7. Monetary Trends and Policy

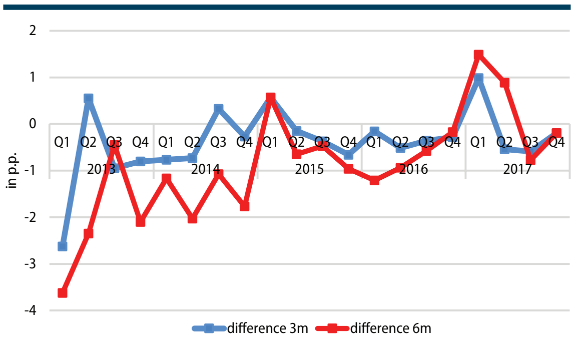
Inflationary pressure continued to weaken in Q4 causing the y.o.y. inflation rate to drop to 3% which is also in the centre of the target framework set by the National Bank of Serbia (NBS). In October the NBS lowered its key policy rate to 3.5% when it became certain that inflation would stand around the target level and there were no new corrections to the end of the year and in the first two months of 2018. In order to prevent excessive oscillations in the exchange rate, the NBS intervened on the Inter-bank foreign exchange (FX) Market in Q4 this time with both the sale and purchase of hard currency. At quarterly level, the NBS was a net seller of foreign currency totalling 85 million Euro but despite that, a nominal appreciation of the Dinar exchange rate happened. Interventions on the FX market and the sale of hard currency to the state affected the level of net own reserves NBS which dropped by 370 million Euro in Q4 which had an effect on the reduction of Dinar liquidity while the rise in state spending and the withdrawal of banks from REPO placements completely neutralized the drop. On the money market, the y-o-y. growth of the M2 slowed down and Q4 saw the lowest value in the past few years in both nominal and real terms while at the same time the y-o-y. growth of credit to the non-state sector showed signs of recovery in credit activity. The growth of net bank placements in Q4 was lower than in the previous quarter due mainly to the withdrawal of funds which banks place in REPO earlier and because of the lower growth of net placements to the enterprises and the households which are the consequence of a writing off of a significant part of non-performing loans (NPLs). If we exclude the effects of the writing off, a net placement to the enterprises registered the significant growth while the existing good growth of placements to the households grew even more. In parallel with the increase in placements, there was also a growth in the credit potentials of banks because of the rise in domestic deposits and because of the increased bank debts abroad. The participation of bad loans in the overall placement at the end of December dropped to 11.3% as a consequence of the growth of credit activities but mainly thanks to a faster writing off of NPLs in Q4. On the credit market, a majority of interest rates is at a similar or slightly higher level compared to the previous quarter while interest rates on loans (indexed in Dinars) for current assets continued to drop. The drop in the key policy rate to 3.25% in mid-March is an adequate reaction by monetary policy on macroeconomic trends in Serbia.

Central Bank: Balance and Monetary Policy

The reduction of the key policy rate in October and March is an adequate response to macroeconomic trends

The end of the year was marked by an additional weakening of inflationary pressure which brought monthly inflation rates in November and December to zero. The y.o.y. inflation rate at the end of Q4 was right in the middle of the target framework of 3%±1,5% which the NBS kept as the goal for 2018. The maintaining of this level of inflation which was higher than the average inflation in the EU by 1-1.5 percentage points in the past few years with a nominal appreciation of the Dinar had a negative effect on the price competitiveness of Serbian exports. Given those circumstances, the NBS lowered its key policy rate in October by 0.25 percentage points and kept it at the level of 3.5% up to mid-March. One of the important elements which caused extremely low monthly inflation rates in most of 2017 included the state's restrictive fiscal policy which, in conditions of limited economic growth generated a consolidated surplus of 1.2% of the GDP. In this period business banks withdrew a significant portion of

Graph T7-1. Oscillations in planned inflation for 3 and 6 months in advance of the real state 2013-2017



Source: NBS

their funds from REPO which had a positive effect on Dinar liquidity but not on the exchange rate which, despite interventions, continued to appreciate nominally (Table T7-2).

