# 7. Monetary Trends and Policy

The lowering of the y.o.y. inflation rate from the start of the year and the relatively stable exchange rate along with the announced reform of public finances created a positive environment to continue relaxing monetary policy. If expectations in regard to the public finances deficit come true in the coming period, the National Bank of Serbia (NBS) will have more space to maneuver for an additional cut in the key policy rate which would, by influencing the interest rates of business banks, at least partly improve new credit placements. Although the repo stock was decreased in Q2, Dinar liquidity in the system was cut down through NBS interventions on the inter-banking foreign currency market. The real growth rate of the money mass M2 at y.o.y. level is negative which caused by the worrying trend of debt repayments by the enterprises to foreign creditors and domestic banks. Enterprises have lowered their debts to domestic banks for the third quarter running which can turn into a serious problem unless a solution is found to move new credit placements. One of the elements that caused the debt payments of the enterprises was the end of a program of subsidized loans which allowed the economy to finance the purchase of working capital and current account liquidity. An additional deterioration was registered in the segment of bad credits whose participation continues to grow in Q2 with the speed of growth growing compared to Q1. The drop in credit activity and rise in bad loans demand a quick response by the state to ease recession tendencies in the greater part of the economy and minimize fiscal risks due to problems in the banking sector.

### **Central Bank: Balance and Monetary Policy**

NBS lowers key policy rate ...

... due to weakening inflationary pressure

The NBS key policy rate was lowered by 0.5 percentage points in May to 11.25% and that was followed in June by another correction to bring it to 11% (Table T7-1). The easing of monetary policy could have come earlier due to the fact that the monthly inflation rate in November indicated a significant drop in inflationary pressure which continued through the first half of 2013. A somewhat higher rise in prices in June which was seasonal was practically neutralized by deflation of -0.9% which appeared in July continuing the trend of bringing the annual inflation rate to the target framework for this year. Unlike the previous quarter when Dinar liquidity in the system was lowered through REPO placements, in Q2 the drop in Dinar liquidity was affected by NBS net interventions on the inter-banking foreign currency market totaling 225 million Euro aimed at cutting the weakening of the value of the Dinar. (In Q1 the NBS bought hard currency for a total of 10 million Euro, Table T7-1). Following the weakening of depreciation pressure, interventions on the inter-banking foreign currency market in July were directed at easing the strengthening of the Dinar which caused the NBS to buy 30 million Euro. Despite the constant presence of the deficit in the trade segment of the balance of payments which would require a depreciation of the exchange rate, the Serbian economy has seen a real appreciation of the Dinar since mid-2012 which caused an additional deterioration in Serbia's long-term export position.

In the highly eurorized economy with a constant growth of bad loans, the depreciation of the domestic currency caused a deterioration of the property position of the economy, state and the population because of which the NBS is intervening on the inter-banking forex market to prevent a sudden weakening of the value of the domestic currency. This problem is often described as the impossible trinity of the open economy in which it is unsustainable to have a stable exchange rate in combination with free movement of capital and an independent monetary policy which should secure price stability. In that case, the adapting of all imbalances in the current segment of the balance of payments is done through a change in the exchange rate. We believe that the lowering of the y.o.y. inflation rate in the period to the end of the year opens the door to a gradual depreciation of the Dinar exchange rate which would have a positive effect on the foreign trade balance while a new program of subsidized loans by the state would neutralize the negative effects of the rise of the cost of financing loans to the economy and the population.

