.3	-40.9	-0.3	4.5	30.6	33.6	-0.7	-15.5	-28.6		
Government, dinar deposits	6.4	-13.0	2.7	4.8	7.9	3.1	-4.6	-3.3	3.6		
Repo transactions ³⁾	95.2	-19.9	4.9	14.2	35.4	42.5	-6.9	-15.3	-32.2		
Other items, net ⁴⁾	-10.5	-8.1	-7.9	-10.4	-8.6	-7.9	10.9	3.1	0.0		
H	111.6	-20.1	-15.6	-26.7	-26.9	-27.3	-9.6	-1.5	-1.8		
o/w: currency in circulation	9.7	1.8	-3.9	-3.2	-2.3	-1.5	-5.8	-4.2	1.3		
o/w: excess liquidity	1.2	-16.5	-13.7	-12.5	-8.6	-6.8	-3.8	2.5	-5.5		

Source: Table P-14 in Analytical Appendix.

1) State includes all levels of power: republic level and local government level.

2) Definition of net own NBS reserves is given in section 8 Monetary Trends and Policy, Frame 4, QM no. 5.

3) This category includes NBS bills (BZ), and repo operations.

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

5) Initial H is the state of primary money (H) at the start of the stated year that is end of previous.

NBS net own reserves increased in Q2/Q3 inflation stabilized... which led the NBS to lower the key policy rate

Because the exchange rate oscillations decreased in the past six months, the NBS started interventions on the inter-banking foreign currency market on just three occasions totaling 60 million Euro (Table T7-3). The amount of used funds is significantly lower compared to 2010 when between 320 and 780 million Euro were used quarterly to ease the volatility of the exchange rate. In Q2 a net rise was registered of the NBS own reserves by 404 million Euro following an initial drop at the start of the year (in Q1 the net own reserves dropped by 154 million Euro, Table T7-2). The increase continued in Q3 when a rise in the net own reserves of an additional 224 million Euro was registered. At the same time, the state increased its deposit with the NBS by another 777 million Euro cumulatively in Q2 and Q3.

Following the stabilization of inflation at the start of the year and the weakening which came after April, the NBS started gradually lower the key policy rate to bring it into line with the target corridor by the end of the first quarter of next year without any great oscillations. Because of that a correction of the key policy rate was implemented lowering it by 25 base points and then another two in September and October by 50 base points. The current NBS key policy rate, following the latest decrease by 75 base points in November is 10%. If the un-inflationary pressure continued on the side of domestic demand in the coming period, inflation next year could be within the target frameworks set by the NBS.

Table T7-2. Structure of Serbia's Foreign Currency Reserves – Stock and Flow, 2008–2011