Monetary policy in 2017 can be said to have been relatively successful because the target inflation level was achieved with great progress in terms of lowering the participation of bad loans. It seems that attention should be paid to the exchange rate level which does not reflect the actual situation when we take into account the trends in general price levels and productivity in Serbia and the European Union. We feel that the lowering of the key policy rate to 3.25% in mid -March is an adequate monetary policy reaction to macroeconomic trends in Serbia. The lower key policy rate will lower pressure on the financial market towards a strengthening of the Dinar and it could stimulate its slight weakening. The slight weakening of the Dinar would contribute to raising the profitability of exports and higher cost of imports and would stop the growth of the foreign trade deficit. That policy contributes to strengthening the competitiveness of the Serbian economy, the opening of new jobs and speeding up long-term growth.

Table T7-2. NBS interventions and foreign currency reserves 2015-2017

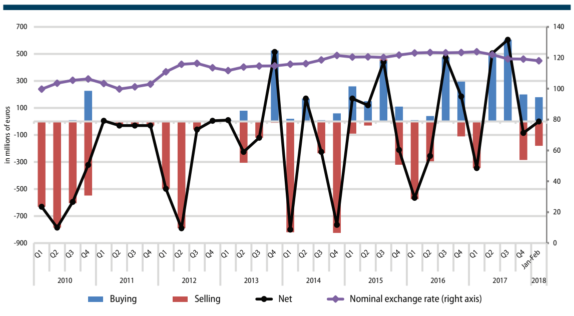
	2015				2016				2017			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Repo stock (in milions of euros)	2.85	168.72	508.19	253.24	246.50	239.12	325.82	279.23	480.53	572.42	634.74	384.53
NBS interest rate	7.50	6.00	5.00	4.50	4.25	4.25	4.00	4.00	4.00	4.00	3.75	3.50
NBS interest rate	-1.13	3.08	5.00	6.66	2.60	1.78	3.17	1.94	-5.11	1.94	4.17	2.68
NBS interest rate	11.33	5.70	6.29	-0.76	-0.34	3.35	4.57	3.37	4.48	15.71	7.77	3.50
NBS interventions on FX market (in milions of euros)	170.00	290.00	730.00	520.00	-555.00	-820.00	-345.00	-160.00	-345.00	160.00	765.00	680.00
INCREASE	**in millions of euros, cumulative from the beginning of the year**											
NBS own resreves[2)]	607.7	638.6	1022.9	1163.0	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22	364.16	-4.87
NDA	-515.6	-460.4	-956.2	-783.4	45.62	395.60	-99.67	94.92	-171.42	-248.75	-704.00	137.47
Government, dinar deposits[3)]	-151.9	-13.7	-308.7	-217.4	41.52	275.36	35.00	195.73	-41.59	-358.48	-755.64	-247.10
Repo transactions[4)]	68.0	-97.4	-413.3	-166.4	5.09	19.53	-279.20	-25.66	-207.38	-285.41	-346.27	-95.49
Other items , net[5)]	-431.8	-349.3	-234.1	-399.5	-0.99	100.71	144.53	-75.15	77.56	395.14	397.91	480.06
H	92.1	178.3	66.7	379.6	-423.81	-390.27	-446.13	-68.11	-441.15	-513.96	-339.84	132.60
o/w: currency in circulation	-133.7	-95.5	-39.9	76.8	-68.06	-20.21	40.74	157.26	-104.02	-114.39	-103.93	39.59
o/w: excess liquidity	210.3	229.5	104.1	408.0	-284.91	-319.01	-465.39	-241.74	-351.17	-422.08	-269.15	22.35
	in millions of euros, cumulative from the beginning of the year											
NBS, net	676.36	561.44	762.45	667.97	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87	452.21	-280.73
Gross foreign reserves	638.67	440.86	613.29	508.46	-880.04	-1080.32	-807.49	-153.76	-469.25	-632.21	431.51	-302.83
Foreign liabilities	37.69	120.58	149.16	159.52	14.21	18.69	22.97	16.14	4.66	13.34	20.70	22.10
IMF	39.37	106.55	129.87	141.97	8.10	15.09	16.00	14.12	-0.04	5.81	7.68	8.67
Other liabilities	-1.67	14.04	19.29	17.54	6.10	3.59	6.98	2.02	4.69	7.53	13.02	13.43
NBS, NET RESERVES-STRUCTURE												
1. NBS, net	676.36	561.44	762.45	667.97	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87	452.21	-280.73
1.1 Commercial banks deposits	-20.68	-29.93	65.59	100.98	331.11	302.75	339.40	90.80	144.67	156.34	123.17	159.61
1.2 Government deposits	-47.99	107.13	194.81	393.89	65.30	-26.98	98.65	-116.22	50.18	197.32	-211.22	116.25
1.3 **NBS own reserves**	607.70	638.64	1022.85	1162.84	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22	364.16	-4.87

