7. Monetary Trends and Policy

The Central Bank: balance and monetary policy

In Q3 the y.o.y. inflation rate continued to stand below the target framework for the period while at monthly level, inflation was positive only in August. This allowed the National Bank of Serbia (NBS) to relax its monetary policy by further lowering the key policy rate which, following the previous correction in October, stands at 4.5%. Further relaxation by the NBS was launched in mid-September when it started lowering the rate of foreign exchange (FX) reserve requirement ratio by one percentage point each over a period of six months. A greater inflow of foreign direct investments and remittances created appreciation pressure and caused the NBS to react by buying foreign currency on the inter-banking FX market to the net value of 500 million Euro by the end of October. Thanks to a higher level of interventions in purchase, the NBS net own reserves were increased but in the same period an increased interest by business banks for REPO operations was also registered and that neutralized the positive effect on the growth of primary money. That led to a slowing down of the y.o.y. growth of the money mass M2 in Q3 and a drop in the monetary aggregate compared to the previous quarter. Besides a growth of the placements of business banks in REPO, the banking sector also registered an increase in the net placements of credit to the households and to the enterprises which exceeded the repayments by the enterprises of cross-border loans. Credit activity recorded its highest level since mid-2012 which could be a sign of slight recovery in this segment. The liquidity of the banking sector increased again through the growth of domestic deposits and the net foreign loans by banks. At the same time the participation of bad loans decreased to the level of 20% with the state of bad loans decreasing in all three debtor categories.

Maintaining inflation below target framework allowed relaxation of monetary policy

The maintaining of the y.o.y. inflation rate below the target corridor in Q3 allowed the NBS to continue relaxing monetary policy through an additional lowering of the key policy rate. The first correction came in July by 0.5 percentage points followed in September by a fresh reduction of the key policy rate to 5%. Since deflation at monthly level was registered in October, the NBS once again corrected the key policy rate brining it to the level of 4.5%. Besides the policy of consistent reactive reduction of the key policy rate, the NBS took a decision in September to lower the rate of the FX reserve requirement ratio which will be implemented through six monthly reductions of 1 percentage point each month. Under that decision, the ratio of the FX reserve requirement from mid-February next year will be at the level of 20% for sources with a due date of up to two years and 13% for longer due dates. Freeing up the foreign currency liquidity of business banks should have a positive effect on the trends in interest rates on indexed loans in the coming period. In order to further ease financial burdens on the banking system, activities linked to solving the problem of bad loans need to be speeded up since bad loans are currently one of the obstacles to increasing the growth of credit activity. Despite the reduction of the key policy rate, the virtual lack of inflation in Q3 had a positive effect on the profitability of investments in REPO. That caused business banks to double the amounts of their net placements in REPO bonds compared to the previous quarter.