	2008		2009		2010			2011		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	
stock, in millions of euros										
NFA of Serbia	5,451	5,940	5,609	5,438	5,211	4,771	4,654	4,890	6,283	
Commercial banks, net	-2,562	-3,519	-3,667	-3,633	-3,258	-3,628	-3,802	-3,792	-3,491	
Gross foreign reserves	1,385	1,694	1,750	1,589	1,906	2,110	1,410	1,491	1,609	
Foreign liabilities	-3,947	-5,213	-5,417	-5,221	-5,164	-5,738	-5,213	-5,283	-5,100	
NBS, net	8,013	9,459	9,275	9,070	8,469	8,400	8,456	8,682	9,774	
Gross foreign reserves	8,180	10,657	10,522	10,661	10,019	10,003	10,018	10,311	11,429	
Foreign liabilities	-167	-1,198	-1,246	-1,591	-1,551	-1,603	-1,562	-1,629	-1,655	
IMF	-9	-1,113	-1,160	-1,499	-1,469	-1,521	-1,484	-1,553	-1,580	
Other liabilities	-159	-85	-87	-92	-82	-82	-78	-76	-75	
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	8,013	9,459	9,275	9,070	8,469	8,400	8,456	8,682	9,774	
1.1 Commercial banks deposits	-2,191	-2,916	-3,031	-3,309	-3,293	-3,289	-3,264	-3,059	-3,177	
1.2 Government deposits	-459	-513	-593	-474	-491	-495	-738	-763	-1,514	
1.3 NBS own reserves	5,362	6,030	5,652	5,287	4,684	4,616	4,455	4,860	5,083	
(1.3 = 1 - 1.1 - 1.2)										
in millions of euros, cumulative from the beginning of the year										
NFA of Serbia	-1,665	489	-332	-503	-729	-1,169	-119	117	1,510	
Commercial banks, net	-183	-957	-148	-114	261	-110	-175	-165	136	
Gross foreign reserves	-18	309	56	-105	212	416	-700	-619	-501	
Foreign liabilities	-165	-1,266	-204	-8	49	-526	524	454	637	
NBS, net	-1,482	1,446	-183	-389	-990	-1,059	56	282	1,374	
Gross foreign reserves	-1,482	2,477	-135	5	-637	-654	16	308	1,426	
Foreign liabilities	1	-1,031	-49	-393	-353	-405	41	-26	-52	
IMF	-12	-1,104	-47	-386	-356	-408	37	-32	-59	
Other liabilities	13	74	0	-7	3	3	4	6	7	
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	-1,482	1,446	-183	-389	-990	-1,059	56	282	1,374	
1.1 Commercial banks deposits	1,219	-725	-115	-393	-377	-374	22	226	109	
1.2 Government deposits	575	-54	-80	39	22	18	-232	-258	-1,009	
1.3 NBS own reserves	312	668	-378	-743	-1,346	-1,415	-154	250	474	
(1.3 = 1 - 1.1 - 1.2)										

Source: NBS

Note:

The NBS foreign currency obligations are treated differently in monetary review and NBS balance. This category in the monetary review includes loans from the IMF and other foreign debts while the NBS balance, besides the listed items, includes foreign currency deposits of business banks (mandatory reserves and other foreign currency deposits).

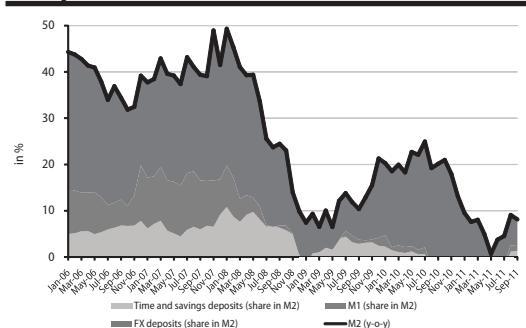
Table T7-3. Net Monthly Foreign Currency Trade NBS – Banks and Exchange Offices, Nov. 2006–September 2011

	Interbank fx market (NBS-commercial banks)	Exchange offices	Total
(-, net sale of foreign currency by NBS)			
in millions of euros			
January-December 2006	350	367.8	718
January-December 2007	-704.8	1161.2	456
January-December 2008	-1304	507	-797
January-December 2009	-656.9	128.2	-529
January 2010	-245.5	0	-246
February 2010	-196	0	-196
March 2010	-190	0	-190
April 2010	-5	0	-5
May 2010	-359	0	-359
June 2010	-421	0	-421
July 2010	-231	0	-231
August 2010	-182.5	0	-183
September 2010	-181.7	0	-182
October 2010	-173	0	-173
November 2010	-185	0	-185
December 2010	36.5	0	37
January 2011	5	0	5
February 2011	0	0	0
March 2011	0	0	0
April 2011	0	0	0
May 2011	0	0	0
June 2011	-30	0	-30
July 2011	-20	0	-20
August 2011	-10	0	-10
September 2011	0	0	0

Source: NBS

Monetary System: Money Supply Structure and Flow

*Real M2 growth rate
still negative...*

Graph T7-4. Serbia: Money and its Components¹⁾, 2006–2011

Source: Table P-12 in Analytical Appendix.

Participation of money components shown as ratio of its increase against the M2 value in the same period a year earlier which means the sum of those ratios is equal to 12-m growth of all money (M2).