Source: NBS.
1) Initial M2 designates the state of primary money at the start of the current and end of previous year.
2) The definition of net own reserves NBS is given in section 8 Monetary Trends and Policy frame 4, *QM* no. 5.
3) State includes all levels of government: republic and local.
4) This category includes Treasury Bonds NBS and repo operations.
5) Other domestic net assets include: domestic loans (net debts of banks, not including Treasury Bonds and repo transactions; net debts of the economy) along with other assets (capital and reserves; and items in the balance: other assets) and is corrected by exchange rate changes.

The Dinar appreciated slightly in Q4, contrary to seasonal dynamics...

...despite net sale of hard currency by NBS in Q4 on the inter-bank FX market

Graph T7-3. NBS interventions on inter-bank foreign currency market 2010-2017



Source: NBS

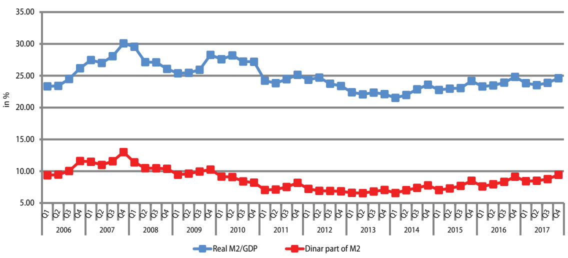
Following appreciation pressure which dominated the previous two quarters, that pressure in Q4 acted in both directions with the depreciation prevailing which is typical for the end of the year. In the last three months of 2017, the NBS tried to stabilize excessive oscillations on the inter-bank FX market reacting in October and December by buying 200 million Euro and in November and December by selling foreign currency totalling 285 million Euro (Graph T7-3). The net effect for Q4 was the sale of 85 million Euro on the inter-bank foreign currency market which affected Dinar liquidity on the money market. Although the Dinar usually grows weaker at the end of the year because of a higher demand for foreign currency to pay debts to foreign partners and creditors and a higher offer of the Dinar because of the fiscal deficit in Q4. In Q4 the Dinar grew stronger compared to the previous quarter. A similar situation continued in January and February which is not in accord with the basic results of the economy bearing in mind the higher domestic inflation and weaker growth of productivity compared to the EU average, as well as Serbia's negative trade balance. The strengthening of the Dinar in 2017 was partly the consequence of the sterilization of Dinar liquidity in the system due to a surplus in the state budget. The insufficient realization of infrastructure projects and a higher level of collection of tax income caused the state to withdraw Dinars from the system to the value of some 440 million Euro. The effect of this was a parallel weakening of inflationary pressure and strengthening of the Dinar exchange rate. The net own reserves dropped in Q4 by 370 million Euro compared to the level at the end of September but the drop was completely compensated with the growth of net domestic assets. The withdrawal of business banks from REPO placements by 251 million Euro had a positive effect on the growth of net domestic assets which in Q4 were increased by 841 million Euro. This neutralized the effects of the drop in NBS net own reserves and affected the primary money in Q4 with an increase of 471 million Euro.