Table T7-1. Serbia: NBS interventions and foreign currency reserves 2010-2013

	2011					20	2013			
_	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
Repo stock (in milions of euros)	549.77	746.09	1,000.42	1,174.84	1,055.98	111.98	2.29	354.16	678.86	663.82
NBS interest rate	12.25	12.00	11.25	9.75	9.50	10.00	10.50	11.25	11.75	11.00
NBS interest rate	-9.74	6.76	12.59	7.15	1.11	-2.77	-5.74	1.11	6.95	3.31
NBS interest rate	25.66	28.86	5.17	2.61	-18.43	-7.27	-6.50	-3.99	19.25	12.85
NBS interventions on FX market (in milions of euros)	5.00	-30.00	-30.00	-30.00	-498.50	-1288.80	-1348.30	-1343.30	10.00	-215.00
INCREASE					ılative, in % of ir	nitial M2 <sup>5)</sup>				
NBS own resreves <sup>2)</sup>	-8.9	14.0	26.8	73.9	-17.6	-45.4	-35.6	-6.0	12.5	7.1
NDA	-0.7	-15.5	-28.6	-51.8	2.4	61.3	65.8	41.3	-15.3	-3.9
Government, dinar deposits <sup>1)</sup>	-4.6	-3.3	3.6	2.7	-5.1	6.1	4.3	-4.3	1.0	-1.2
Repo transactions <sup>3)</sup>	-6.9	-15.3	-32.2	-47.5	2.2	53.7	59.3	40.2	-16.0	-14.7
Other items , net <sup>4)</sup>	10.9	3.1	0.0	-7.0	5.3	1.5	2.3	5.4	-0.3	12.0
Н	-9.6	-1.5	-1.8	22.1	-15.2	15.9	30.2	35.3	-2.8	3.3
o/w: currency in circulation	-5.8	-4.2	1.3	12.4	-3.3	-4.0	-1.4	-1.6	-3.9	-0.7
o/w: excess liquidity	-3.8	2.5	-5.5	6.3	-13.6	-1.6	-1.1	5.4	0.6	2.1
			in mil	lions of euros, c	umulative from					
NBS, net	56	282	1,374	2,203	-1,070.60	-2,087.45	-2383.97	-1050.9	30.0	-992.0
Gross foreign reserves	16	308	1,426	2,334	-1,138.11	-2,090.09	-2536.57	-1324.2	-385.8	-1576.9
Foreign liabilities	41	-26	-52	-131	67.51	2.64	152.6	273.2	415.8	584.9
IMF	37	-32	-59	-132	58.24	-6.44	138.99	259.0	401.1	568.4
Other liabilities	4	6	7	1	9.27	9.07	13.61	14.2	14.6	16.5
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	56	282	1,374	2,203	-1,070.60	-2,087.45	-2389.97	-1050.9	30.0	-992.0
1.1 Commercial banks deposits	22	226	109	-462	459.45	740.45	1030.19	907.6	911.8	967.0
1.2 Government deposits	-232	-258	-1,009	-455	263.40	488.43	683.75	28.6	-811.8	47.1
1.3 NBS own reserves (1.3 = 1 - 1.1 - 1.2)	-154	250	474	1,286	-347.74	-858.58	-670.03	-114.7	130.0	22.1

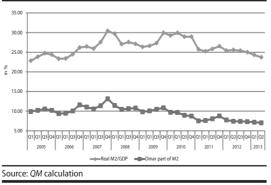
Source: NBS

Interventions on Inter-Banking Forex Market influence drop in own reserves Interventions on the inter-banking forex market in Q2 caused a drop in NBS net own reserves compared to the previous quarter by about 109 million Euro. A greater drop was prevented somewhat by the purchase of foreign currency from the state which converted a part of the hard currency deposits from its NBS account to finance spending in Q2. State spending in Q2, together with the withdrawal of funds from repo operations unlike the previous quarter when banks aggressively invested funds in REPO, caused a positive growth of the net domestic assets (NDA) of 11.5%. The recorded rise in net domestic assets was enough to compensate the drop in NBS net own reserves which finally caused a growth in primary money in Q2 of 6.1% compared to the previous quarter.

## **Monetary System: Money Supply Structure and Trends**

Rise of NDA from start of year due to increased state spending From the start of the year, the M2 money mass increased by 1.1% with the growth of the money mass in Q2 standing at 2.3% which neutralized the drop in the first three months of -1.2%. The

Graph T7-2. Serbia: money mass trend as percentage of GDP, 2005-2013



nominal growth of the money mass in Q2 was due to the increase of the NDA of 6.8% while the net foreign assets (NFA) were lowered by 4.5% on the basis of exchange rate differences. Bear in mind that the increase of the NDA was achieved thanks to higher state spending in this period while credits in the private sector which should be the main moving force for economic growth saw an insignificant rise in this period compared to the previous quarter and a significant drop at y.o.y. level.