*... as well as rate of
growth of loans to
economy*

For the third quarter in a row, M2 has recorded a negative rate of real growth which in Q3 dropped to -1.2% y-o-y (in Q2 real growth -8% y-o-y, in Q1 -5,4% y-o-y, Table T7-5). Following the correction by the exchange rate, the real growth of M2 has been positive since the start of the year but only due to the relatively high exchange rate compared to the same period a year earlier. Added cause for concern is the rate of growth of loans to the economy which is negative following the correction and in Q3 stood at -0,4% y-o-y (in Q2 the growth rate was -3% y-o-y, in Q1 -1.6 y-o-y). On the other hand, the rate of growth of household loans has stabilized at 7.8% in Q3 y-o-y (in Q2 7%, in Q1 9,2% y-o-y), which is below the pre-crisis level

but is an improvement over the 2008–2009 period.

Decomposed M2 growth in the past two quarters (Graph T7-4), indicates a change in the trend in the contribution of integral parts, primarily with M1 and savings and time deposits. Of the overall nominal growth of M2 which in Q3 stood at 8.13% y-o-y, the rise in foreign currency deposits is owed 5.77 percentage points which continues the years-long trend. Interestingly, in Q3 savings and time deposits started having a positive influence after more than a year and explain the 1.32 percentage points of the overall M2 growth. There is an evident rise in the contribution of M1 to overall growth with 1.04 percentage points contributing to the overall rise of M2 in Q3.

**Growth of money mass
in Q2 and Q3 becomes
positive...**

...thanks to rise in NSA

The money mass recorded a growth of 2.1% from the initial M2 in Q2 and another 5% from the initial M2 in Q3 (in Q1 a drop of -3,3% of the initial M2, Table T7-5). Foreign currency deposits cumulatively rose by 5.1% from the initial M2 while the Dinar M2 increased by a total of 3.7% from the initial M2 over Q1. The increase of the money mass was done by foreign currency channels through a growth of the NSA whose rise following the exchange rate correction in Q2 was 0.9% from the initial M2 while in Q3 it rose by an added 11.8% from the initial M2. On the other hand, the NDA in Q2 recorded a growth of 1.6% from the initial M2 – and the final contribution to the money mass was still negative at the end of Q3 when a 5.9% drop of the NDA was recorded from the initial M2. The main reason cited for the drop of the NDA was the increase in deposits on state accounts of 4.4% of the initial M2.