Monetary system: structure and trends of the money mass

The y-o-y. growth of the M2 slowed down nominally in Q4 …

…while the growth rate in real terms recorded its lowest level in the past few years

Graph T7-4. Money mass trends as a percentage of GDP, 2005-2017



Source: *QM* calculation

The slowing down of the nominal growth of the M2[1] which is evident from the first half of the year continued in Q4 at the end of which the rate dropped to 3.6% y-o-y. (in Q3 that growth stood at 5.6% y-o-y., Table T7-5). The money mass, compared to the value at the end of September, increased by 3.2% mainly thanks to an increase in the NSA which contributed to the growth with 2.9 percentage points while the remaining 0.3 percentage points are due to a rise in the NDA. The y-o-y. growth rate of the M2 in real terms, not including price rises, shows that this growth was almost stopped in Q4. The growth in real terms stands at just 0.6% compared to the level at the end of 2016 which is the lowest growth over the past few years (in 2016 the M2 growth in real terms stood at 8% while in 2015 it stood at 5.5%).

Table T7-5. Growth of money and contributing aggregates, 2015–2017

	2015				2016				2017			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
y-o-y, in %												
M2 1)	8.5	7.8	4.1	7.2	7.9	7.8	10.2	9.9	10.3	7.4	5.6	3.6
Credit to the non-government sector 2)	5.8	4.2	2.2	2.8	2.2	4.7	5.9	2.6	4.1	2.0	0.7	1.8
Credit to the non-government sector 2), adjusted 3)	2.8	1.2	1.7	2.5	0.6	3.1	3.9	1.5	3.5	3.5	2.9	4.7
Households	5.5	4.9	3.8	4.3	3.8	5.8	8.4	9.4	11.0	11.8	10.8	10.9
Enterprises	1.2	-1.0	0.3	1.3	-1.4	1.4	1.0	-3.3	-1.3	-2.1	-2.4	0.4
real y-o-y, in %												
M2 1)	6.4	5.8	2.6	5.5	7.2	7.3	9.4	8.0	6.4	3.8	2.3	0.6
Credit to the non-government sector 2), adjusted 3)	1.6	0.3	1.1	1.8	0.2	2.3	2.8	0.9	2.1	2.7	2.4	4.0
Households	3.9	3.4	2.9	3.4	2.9	4.6	6.6	7.5	8.6	9.7	9.0	9.2
Enterprises	0.3	-1.5	0.0	0.8	-1.5	0.9	0.4	-3.2	-1.7	-2.0	-2.1	0.4
in bilions of dinars, end of period												
M2 1)	1,835.4	1,876.1	1,893.8	1,999.7	1,979.6	2,023.2	2,087.0	2,196.8	2,182.7	2,173.3	2,204.5	2275.5
M2 1) dinars	567.8	595.3	632.4	702.6	645.5	685.0	727.1	808.0	772.7	785.2	808.3	872.1
Fx deposits (enterprise and housholds)	1,267.7	1,280.8	1,261.4	1,297.0	1,334.1	1,338.2	1,359.9	1,388.7	1,410.0	1,388.1	1,396.2	1403.4
quarterly growth M2 4) and shares												
M2 1)	-1.6	2.2	0.9	5.6	-1.0	2.2	3.2	5.3	-0.6	-0.4	1.4	3.2
NFA, dinar increase	-2.5	1.5	2.0	3.7	-2.9	2.0	2.1	3.9	-1.6	0.6	1.1	2.9
NDA	0.9	0.7	-1.0	1.9	1.9	0.2	1.1	1.4	1.0	-1.0	0.4	0.3

Source: NBS
1) Money mass: components – see Analytical and Notation Conventions *QM*.
2) Loans to the non-state sector – loans to enterprises (including local government) and households.
3) Trends are corrected by changes to exchange rate. Corrections are done under the assumption that 70% of loans to the non-state sector (households and the enterprises) are indexed in Euro.
4) Trends are corrected by changes to exchange rate and inflation. Corrections are done under the assumption that 70% of loans to the non-state sector (households and the enterprises) are indexed in Euro.

1 M2 monetary aggregate in the section Monetary Trends and Policy includes the lesser aggregate M1, savings and timed deposits as well as foreign currency deposits in business banks. That means that the aggregate M2 which we follow is equal to the monetary aggregate M3 in NBS reports.