Table T7-1. NBS interventions and foreign currency reserves 2013-2015

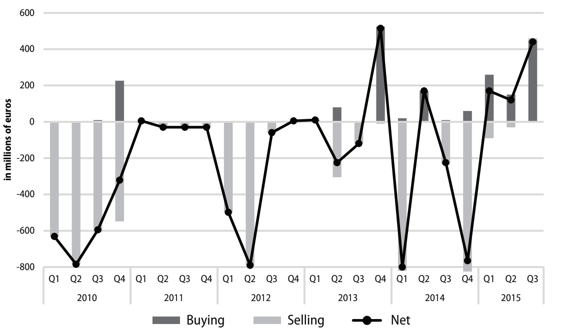
	2013				2014				2015		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
Repo stock (in milions of euros)	678.86	663.82	832.03	966.40	783.96	824.19	387.39	69.48	2.85	168.72	508.19
NBS interest rate	11.75	11.00	11.00	9.50	9.50	8.50	8.50	8.00	7.50	6.00	5.00
NBS interest rate	6.95	3.31	13.24	10.38	4.38	5.09	6.78	10.63	-1.13	3.08	5.00
NBS interest rate	19.25	12.85	12.83	9.25	5.28	7.08	0.03	-1.94	11.33	5.70	6.29
NBS interventions on FX market (in milions of euros)	10.00	-215.00	-140.00	375.00	-800.00	-630.00	-855.00	-1620.00	170.00	290.00	730.00
INCREASE	**cumulative, in % of initial M2[1)]**										
NBS own resreves[2)]	12.5	7.1	17.9	43.2	-31.2	-4.9	2.0	-6.6	33.5	22.5	35.9
NDA	-15.3	-3.9	-16.2	-31.3	12.2	-11.4	-7.6	15.6	-28.4	-16.2	-33.6
Government, dinar deposits[3)]	1.0	-1.2	-4.7	-19.9	3.3	-14.6	-24.3	-9.5	-8.4	-0.5	-10.8
Repo transactions[4)]	-16.0	-14.7	-23.8	-30.7	9.2	6.5	28.9	46.0	3.7	-3.4	-14.5
Other items , net[5)]	-0.3	12.0	12.4	19.3	-0.3	-3.4	-12.2	-20.9	-23.8	-12.3	-8.2
H	-2.8	3.3	1.7	12.0	-19.0	-16.3	-5.6	9.0	5.1	6.3	2.3
o/w: currency in circulation	-3.9	-0.7	1.0	5.4	-5.2	-3.5	0.5	3.7	-7.4	-3.4	-1.4
o/w: excess liquidity	0.6	2.1	-1.4	4.4	-12.1	-11.6	-7.3	-0.6	11.6	8.1	3.7
	in millions of euros, cumulative from the beginning of the year										
NBS, net	30.01	-992.01	-1041.50	943.97	-608.63	-725.22	169.79	-778.03	-101.66	-216.59	-15.58
Gross foreign reserves	-385.77	-1576.91	-1822.60	240.33	-793.11	-1090.74	-276.23	-1309.69	-671.02	-868.83	-696.40
Foreign liabilities	415.78	584.90	781.10	703.63	184.49	365.52	446.02	531.66	569.35	652.24	680.82
IMF	401.14	568.40	759.83	695.60	182.35	364.90	446.72	539.97	579.34	646.52	669.84
Other liabilities	14.65	16.50	21.27	8.03	2.14	0.61	-0.70	-8.31	-9.98	5.73	10.98
NBS, NET RESERVES-STRUCTURE											
1. NBS, net	30.01	-992.01	-1041.50	943.97	-608.63	-725.22	169.79	-778.03	-101.66	-216.59	-15.58
1.1 Commercial banks deposits	911.80	967.01	1058.25	240.42	-125.77	91.72	28.90	610.69	590.01	580.76	676.27
1.2 Government deposits	-811.79	47.05	209.55	-359.83	144.17	541.44	-162.64	48.59	0.60	155.71	243.40
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	130.02	22.06	226.30	824.56	-590.22	-92.05	36.05	-118.75	488.94	519.88	904.10

Source: NBS.
1) "Initial M2" designates the state of the primary money at the start of the current i.e. end of previous year.
2) Definition of net own reserves NBS given in section 8 „Monetary trends and policy", Frame 4, QM5.
3) State includes all levels of government: republic and local government.
4) This category includes NBS Treasury Bondsand repo operations.
5) Other net domestic assets include: domestic loans (net bank debts not including treasury bonds and repo transactions; net debts by the economy) together with other assets (capital and reserves; and items in the balance: other assets) and corrected by changes to the exchange rate.

The NBS prevented excessive exchange rate fluctuations through its interventions on the foreign currency market

In Q3 the NBS intervened to prevent appreciation and in December to prevent depreciation of the Dinar