Table T7-5. Serbia: Money and Component Aggregates, 2008–2011

	2008	2009	2010			2011			
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
	y-o-y, in %								
M2 ¹⁾	9.8	21.3	19.9	22.1	20.1	13.1	8.0	3.7	8.1
Credit to the non-government sector ²⁾	33.7	16.1	14.4	25.0	27.1	27.2	19.3	11.6	8.3
Credit to the non-government sector ²⁾ , adjusted ³⁾	23.6	10.2	10.4	16.2	16.8	19.9	16.7	13.0	11.8
Households	15.7	3.7	7.9	16.1	18.7	18.9	25.1	20.6	17.8
Enterprises	28.1	13.6	11.6	16.3	15.8	20.4	12.8	9.4	8.8
	real y-o-y, in %								
M2 ¹⁾	2.9	9.8	11.5	14.6	10.3	1.3	-5.4	-8.0	-1.2
Credit to the non-government sector ²⁾	25.2	5.2	6.3	17.3	16.7	13.9	4.5	-1.0	-1.1
Credit to the non-government sector ²⁾ , adjusted ³⁾	15.7	-0.5	2.6	8.8	6.7	6.9	1.8	0.2	2.2
Households	8.3	-6.4	0.3	8.7	8.5	5.9	9.2	7.0	7.8
Enterprises	19.9	2.5	3.7	8.9	5.9	7.3	-1.6	-3.0	-0.4
	cumulative, in % of opening M2⁴⁾								
M2 ¹⁾	9.8	21.3	1.1	7.7	8.5	13.1	-3.3	-1.2	3.8
M2 dinar ¹⁾	0.5	4.2	-2.7	-1.6	-2.8	-2.2	-2.0	-0.6	1.7
Foreign deposits (households and enterprises) ⁵⁾	2.3	11.2	1.3	3.3	4.0	8.1	0.0	1.5	5.1
Valuation adjustments ⁶⁾	7.0	5.9	2.6	5.9	7.3	7.2	-1.3	-2.1	-3.1
NFA, dinar increase	-8.8	8.9	-0.9	-0.6	-1.7	-5.3	-1.9	-1.4	9.5
NFA, fx increase	-14.5	4.5	-2.7	-4.4	-6.1	-9.1	-1.3	-0.4	11.4
Valuation adjustments ⁶⁾	5.7	4.4	1.8	3.8	4.4	3.8	-0.6	-1.1	-2.0
NDA	18.7	12.4	2.1	8.3	10.2	18.4	-1.4	0.2	-5.7
o/w: credit to the non-government sector ²⁾ , adjusted ³⁾	22.0	11.6	3.9	11.1	14.6	21.6	1.5	0.0	0.5
o/w: net credit to government ⁷⁾	7.0	5.2	0.8	4.1	4.3	6.1	-2.0	-2.3	-6.7
o/w: NBS and com. banks capital and reserves	-16.4	-13.7	-0.2	-11.1	-6.3	-7.7	7.3	0.5	-2.0
	cumulative, in % of GDP⁸⁾								
Net credit to government ⁷⁾	2.2	1.7	0.3	1.6	1.6	2.3	-0.9	-0.9	-2.6
o/w: dinar credits	0.8	1.7	0.6	1.3	1.8	1.9	-0.4	-0.6	-0.4
Credit to the non-government sector ²⁾ , adjusted ³⁾	10.7	6.4	2.9	7.2	9.2	11.5	0.1	1.3	1.7

Source: Table P-12 in Analytical Appendix.

1) Money mass: components – v. analytical and notation conventions QM.

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

3) Trends are corrected by exchange rate. Corrections are implementation under assumption that 70% of loans to non-state sector (and households and economy) are indexed against the Euro.

4) Initial M2 used to mark state of M2 at start of current, that is end of previous year.

5) Contribution of foreign currency deposits to M2 growth measures only contributions to growth of foreign currency deposits in foreign currency sign so that their revaluation gives the exchange rate difference.

6) Exchange rate differences mean the difference in NSA contributions to M2 growth measured in Dinars and NSA contributions to M2 growth in foreign currency.

7) Loans to the state, net – difference between loans (Dinar and foreign currency) and state deposits (Dinar and foreign currency). The state does not include local government which is treated as the non-state sector.

8) The GDP used for calculation is centered at annual level.

Table T7-6. Serbia: Monetary Survey, 2008–2011

	2008		2009		2010			2011		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	
in millions of dinars, end of period										
STOCK										
NFA	483,707	570,534	559,408	563,269	549,806	507,096	480,916	488,002	635,939	
o/w: NBS gross reserves	724,755	1,022,861	1,049,068	1,103,542	1,056,399	1,063,078	1,035,237	1,028,989	1,156,733	
o/w: commercial bank foreign liabilities	-349,703	-500,336	-540,076	-540,431	-544,477	-609,859	-538,640	-527,224	-516,144	
NDA	508,826	633,447	658,351	732,914	756,197	854,430	834,723	856,769	776,240	
Net credit to government ¹⁾	-53,042	-4,340	3,916	42,404	43,258	66,656	38,964	35,946	-21,409	
Net dinar credit	-14,199	33,822	50,763	71,864	88,847	91,071	77,935	70,943	77,416	
Net fx credit	-38,843	-38,162	-46,847	-29,460	-45,589	-24,415	-38,971	-34,997	-98,825	
Credit to the non-government sector ²⁾	1,126,111	1,306,224	1,389,783	1,523,040	1,583,687	1,660,870	1,658,603	1,700,248	1,714,617	
Other items, net	-564,243	-668,437	-735,348	-832,530	-870,748	-873,096	-862,844	-879,425	-916,968	
M2 ³⁾	992,533	1,203,981	1,217,759	1,296,183	1,306,003	1,361,526	1,315,641	1,344,773	1,412,180	
M2 dinar ³⁾	395,088	436,784	403,722	417,948	402,995	410,172	382,714	401,970	433,841	
Fx deposits (households and economy)	597,445	767,197	814,037	878,235	903,008	951,354	932,926	942,803	978,339	
STRUCTURAL INDICATORS										
Currency outside banks/Dinar deposits (households and economy), in %	29.5	28.0	27.0	26.5	28.7	28.8	27.0	26.5	27.7	
Fx deposits (households and economy) / M2 (%)	60.2	63.7	66.8	67.8	69.1	69.9	70.9	70.1	69.3	
Velocity (GDP ⁴⁾ / M2)	2.7	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.4	
M2 / GDP ⁴⁾	0.38	0.4	0.4	0.4	0.4	0.4	0.4	0.42	0.42	
Credits to the non-government sector / GDP ⁴⁾	0.43	0.5	0.5	0.5	0.5	0.5	0.5	0.53	0.52	
Non-performing loans ⁵⁾ (in % of total loans)	5.8	10.8	13.8	12.0	11.9	14.9	12.2	15.24	18.24	
Money multiplier (dinar M2/H)	1.2	1.7	1.9	2.2	2.2	2.2	2.2	2.2	2.4	