The nominal money mass M2<sup>1</sup> in Q2 slowed its growth to 4.5% y.o.y., mainly thanks to the

<sup>1)</sup> State includes all levels of government from republic to local.

<sup>2)</sup> Definition of net own reserves NBS is given in section 8, Monetary Trends and Policy ", frame 4, QM 5.

<sup>3)</sup> This category includes NBS Bills and repo operations.

<sup>4)</sup> Other domestic assets net include: domestic loans (net debts to banks, not including NBS Bills and repo transactions; net debts of economy) together with other assets (capital and reserves; and balance items: other assets) and corrected by exchange rate.

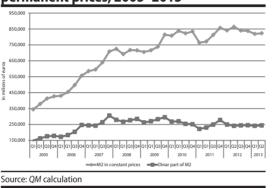
<sup>5) &</sup>quot;Initial M2" signifies the state of primary money at the start of the current ie end of previous year.

Real y.o.y. M2 growth rate negative ...

<sup>1</sup> Monetary aggregate M2 in section Monetary Trends and Policy includes the lesser aggregate M1, savings and timed deposits as well as foreign currency deposits in business banks. Because of that, aggregate M2 which we are observing is equal to monetary aggregate M3 in NBS reports.

... as consequence of worrying debt repayment of enterprises negative trend established in credit placement to the enterprises (in Q4 2012, the M2 growth rate stood at 9.6% y.o.y. Table T7-4). Following corrections to allow for inflation we see that the negative trend of a decrease of the real value of the money mass has continued. The drop in the money mass in Q2 stood at -4.7% at y.o.y. level which is a speedier drop compared to the previous two quarters which also saw the negative trend (in Q1 the drop of the M2 was 2.6% y.o.y., in Q4 2012 the M2 drop was -2.2 y.o.y.). That mentioned drop was mainly caused by the drop in credit placements to the private sector whose real rate showed a decrease of -9.2% which is the greatest relative drop since QM has monitored that data. Following the correction for the exchange rate, the drop in credit to the private sector was somewhat lesser and stood at -6.8% y.o.y. (in Q1 the drop stood at -8.7% and in Q4 2012 at -7.6% y.o.y.). The overall drop was caused by

Graph T7-3. State of money mass in permanent prices, 2005–2013



a drop in credit placements to both the population and the economy with a decrease of –7.9% y.o.y. Part of the drop in credit activity was caused by the end of the program of subsidized loans since the financing funds were exhausted in March of the current year and according to the amended budget and measures to cut expenses no additional funds were planned for this year. We believe that it would be necessary to restart the program of subsidized loans since it is obvious that the largest part of the economy is still failing to resolve the problem of current financing and is actually still in recession.

The nominal growth of the M2 money mass of 4.5% y.o.y. in Q2 was mainly caused by the increase of the lesser monetary aggregate M1 of 3.71 percentage points. This is an exception compared to the previous quarters when foreign currency deposits had the dominant influence on the growth of M2. The contribution to the growth of M2 in Q2 by foreign currency deposits stood at 1.47 percentage points (in Q1 the rise of the foreign currency deposits was 5.94 percentage points) which was cited to explain the 25% rise in the M2 monetary aggregate. Savings and timed deposits continued their negative contribution of 0.7 percentage points in Q2 which marks one year since that element of the money mass having a negative effect on the overall nominal growth of M2.