Graph T7-2. NBS interventions on inter-banking foreign currency market 2010-2015



Source: NBS

The appreciation pressure which were dominant during Q3 caused the NBS to intervene more on the inter-banking FX market on the hard currency purchase side to the extent of 440 million Euro (in Q2, the NBS was a net buyer to the value of 120 million Euro, Graph T7-2). The NBS intervened again in October purchasing foreign currency to the value of 70 million Euro and appearing once on the offer side with 10 million Euro to prevent excessive daily oscillations of the Dinar exchange rate. Pressure to strengthen the Dinar exchange rate are the consequence of a higher inflow of direct foreign investments and remittances in Q3 compared to the other quarters and led to a higher level of NBS interventions. The increased purchases of foreign currency on the inter-banking foreign currency market led to an increase in the NBS own net reserves in Q3 to the extent of 385 million Euro (in Q2 those net own reserves were increased by 31 million Euro, Table T7-1). Although the increase in net own reserves had a positive effect on the growth of primary money due to a reduction in net domestic assets, Q3 registered a reduction o primary money by 3.94% compared to the value at the start of the year. Net domestic assets, on the basis of increased state Dinar deposits and increased placements by business banks in REPO, registered a drop of 17.37% of the value of primary money at the start of the year which completely neutralized the positive effect of the rise in net own reserves. From October to mid-December, the Dinar depreciated against the Euro by about 1.5% which is desirable from a macroeconomic point of view because that improves the competitiveness of the economy and stimulates exports and foreign investments. Although a moderate depreciation of the Dinar is desirable, the NBS interventions in December which prevented a sudden depreciation of the Dinar were justified because in a bi-currency system sudden depreciation leads to huge losses for the economy, the state and the citizens.

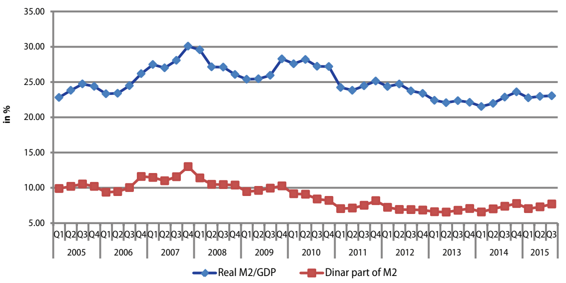
Monetary System: money mass structure and trends

The nominal y.o.y. growth of the money nass slowed down in Q3 ...

... but a slight drop was registered compared to Q2

The money mass M2[1] continued to slow down its nominal growth in Q3 to 4.1% y.o.y. (in Q2 the growth rate of the M2 stood at 7.8% y.o.y., Table T7-4), with the same trend registered in loans to the non-state sector whose nominal growth slowed down to 2.2% year on year. Taking into account y.o.y. inflation, the real y.o.y. growth of the M2 in Q3 stood at 2.6% while in the same period loans to the non-state sector registered a real growth of just 0.7% year on year. Following corrections by the changes to the exchange rate, this growth is even lower and stands at 0.1% year on year. Compared to Q2 the money mass registered a slight drop of 0.2% compared to the value at the start of the year.