Source: Table P-13 in Analytical Appendix.

1) see footnote 7) in Table T7-2.

2) see footnote 2) in Table T7-2.

3) Money mass: components – see Analytical and note conventions QM.

4) see footnote 8) in Table T7-2.

5) Participation of loans which have a continued delay in repayment of 90 days or more in overall loans. The source for this information is the Credit Bureau of the Serbian Bank Association; see details in : J. Dimitrijević, „Unredeemable loans in Serbia – what is the true measure?“, QM No. 6.

Banking sector: Placement and Sources of Financing

Growth of new loans to enterprises and households slowed in Q3

After the 814 million Euro placed with the enterprises and households in Q2, the new loans in Q3 dropped to 524 million Euro (in Q1 216 million Euro was placed, Table T7-7 and Table T7-8). Of that amount – 423 million Euro were placed with the enterprises while the households took 102 million Euro in debts in Q3 (in Q2 the enterprises took 575 million Euro in loans and the households 228 million Euro). The drop in those placements was evident in Q3 and corresponds with the exhausting of funds earmarked for the approval of subsidized loans. As part of the segment in Q2 and Q3 about 660 million Euro in subsidized loans was approved of which some 86% were placed in Q2. In that same period the state increased its debts by 103 million Euro with business banks after a reduction of the debt in Q2 by 35 million Euro. The trend of negative cross-borders is still present which means the foreign debt was reduced in Q2 by 160 million Euro while it dropped by 58 million Euro in Q3.

Table T7-7. Serbia: Banking Sector Activity – Sources and Structure of Lending, Adjusted¹⁾ trends, 2008-2011

	2008	2009	2010			2011			
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
in millions of euros, cumulative from the beginning of the year									
Funding(-, increase in liabilities)	-833	-2,790	7	-117	-68	-1,495	603	69	-822
Domestic deposits	-95	-1,633	131	-233	-236	-836	206	-148	-844
Households deposits	84	-1,314	-137	-323	-500	-1,020	-92	-295	-483
dinar deposits	-63	-89	30	21	25	12	24	13	-68
fx deposits	147	-1,225	-167	-343	-525	-1,032	-116	-308	-416
Enterprise deposits	-180	-319	268	89	264	184	298	147	-361
dinar deposits	198	-284	213	84	232	151	176	13	-128
fx deposits	-378	-35	55	5	32	33	122	134	-233
Foreign liabilities	-165	-1,271	-196	40	90	-563	580	634	678
Capital and reserves	-572	114	72	77	78	-96	-183	-416	-656
Gross foreign reserves(-, decline in assets)	-18	311	53	-120	197	430	-720	-674	-517
Credits and Investment²⁾	700	2,844	397	1,279	1,281	2,285	309	1,270	2,158
Credit to the non-government sector, total	2,022	1,183	411	1,264	1,669	2,434	216	1,030	1,554
Enterprises	1,574	1,097	319	897	1,142	1,756	191	766	1,189
Households	448	86	91	368	527	678	25	263	365
Placements with NBS (Repo transactions and treasury bills)	-1,419	625	-125	-445	-839	-1,010	86	268	529
Government, net ³⁾	98	1,036	112	460	451	861	7	-28	75
MEMORANDUM ITEMS									
Required reserves and deposits	-225	36	54	-182	-188	-115	-157	-429	-210
Other net claims on NBS ⁴⁾	422	-158	-287	-272	-195	-229	17	123	2
o/w: Excess reserves	443	-177	-279	-252	-173	-220	22	123	-3
Other items ⁵⁾	-330	-99	-147	-331	-692	-565	-136	-195	-246
Effective required reserves (in %) ⁶⁾	30	25	26	24	24	23	23	21	21