Table T7-4. Serbia: growth of money and contributing aggregates 2011–2013

·			2013									
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun		
					y-o-y, in %							
M2 <sup>1)</sup>	8.0	3.7	8.1	10.1	14.0	18.1	13.8	9.6	8.2	4.5		
Credit to the non-government sector <sup>2)</sup>	19.3	11.6	8.3	7.7	14.4	14.0	16.6	9.8	1.9	-0.5		
Credit to the non-government sector <sup>2)</sup> , adjusted <sup>3)</sup>	16.7	13.0	11.8	8.1	8.6	4.6	7	3.8	1.6	2.2		
Households	25.1	20.6	17.8	5.7	5.7	3.3	3	2.5	3.0	4.5		
Enterprises	12.8	9.4	8.8	9.3	10.1	5.3	9.1	4.4	0.9	1.0		
	real y-o-y, in %											
M2 <sup>1)</sup>	-5.4	-8.0	-1.2	2.7	10.1	12.0	3.4	-2.2	-2.6	-4.7		
Credit to the non-government sector <sup>2)</sup>	4.5	-1.0	-1.1	0.5	10.5	8.1	5.9	-2.0	-8.2	-9.2		
Credit to the non-government sector <sup>2)</sup> , adjusted <sup>3)</sup>	1.8	0.2	2.2	0.9	4.9	-1.2	-3.6	-8.1	-8.7	-6.8		
Households	9.2	7.0	7.8	-1.3	2.0	-2.4	-7.2	-9.2	-7.5	-4.6		
Enterprises	-1.6	-3.0	-0.4	2.1	6.3	-0.5	-1.7	-7.5	-9.3	-7.9		
				in bilions	of dinars, en	d of period						
M2 <sup>1)</sup>	1,315.6	1,344.8	1,412.2	1,498.0	1,499.7	1,588.6	1,607.6	1,641.7	1622.7	1659.8		
M2 <sup>1)</sup> dinars	382.7	402.0	433.8	486.5	445.0	444.6	467.4	480.6	478.8	492.5		
Fx deposits (enterprise and housholds)	932.9	942.8	978.3	1,011.5	1,054.7	1,144.0	1,140.2	1,161.1	1143.8	1167.3		
				cumulati	ve, in % of op	enina M2 <sup>4</sup>	1					
M2 <sup>1)</sup>	-3.3	-1.2	3.8	10.1	0.1	6.1	7.3	9.6	-1.2	1.1		
NFA, dinar increase	-1.9	-1.4	9.5	11.9	-5.6	-4.5	-7.9	0.2	7.2	2.7		
NDA	-1.4	0.2	-5.7	-1.8	5.7	10.5	15.2	9.4	-8.4	-1.6		

Source: NBS

<sup>1)</sup> Money mass: components – see Analytical and Notational Conventions QM.

<sup>2)</sup> Credits to private sector – credit to the economy (including local government) and households.

<sup>3)</sup> Trends corrected by exchange rate changes. Corrections conducted under assumption that 70% of loans to private sector (both households and the economy) indexed against the Euro.

<sup>4)</sup> Initial M2 means the state of the M2 at start of current ie end of previous year.

### **Banking Sector: Placements and Sources of Financing**

Repayment of enterprises debts continued in Q2...

... towards both local and foreign banks

The banking sector in Q2 continued in its unchanged position on the overall placements of funds compared to the start of the year. In the segment of the enterprises and the households, placements dropped by 46 million Euro as the consequence of the drop in credit to the economy while the placement to the population increased in Q2. The households increased its debts in this quarter by 184 million Euro (Table T7-5) which is a significant growth of credit activity compared to the growth in previous quarters of about 40 million Euro. On the other hand, the net placement to the enterprises has been negative for the third quarter running which means that repayments of loans taken earlier is higher that the amount of new loans. The drop in the placement to the enterprises in Q2 stood at 230 million Euro (about 0.7% of the GDP). Including the debt repayments in the previous two quarters the total repayment amount has increased to about half a billion Euro. We should mention that the drop in credit activity in Q2 was also influenced by the fact that the Razvojna Banka Vojvodine lost its work permit. As in the case of bankruptcy proceedings at the Nova Agrobanka, most of the debts were automatically transferred to the Deposit Insurance Agency which means those debts were taken out of the overall balance of the banking sector. Despite that, if we look at the rest of the banking sector we see that the drop in the placements to the enterprises was present in Q2 and stood at around 100 million Euro.