One positive change of note is the speeding up of the rise in real terms of loans to the enterprises and the households to 4% y-o-y. which made the greatest contribution to the maintaining of the growth rate in real terms of loans to households at a high rate of 9.2% y.o.y.

Separating the y-o-y. nominal growth of the M2 into lesser monetary aggregates show that the greatest contribution comes from the smallest monetary aggregate M1. It's contribution to the y-o-y. growth stands at 2.82 percentage points which is somewhat higher than the contribution in Q3. Since the nominal growth of the M2 stands at 3.58% y-o-y. the remaining two components have evidently recorded a significantly lower growth than in the previous quarter and have achieved a smaller contribution to the overall growth.

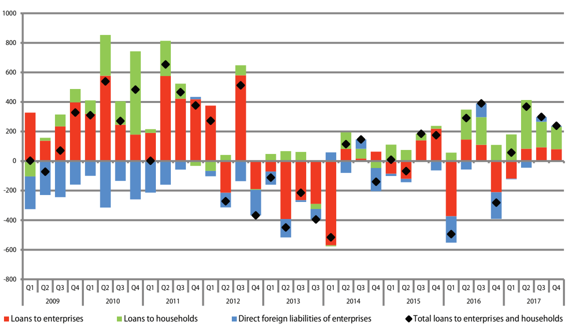
Banking sector: placements and sources of financing

The withdrawal of banks from REPO placements in Q4 brought down overall growth …

… while new net loans to the state, enterprises and the households affected growth

The slowing down of the growth of net placements from the previous quarter continued in Q4 despite the great increase in credit potential among business banks. The net placements in Q4 increased by only 75 million Euro which brought the overall growth of net placements in 2017 to a stop at 1.2 billion Euro (Table T7-7). The greatest influence on the slowing down of growth in Q4 came from the withdrawal of business banks from REPO placements totalling 250 million Euro. That almost completely neutralizes the effects of the growth of net loans to the state and non-state sector. The growth of net loans to the enterprises and the households of 232 million Euro is at a similar level as in the previous quarter with the households once again contributing the most to the increase. Net loans to the households increased in Q4 by 151 million Euro while the enterprises increased its debts by 80 million Euro (net placements to the households in Q3 increased by 173 million Euro and to the enterprises by 93 million Euro). Bearing in mind that banks wrote off debts in this period, the growth of net placements was undervalued, especially in the case of the enterprises, since the total bank loans were decreased by the value of debts written off. The amount of written off debts for the enterprise sector in Q4 stood at around 235 million Euro which is more than a third of the value of debts written in all of 2017 (during 2017 the amount of debts written off for the enterprises stood at 625 million Euro). Business banks wrote off 197 million Euro of bad loans to the households during 2017 and that also caused the overall rise in credit activity to be partly lower. At the end of the year, the state also contributed to the rise in net placements by business banks by withdrawing funds from accounts in Q4 to finance the deficit which appeared seasonally in the last quarter. The net loans to the state increased by 94 million Euro which had a positive effect on the growth of overall net placements.

Graph T7-6. Growth of new loans to the enterprises and households, 2009-2017



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

Data on the enterprise net debts to foreign banks shows that there is no significant recovery in that segment. Local companies increased their net debts to foreign banks in Q4 by just 7 million Euro (in Q3 the growth of net cross-border loans stood at 33 million Euro (Table T7-7). Viewed at the level of the entire year, the enterprises paid off debts to foreign banks totalling 15 million Euro since net debt repayments in Q1 were higher than the growth in the remaining two quarters. The overall growth of net placements to the enterprises and the households from domestic and foreign sources in Q4 stood at 239 million Euro which, along with previous quarters, brought the overall annual rise of net placements to 957 million Euro in 2017. Although the growth is due in great part to the rise in activity in the households segment, credit activity was raised significantly compared to the previous years when we saw more net debt repayments than the net growth of placement. We should also bear in mind that some 824 million Euro in bad loans placed to the households and enterprises were written off which caused the more evident growth of credit to be significantly lower especially with the enterprises. Once this effect is taken into consideration, the overall growth of net loans to the enterprises and households in 2017 was significantly higher at the level of some 1.7 billion Euro which is a significant rise compared to 2016 when it stood at some 280 million Euro including written off debts.