Source: Table P-14 in Analytical Annex.

1) Calculating the growth is done with the assumption that 70% of the total placement was indexed against the Euro. Growth for original Dinar values of deposits are calculated according to the average exchange rate for the period. For foreign currency deposits – as the difference in the states calculated according to the exchange rate at the end of periods. Capital and reserves are calculated according to the Euro exchange rate at the end of periods and do not include the effect of exchange rate differences from the calculating of balance remainder.

2) NBS bonds include state bonds and NBS bills which are sold at repo rate and at a rate set on the market in regard to auction sales with a due date of 14 days.

3) Net crediting of state: loans approved to the state are decreased by the state deposit with business banks; the negative sign indicates a higher growth of deposits than loans. The state includes all levels of power: republic level and level of local government.

4) Remaining debts of NBS (net): difference between NBS debts to banks and free reserves and dues to NBS.

5) Items in bank balance: other assets, deposits by companies in liquidation, inter-banking relations (net) and other passive assets including capital and reserves.

6) The effective required reserve is the participation of the required reserve and deposits in the sum of overall deposits (private and the economy) and bank debts abroad. The basis for the calculation of the required reserve does not include subordinate debt because it is incomplete.

Table T7-8. Serbia: Credit to Enterprises and to Households - Impact on Aggregate Demand, 2008-2011

	2008	2009	2010			2011			
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
quarterly growth of stock, in millions of euros									
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises ¹⁾	468	329	311	539	271	506	2	654	467
Loans to enterprises and households from domestic banking sector	152	488	411	854	405	765	216	814	525
Loans to enterprises	135	398	319	577	246	614	191	576	422
Loans to households	17	90	91	276	159	151	25	238	102
Direct foreign liabilities of enterprises	316	-159	-100	-315	-134	-259	-214	-160	-58
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	451	239	219	263	112	355	-23	415	365
quarterly growth of stock, in % of quarterly GDP									
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	5.5	3.9	3.7	6.8	3.6	6.5	0.0	7.7	5.6
Loans to enterprises and households from domestic banking sector	1.8	5.8	4.9	10.7	5.3	9.9	3.0	9.6	6.3
Loans to enterprises	1.6	4.7	3.8	7.2	3.2	7.9	2.6	6.8	5.0
Loans to households	0.2	1.1	1.1	3.5	2.1	1.9	0.3	2.8	1.2
Direct foreign liabilities of enterprises	3.7	-1.9	-1.2	-3.9	-1.8	-3.3	-2.9	-1.9	-0.7
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	5.3	2.8	2.6	3.3	1.5	4.6	-0.3	4.9	4.4

Source: FREN

1) see footnote 1 in Table T7-5.

Banks slowly returning to placements in REPO

Despite the modest placements in REPO in Q1, this form of investment has again become interesting to business banks which caused a rise in repo placements in Q2 by 182 million Euro and in Q3 an added placement of 261 million Euro (Table T7-7). These funds brought about a slight recovery of REPO stock which reached a minimum value in November last year when it stood at 359 million Euro. Auctions of Republic of Serbia treasury bills in Q3 showed a drop in interest for investments in bills with a due date of more than one year. Because of that the percentage of realization of treasury bills often stood under 50% except for bills which fall due

Sources for new placements increased in Q3...