Besides the repayment of debts to local banks, the enterprises have reduced its debts to foreign creditors by 140 million Euro in Q2 (in Q1 the debt repayments stood at 70 million Euro). The net repayment of debts by the enterprises to foreign creditors intensified following the start of the crisis which caused a contraction on the international financial market and the negative trend was overturned late in 2011. However, as of Q3 2012, there has been a constant debt repayment to foreign creditors which has caused an added deterioration of the economy in regard to sources of financing. Debt repayment to local and foreign banks can have very negative consequences for the Serbian economy because if the current financing problem is not solved there is a danger of the still present recession becoming the prevailing trend.

End to program of subsidized loans one of causes of drop in credit activity The negative trend of debt repayment in combination with the growth of bad loans and reduced investments reflects the fact that a large part of the economy still has not found a solution to finance current business operations and investments. The drop in credit activity is largely due to the discontinuing of subsidized loans since the budget funds for that purpose were spent and no new subsidized loans were likely to be approved to the end of the year bearing in mind the current situation in terms of the deficit of public finances. It would be useful for stimulating credit activity if the possible budget amendment for 2013 and the budget for 2014 secured funds to continue the program since subsidized loans, despite all their shortcomings, have proved to be one of the rare effective stimulation measures for the Serbian economy in the period of recession.

In Q2 REPO stock stagnated and grew significantly in July ...

... placements in treasury bonds also stagnated

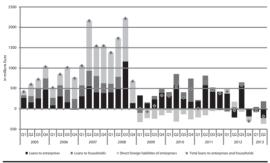
Business banks kept their placement amounts in REPO papers at almost unchanged level in Q2 while moderately increasing placement in treasury bonds. In Q2 the placements in REPO were reduced by just two million Euro while on the other hand activity increased at auctions of state bonds in Q2. As to date, the majority (about 94%) of the funds collected at treasury bond auctions was used to repay debts fallen due from previous auctions and the net withdrawal of funds from the economy on that basis was relatively modest. Since there were no large-scale investments by business banks in REPO and the purchase of treasury bonds in Q2, liquidity accumulated in the banking sector was not used for the placement of new loans to the economy. Part of the surplus liquidity of banks was used in July to increase placement in REPO stock by about 15 billion Dinars. We could say that this formed the covert problem of the sustainability of the macroeconomic position when economic growth was created through the increase of agricultural production and export oriented production within several large companies while the rest of the economy which is still in recession saw credit placement drop.

Table T7-5. Serbia: bank operations – sources and structure of placement corrected<sup>1)</sup> trends, 2011-2013

	2011					20	2013				
	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)	603	69	-822	-1,083	672	692	472	-384	109	-125	
Domestic deposits	206	-148	-844	-1,169	589	146	15	-459	4	-289	
Households deposits	-92	-295	-483	-655	-49	-189	-296	-578	-87	-318	
dinar deposits	24	13	-68	-182	30	69	36	11	16	-34	
fx deposits	-116	-308	-416	-473	-79	-258	-332	-589	-102	-283	
Enterprise deposits	298	147	-361	-513	638	336	311	120	91	29	
dinar deposits	176	13	-128	-350	362	304	230	99	-11	-11	
fx deposits	122	134	-233	-164	275	31	81	21	102	39	
Foreign liabilities	580	634	678	545	3	345	335	127	357	299	
Capital and reserves	-183	-416	-656	-459	80	200	123	-52	-252	-134	
Gross foreign reserves (-, decline in assets)	-720	-674	-517	-923	-199	371	164	284	-278	-73	
Credits and Investment <sup>1)</sup>	309	1,270	2,158	2,771	409	-424	201	521	123	128	
Credit to the non-government sector, total	216	1,030	1,554	1,940	309	136	784	589	-23	-69	
Enterprises	191	766	1,189	1,607	375	161	741	552	-71	-301	
Households	25	263	365	333	-36	-25	42	37	48	232	
Placements with NBS (Repo transactions and treasury bills)	86	268	529	720	-28	-944	-1,052	-701	321	319	
Government, net <sup>2)</sup>	7	-28	75	111	128	385	470	632	-175	-122	
MEMORANDUM ITEMS											
Required reserves and deposits	-157	-429	-210	391	-552	-418	-451	-265	-17	277	
Other net claims on NBS <sup>3)</sup>	17	123	2	110	-199	-20	-42	58	-154	-140	
o/w: Excess reserves	22	123	-3	100	-187	45	54	10	-151	-108	
Other items <sup>4)</sup>	-136	-195	-246	-601	150	222	56	146	100	-140	
Effective required reserves (in %) <sup>5)</sup>	23	21	21	24	22	23	23	23	25	24	