Graph T7-3. Money mass trends as percentage of GDP, 2005-2015



Source: *QM* calculation

Table T7-4. Growth of money and contributing aggregates , 2013–2015

	2013				2014				2015		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
					y-o-y, in %						
M2[1)]	8.2	4.5	6.1	4.6	4.2	4.8	6.6	8.7	8.5	7.8	4.1
Credit to the non-government sector[2)]	1.9	-0.5	-4.4	-4.5	-6.1	-4.5	-1.2	2.9	5.8	4.2	2.2
Credit to the non-government sector[2)], adjusted[3)]	1.6	0.6	-4.1	-5.0	-8.2	-5.4	-3.7	-0.8	2.8	1.2	1.7
Households	3.0	2.9	2.9	2.6	2.0	2.5	3.0	3.6	5.5	4.9	3.8
Enterprises	0.9	-0.6	-7.6	-8.8	-13.4	-9.7	-7.3	-3.4	1.2	-1.0	0.3
					real y-o-y, in %						
M2[1)]	-2.6	-5	1.2	2.3	1.9	3.5	4.3	6.7	6.4	5.8	2.6
Credit to the non-government sector[2)]	-8.2	-9.2	-8.9	-6.5	-8.3	-5.7	-3.3	1.1	3.7	2.2	0.7
Credit to the non-government sector[2)], adjusted[3)]	-8.7	-8.2	-8.5	-7.0	-10.3	-6.7	-5.8	-2.5	0.8	-0.7	0.1
Households	-7.5	-6.1	-1.9	0.4	-0.3	1.2	0.7	1.8	3.4	2.9	2.3
Enterprises	-9.3	-9.3	-11.8	-10.7	-15.4	-10.8	-9.3	-4.9	-0.8	-2.9	-1.1
					in bilions of dinars, end of period						
M2[1)]	1622.7	1659.8	1705.8	1719.3	1691.4	1740.2	1818.4	1864.7	1835.4	1876.1	1893.8
M2[1)] dinars	478.8	492.5	519.5	547.6	516.4	555.3	587.1	614.5	567.8	595.3	632.4
Fx deposits (enterprise and housholds)	1143.8	1167.3	1186.3	1169.3	1175.0	1185.0	1231.3	1250.2	1267.7	1280.8	1261.4
					cumulative, in % of opening M2[4)]						
M2[1)]	-1.2	1.1	3.9	4.6	-1.5	1.4	5.9	8.6	-1.6	0.6	1.5
NFA, dinar increase	7.2	2.7	5.2	10.6	0.2	-0.1	11.7	11.1	3.2	3.4	3.0
NDA	-8.4	-1.6	-1.3	-6.0	-1.6	1.4	-5.8	-2.4	-4.7	-2.7	-1.3

Source: NBS

1) Money mass: components – see Analytical and Notation Conventions *QM*.

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

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

4) Initial M2 designates the state of the M2 at the start of the current ie end of previous year.

Greatest effect on growth of money mass based on growth of M1

A dissembling of the nominal growth of the M2 which in Q3 stood at 4.1% y.o.y. reveals that the highest contribution is now owed to the increase of the M1 which is a change compared to the previous quarters. Foreign currency deposits which traditionally caused more than half the growth of M2 now participate with 1.65 percentage points while savings and timed deposits contribute with 0.41 percentage points. The smallest aggregate M1 participated in the growth of primary money with 2.08 percentage points which rose in October to 2.86% (in Q2 the contribution of M1 stood at 1.44 percentage points).

1 The monetary aggregate M2 in the section Monetary trends and policy covers the lesser aggregate M1, savings and timed deposits as well as foreign currency deposits with business banks. That means that the M2 aggregate which we observe is equal to the M3 aggregate in NBS reports.

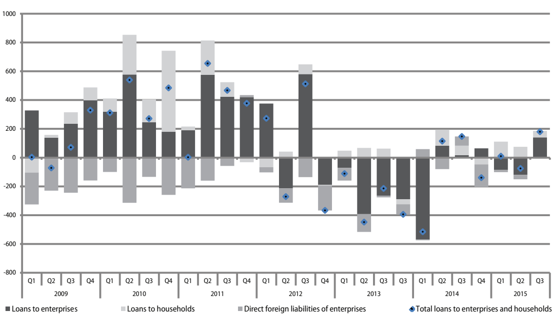
Banking Sector: Placements and Sources of Financing