...mainly thanks to growth of economy deposits

within three months. In September, the state issued Eurobonds on the foreign market for the first time totaling one billion Dollars with a due date of 10 years and a rate of 7.25%. Compared to the average level of yield of treasury bills which, following a correction for inflation in Q2 and Q3, stood at between 5% and 6%, it is evident that these bills are not the cheapest form of debt.

Following the withdrawal of funds in Q1, in the previous six months banks increased the sources for new placements by 1.05 billion Euro of which 696 million Euro is owed to the rise in domestic deposits in Q3 (Table T7-7). Of that amount, the most consists of enterprises deposits of 508 million Euro – of which 367 is the growth of the foreign currency deposits. The households increased its deposits with business banks by 188 million Euro in Q3 with 108 million Euro in foreign currency deposits while the rest is in Dinar deposits. As at the start of the year, business banks continued to increase their funds at the expense of capital and reserves, in Q2 by 233 million Euro and 240 million Euro in Q3. One factor which had a negative effect on sources for new placements is the payment of foreign debts present since the start of the year which stood at 54 million Euro in Q2 and 44 million Euro in Q3.

The decrease in the participation of loans in the GDP continued in Q2 and Q3, which continues the trend started late in 2010. The main role in lowering that participation was played by the appreciation of the Dinar exchange rate which lasted up to June when a slight depreciation was registered. Another factor which played a role was the lowered growth of credit activity and payment of foreign debts which had an added effect on the drop of overall participation.

Table T7-9. Serbia: Ratio of Outstanding Credit Stock to Enterprises and Households to GDP

	2008		2009				2010				2011		
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	80.6	84.9	81.9	80.1	81.7	83.4	86.6	86.2	85.8	83.4	81.4	78.4	
Loans to enterprises and households from domestic banking sector	42.0	44.5	43.8	43.9	45.1	46.8	49.9	51.7	52.9	52.2	51.9	50.8	
Loans to enterprises	27.6	29.8	29.5	29.7	30.5	31.7	33.6	34.6	35.8	34.1	33.8	33.1	
Loans to households	14.5	14.7	14.3	14.2	14.7	15.1	16.3	17.0	17.1	18.0	18.1	17.7	
Direct foreign liabilities of enterprises	38.6	40.5	38.1	36.2	36.6	36.6	36.6	34.5	32.9	31.2	29.5	27.7	
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	66.2	70.2	67.6	65.8	67.0	68.3	70.3	69.2	68.7	65.3	63.3	60.8	

Source: FREN, NBS - Statistical Bulletin

Due to increase of non-performing loans in Q2 and Q3...

...we can expect credit activity to slow in coming period

The ratio of non-performing loans showed a constant growth for the fourth quarter in a row. Following a worrying growth in ration in Q1 when it reached 12.24% – in Q2 there was a rise to 13.58% which continued into Q3 when it reached 14.49%. The greatest rise in non-performing loans was in credits with companies which stood at 17.44% of the total placed in Q3 while a smaller growth was recorded in loans placed with entrepreneurs of 16.99% in Q3. Bearing in mind that non-performing loans did not exceed 12% during the strongest wave of the crisis in 2009, the current growth shows that the economy only managed to postpone and not resolve the burning problem of non-liquidity. Although an IMF report said that the banking sector was sufficiently capitalized and protected in the case of a pessimistic scenario in 2012, we can expect an increase in basic capital in the next few months and a drop in credit activity in banks whose portfolio was endangered by the high level of participation in unredeemable loans.

Table T7-10. Serbia: participation of non-performing loans in total placed , 2008–2011

	2008		2009				2010				2011		
	Dec.	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	
	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	
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	
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	
Total	5.79	9.1	12.1	11.2	10.8	10.14	11.99	11.88	11.9	12.24	13.58	14.49	

Source: Association of Serbian Banks Credit Bureau