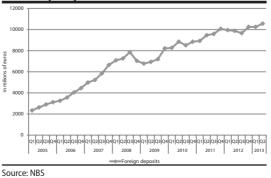
Source: NB

Graph T7-6. Serbia: growth of new credits to economy and population, 2005-2013

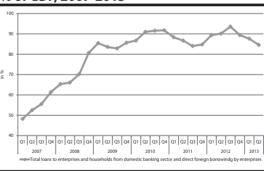


Source: QM calculation
See footnote 1 in Table T7-5

Graph T7-8. Serbia: level of foreign currency deposits, 2005-2013



# Graph T7-7. Serbia: overall credit debts in % of GDP, 2007-2013



Source: QM calculation

Following the seasonal reduction of sources for new placements at the start of the year, the banking sector in Q2 saw a growth in this segment totaling 234 million Euro (in Q1 the drop in sources for new placements was 109 million Euro, Table T7-5). Sources for new placements increased thanks to a growth in the deposits of the population mainly in foreign currency of 181 million Euro while Dinar deposits increased by 50 million Euro. Growth was recorded to a lesser extent with deposits by the economy in foreign currency which increased

<sup>1)</sup> Calculating growth is done under the assumption that 70% of overall placement is indexed against the Euro. Growth for original Dinar values of deposits are calculated on the average exchange rate for the period. For foreign currency deposits – the difference of the situation calculated under the exchange rate at the ends of the period. Capital and reserves calculated under Euro exchange rate at the ends of the period and does not include the effects of changes in the exchange rate from the calculation of the remaining balance.

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

<sup>3)</sup> Net crediting of the state: loans approved to the state are decreased by the deposits of the state in business banks; a negative prefix marks a higher growth of deposits than of credit. The state includes all levels of government; republic to local.

by 62 million Euro in Q2. Growth of sources for new placements which did not turn into new credits to the economy nor into investments in REPO showed that there were significant unused liquidity reserves in the banking sector.

Growth of bad credit speeds up in Q2...

... mainly thanks to a rise in bad credits to corporate sector

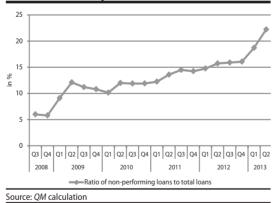
The growth of bad credits in the banking sector in Serbia speeded up throughout Q2. The participation of bad credits calculated using the QM methodology<sup>2</sup> show a worrying jump of 2.6 percentage points in Q1, a growth in Q2 of 3.5 percentage points which continued in July at a somewhat slower pace (Graph T7-10). In the structure of bad credit according to type of debtor the largest contribution to the increase came from the growth of bad loans to corporate sector. The latest data for July show that the participation of bad credits in just one month for corporate sector increased by an added 0.47 percentage points. If a similar trend continues to the end of the year, the banking sector in Serbia would see practically one fourth of the credit placements fall in to the category of bad!