Positive signals in terms of credit activity were registered in Q3 …

… with the repayment of foreign debts by the enterprises dropping significantly

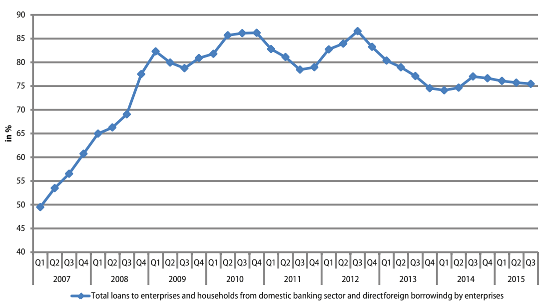
Following the recovery of placements in the previous quarter, mainly thanks to a somewhat higher purchase of REPO bonds, Q3 saw a significant increase of placements by commercial banks by 779 million Euro (Table T7-7). The largest part of the growth was due to the increased placement in REPO bonds which in Q3 stood at 340 million Euro (in Q2 placements in REPO stood at 166 million Euro). Despite the lowering of the key policy rate, the profitability of investing in REPO was high enough thanks to the low and stable inflation and stable Dinar exchange rate, especially bearing in mind that interest rates on the international market for comparable products were almost at zero level. Besides the placements in REPO, banks increased their credits to the enterprises and households in Q3 by 186 million Euro which means a speeding up of the growth started in the previous quarter. The enterprises increased its indebtedness with business banks by 140 million Euro which neutralized its debt repayments in the previous quarter while the growth of loans to the households continued to slow down from the start of the year and in Q3 stood at 45 million Euro (in Q2 placements to the households stood at 75 million Euro, in Q1 they stood at 111 million Euro). In the segment of cross-border loans, debt repayments were almost stopped and in Q3 they stood at just 4,7 million Euro which is significantly lower than in the previous quarters (in Q2 the enterprises repaid debts to the value of 25.5 million Euro, in 2014 a total of 113 million Euro were repaid). The final element in Q3 is the increase in net credit to the state of 225 million Euro which had a positive effect on the overall growth of placements by commercial banks. By observing the segment of yield of the credits placed to the non-state sector from domestic and cross-border loans (Graph T7-5), we see that Q3 registered the highest quarterly yield since Q3 2013. This could be a signal that domestic credit activity is slowly recovering, especially bearing in mind that this yield was achieved without state assistance in the form of subsidized loans. A more certain assessment has to wait for data from at least another two quarters in order to definitely determine whether this is the start of a trend or just a once off increase but what is encouraging is the fact that within the framework of credit to the enterprises a speeding up of the growth of investment loans was registered. Since the start of the year, there has been an evident trend of reduction of real interest rates for Dinar loans for investments and turnover funds (Graph T7-7). A similar trend was registered with indexed loans with interest rates standing at about 5% which is the minimum for interest rates in Serbia over the past 15 years. Interest rates in Serbia continue to stand higher that interest rates in Western economies which stand at 2-3%.

Graph T7-5. Yield for new loans to the economy and population, 2009-2015



Source: *QM* calculation
see footnote in Table T7-4

Graph T7-6. Total credit debt for non-state sector, 2007-2015



Source: *QM* calculation

The participation of bad loans has been reduced in Q3 ...

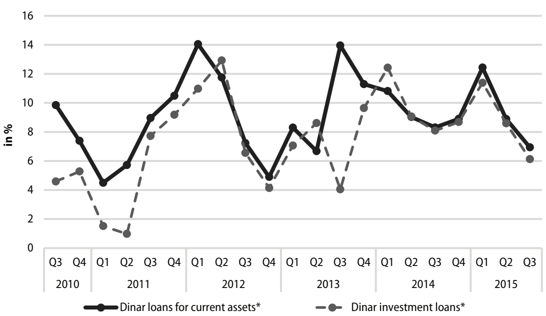
...whereby the decline has been recorded with all segments of debtors

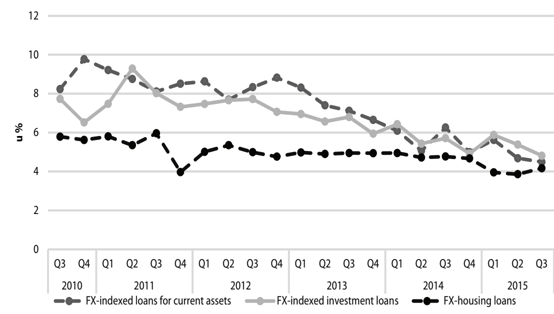
Table T7-7. Bank operations – sources and structure of placements, corrected[1] trends, 2013-2015

	2013				2014				2015		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
	in millions of euros, cumulative from the beginning of the year										
Funding(-, increase in liabilities)	109	341	213	420	578	540	504	678	241	33	-368
Domestic deposits	4	-56	-325	-394	240	-32	-382	-460	47	-118	-324
Households deposits	-87	-132	-252	-423	45	-105	-149	-250	-11	-104	-114
dinar deposits	16	-34	-110	-279	27	-51	-75	-143	96	19	-57
fx deposits	-102	-98	-141	-144	17	-54	-74	-107	-107	-123	-57
Enterprise deposits	91	76	-73	29	195	72	-233	-210	58	-14	-211
dinar deposits	-11	-11	-109	-162	210	45	-159	-273	168	112	-75
fx deposits	102	87	36	191	-15	27	-75	63	-110	-126	-136
Foreign liabilities	357	406	588	806	358	396	610	907	36	150	58
Capital and reserves	-252	-9	-50	8	-20	176	276	232	158	1	-101
Gross foreign reserves(-,decline in assets)	-278	-104	84	-304	193	215	673	1,019	-150	-115	-262
Credits and Investment[1]	123	-169	-67	42	-343	66	-19	-451	-20	149	928
Credit to the non-government sector, total	-23	-348	-551	-875	-577	-382	-300	-296	24	-21	165
Enterprises	-71	-463	-728	-1,018	-570	-488	-471	-410	-86	-207	-67
Households	48	115	177	143	-7	105	171	114	111	186	231
Placements with NBS (Repo transactions and treasury bills)	321	319	492	628	-176	-133	-556	-869	-66	100	439
Government, net[2]	-175	-140	-8	290	411	581	837	713	22	69	324
MEMORANDUM ITEMS											
Required reserves and deposits	-17	-87	-443	-134	-2	-215	-223	-730	444	605	288
Other net claims on NBS[3]	-154	-85	118	44	-136	-135	-4	110	-182	-309	-209
o/w: Excess reserves	-151	-96	60	38	-156	-162	-9	112	-204	-317	-225
Other items[4]	100	50	54	-22	-289	-454	-822	-592	-352	-379	-404
Effective required reserves (in %)[5]	25	24	22	23	23	22	22	19	22	23	20

Source: NBS
1) Calculating yield is done with the assumption that 70% of overall placements are indexed in Euro. Yields for originally Dinar values of deposits are calculated using the average exchange rate for the period. For foreign currency deposits – as the difference calculated by the exchange rate at the ends of the period. Capital and reserves are calculated by the Euro exchange rate at the ends of period and do not include the effects of the change in exchange rate from the calculation of the remaining balance.
2) NBS bonds includes state and NBS treasury bonds which are sold at repo rates and at rates set on the market for permanent auction sales with a due date greater than 14 days.
3) Net crediting of the state: loans approved for the state are lowered by the state deposit in business banks ; a negative prefix designates a higher growth of deposits over loans. State includes all levels of government: republic and local government.
4) Other debts by the NBS (net): the difference between what the NBS owes banks on the basis of cash and free reserves and debts to the NBS.
5) Items in bank balances: other assets, deposits by companies in receivership, inter-bank relationships (net) and other assets including capital and reserves.
6) Mandatory cash reserves means the participation of mandatory reserves and deposits in the overall deposits (population and economy) and bank debts abroad. The basis to calculate mandatory reserves does not include subordinate debts because data is unavailable

Graph T7-8. Interest rates on Dinar and indexed loans, 2010–2015





Source: *QM* calculation
* real interest rates

Growth of deposits additionally increases liquidity of banking sector

The liquidity of business banks increased in Q3 by 400 million Euro which is a speedier growth than in the previous quarter (in Q2 sources of funding increased by 208 million Euro, Table T7-7). Half of overall increase was due to the growth of domestic deposits in Q3 while the remainder of the growth of sources for new placements had a positive effect on the increase of foreign indebtedness of domestic banks of 92 million and an increase of capital and reserves of business banks by 102 million Euro. The increase of domestic deposits of 206 million is predominantly the result of increased deposits of the enterprises by 197 million Euro while the rest is owed to a rise in deposits by the population. The households increased their Dinar deposits by 76 million Euro in Q3 thanks to low and long-term stable inflation rates in combination with especially non-stimulating interest rates on savings in foreign currency. That caused the foreign currency

Trends

deposits by the population to decrease by 66 million Euro which brought down their combined effect on the growth of liquidity in business banks. The economy saw the greatest part of the growth in Dinar deposits of 94% while the remainder of the growth was on foreign currency deposits with commercial banks.