Table T7-9. Serbia: participation of bad credits by type of debtor, 2009-2013

2009	2010		2011			2012				2013	
Q4	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	May
balance at the end of period											
12.14	14.02	14.39	16.23	17.44	17.07	17.72	19.26	19.04	19.06	22.62	27.77
11.21	15.8	15.66	15.75	16.99	17.07	16.05	18.47	17.56	15.92	16.79	18.19
6.69	6.71	6.79	7.1	7.4	7.24	7.57	7.69	8.05	8.32	8.44	8.37
1.58	1.94	2.09	2.46	2.64	2.63	2.67	2.71	2.97	3.19	3.87	4.47
	Q4 12.14 11.21 6.69	Q4 Q4  12.14 14.02 11.21 15.8 6.69 6.71	Q4         Q4         Q1           12.14         14.02         14.39           11.21         15.8         15.66           6.69         6.71         6.79	Q4         Q4         Q1         Q2           12.14         14.02         14.39         16.23           11.21         15.8         15.66         15.75           6.69         6.71         6.79         7.1	Q4         Q4         Q1         Q2         Q3           bal           12.14         14.02         14.39         16.23         17.44           11.21         15.8         15.66         15.75         16.99           6.69         6.71         6.79         7.1         7.4	Q4         Q4         Q1         Q2         Q3         Q4           balance at the           12.14         14.02         14.39         16.23         17.44         17.07           11.21         15.8         15.66         15.75         16.99         17.07           6.69         6.71         6.79         7.1         7.4         7.24	Q4         Q4         Q1         Q2         Q3         Q4         Q1           balance at the und of period           12.14         14.02         14.39         16.23         17.44         17.07         17.72           11.21         15.8         15.66         15.75         16.99         17.07         16.05           6.69         6.71         6.79         7.1         7.4         7.24         7.57	Q4         Q4         Q1         Q2         Q3         Q4         Q1         Q2           balance at the end of period           12.14         14.02         14.39         16.23         17.44         17.07         17.72         19.26           11.21         15.8         15.66         15.75         16.99         17.07         16.05         18.47           6.69         6.71         6.79         7.1         7.4         7.24         7.57         7.69	Q4         Q4         Q1         Q2         Q3         Q4         Q1         Q2         Q3           balance at the emb of period           12.14         14.02         14.39         16.23         17.44         17.07         17.72         19.26         19.04           11.21         15.8         15.66         15.75         16.99         17.07         16.05         18.47         17.56           6.69         6.71         6.79         7.1         7.4         7.24         7.57         7.69         8.05	Q4         Q4         Q1         Q2         Q3         Q4         Q1         Q2         Q3         Q4           balance at the end of period           12.14         14.02         14.39         16.23         17.44         17.07         17.72         19.26         19.04         19.06           11.21         15.8         15.66         15.75         16.99         17.07         16.05         18.47         17.56         15.92           6.69         6.71         6.79         7.1         7.4         7.24         7.57         7.69         8.05         8.32	Q4         Q4         Q1         Q2         Q3         Q4         Q1         Q2         Q3         Q4         Q1           balance at the = rate to f period           12.14         14.02         14.39         16.23         17.44         17.07         17.72         19.26         19.04         19.06         22.62           11.21         15.8         15.66         15.75         16.99         17.07         16.05         18.47         17.56         15.92         16.79           6.69         6.71         6.79         7.1         7.4         7.24         7.57         7.69         8.05         8.32         8.44

A short-term reduction of the participation of bad credits to the individuals was recorded compared to the previous quarter but in July it increased again to 8.5% which is a new quarterly maximum. Still, the fact that the overall growth of bad loans in this segment from the start of the crisis stood at more than 4 percentage points because of which the loans to private individuals represents the part of the market which is the most regular in meeting its credit dues.

Graph T7-10. Serbia: participation of bad loans in overall placement, 2008-2013



Bearing in mid the fact that the growth of bad loans continued despite the slight economic recovery in the previous and this year, we come to the conclusion that the greatest generators of this growth are companies for which the recession has not been stopped id est. those which are not export oriented. Large-scale investments in local companies such as those by FIAT, ETIHAD and NIS are highly desirable and necessary to the Serbian economy but will not have any great effect on the level of bad loans at least not directly since those companies use foreign sources of finance and do not have any great influence on the domestic banking system (for more details on bad loans see QM 32, Review 3).

 $<sup>2\ \</sup> Manner\ of\ calculation\ in\ more\ detail\ in\ \emph{QM.6}, Under\ the\ Microscope:\ NPLs\ in\ Serbia-what\ is\ the\ right\ measure?$