Table T7-9. Participation of bad loans according to debtor type, 2009-2015

	2009	2010	2011	2012	2013				2014				2015		
	Dec	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Q1	Q2	Q3
	balance at the end of period														
Corporate	12.14	14.02	17.07	19.06	22.62	27.77	31.13	27.76	28.67	28.12	26.76	25.5	25.85	28.63	25.52
Entrepreneurs	11.21	15.8	17.07	15.92	16.79	18.19	20.86	20.82	21.11	29.77	43.61	43.29	45.19	34.91	32.03
Individuals	6.69	6.71	7.24	8.32	8.44	8.37	8.14	8.59	8.7	9.22	11.41	9.97	10.16	11.60	10.68
Ammount of dept by NPL (in bilions of euros)	1.58	1.94	2.63	3.19	3.87	4.47	4.82	4.09	4.05	4.07	3.81	3.70	3.72	3.96	3.61

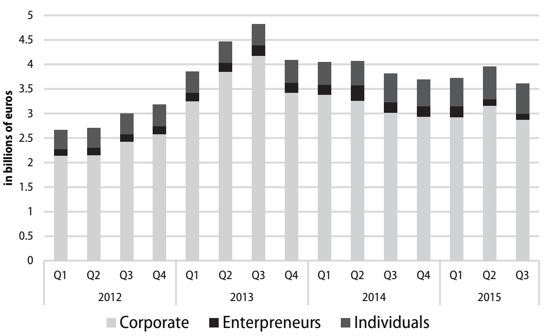
Source: *QM* calculation

The participation of bad loans dropped in Q3 …

… with a drop being registered in all segments of debtor

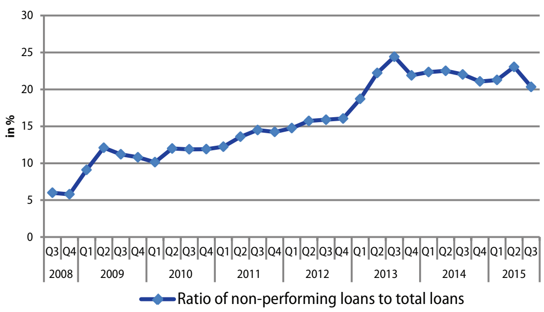
Following the unusually sudden rise in the participation of bad loans at the end of June, the latest data from the Credit Bureau shows that stabilization and decreases have come to this segment. At the end of Q3, the participation of bad loans stood at 20.09% which is a drop compared to the previous quarter of 3 percentage points(Graph T7-11). The greatest contribution to the drop in participation is owed to the decrease in the part of the bad loans placed to corporate sector which stood at 25.5% at the end of Q3 (at the end of Q2 that participation stood at 28.63%). A decrease was also registered in the participation of bad loans placed to entrepreneurs and private individuals by 2.8 and 1 percentage point respectively. Bearing in mind that the growth of bad loans, in both relative and absolute amounts (Graph T7-10) in Q2 was more the consequence of a once-off break in the series than a started trend of slight weakening, we expect that the overall participation in the next quarter will stay at a level of around 20% which is confirmed by preliminary data from October and November. The overall stock of bad loans was reduced in Q3 compared to data at the end of Q1 which along with a slight recovery of credit activity explains the drop in the participation rate of bad loans in overall placements. The set of measures which the NBS adopted in August following negotiations with the International Monetary Fund (IMF) mission should speed up the resolving of the problem of bad loans. Most of their effects will be felt at the end of next year since the framework for their implementation was set in the second half of 2016.

Graph T7-10. Amount of remaining debt on loans which are late with repayment, 2012-2015



Source: *QM* calculation

Graph T7-11. Participation of bad loans in overall placement, 2008-2015



Source: *QM* calculation