Minimum debt repayment abroad registered in Q4…

…but corrected data on debts from domestic banks shows recovery of credit activity

Table T7-7. Bank operations – sources and structure of placements, corrected[1] trends, 2015-2017

	2015				2016				2017			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	in millions of euros, cumulative from the beginning of the year											
Funding(-, increase in liabilities)	241	33	-368	-513	377	168	-363	-1,130	354	-252	-1,138	-2,185
Domestic deposits	47	-118	-324	-918	223	-235	-708	-1,425	107	-104	-426	-1,032
Households deposits	-11	-104	-114	-282	-16	-235	-362	-625	-69	-164	-258	-517
dinar deposits	96	19	-57	-196	3	-75	-154	-290	27	-7	25	-121
fx deposits	-107	-123	-57	-86	-19	-161	-208	-334	-96	-157	-283	-395
Enterprise deposits	58	-14	-211	-635	239	0	-346	-800	175	60	-167	-515
dinar deposits	168	112	-75	-455	385	222	5	-352	207	142	-30	-307
fx deposits	-110	-126	-136	-181	-146	-222	-351	-448	-31	-82	-137	-208
Foreign liabilities	36	150	58	225	181	397	427	335	218	49	-317	-546
Capital and reserves	158	1	-101	179	-27	6	-82	-40	29	-198	-395	-607
Gross foreign reserves(-,decline in assets)	-150	-115	-262	-497	214	337	284	244	-35	-153	-286	-261
Credits and Investment[1]	-20	149	928	1,252	128	426	1,129	997	255	856	1,162	1,237
Credit to the non-government sector, total	24	-21	165	407	-316	32	329	186	61	474	740	972
Enterprises	-86	-207	-67	158	-374	-228	-118	-372	-119	-36	58	138
Households	111	186	231	248	57	260	447	559	180	510	682	833
Placements with NBS (Repo transactions and treasury bills)	-66	100	439	192	-7	-14	276	27	202	289	341	90
Government, net[2]	22	69	324	653	452	408	525	784	-8	93	82	176
MEMORANDUM ITEMS												
Required reserves and deposits	444	605	288	311	-598	-864	-859	-565	-161	-94	-83	-30
Other net claims on NBS[3]	-182	-309	-209	-100	-107	160	6	201	-324	-401	-220	62
o/w: Excess reserves	-204	-317	-225	-134	-102	160	3	187	-326	-415	-223	42
Other items[4]	-352	-379	-404	-343	0	-204	-175	253	-79	18	545	1,176
Effective required reserves (in %)[5]	22	23	20	20	17	16	15	16	16	15	15	15

Source: NBS

1) Calculating growth is done under the assumption that 70% of overall placements are indexed against the Euro. Growth for original Dinar value of deposits is calculated based on the average exchange rate for the period. For foreign currency deposits – as the difference between the states calculated using the exchange rate at the ends of the period. Capital and reserves are calculated using the Euro exchange rate at the ends of the period and do not include the effects of changes to the exchange rate from the calculation of the remaining balance.

2) NBS bonds include state bonds and NBS treasury bonds which are sold at repo rates and 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 decreased by the state deposits in business banks; the negative prefix designates a higher growth of deposits than of loans. State includes all levels of government: republic and local.

4) Other NBS debts (net): the difference between what the NBS owes banks in terms of cash and free reserves and debts to the NBS.

5) Items on bank balance: other assets, deposits by companies in receivership, inter-bank relations (net) and other assets not including capital and reserves.

6) Effective mandatory reserve is the participation of the mandatory reserve and deposits in the overall deposits (by the enterprises and households) and bank debts abroad. The basis for calculation of the mandatory reserve does not include subordinate debts because that data is not available

Bank credit potential records faster growth in Q4…

…mainly because of the growth of domestic deposits and other sources

The rise in sources for new placements by business banks which was present in 2017 since May continued in Q4 at a visibly faster pace. Following the increase of 886 million Euro in Q3, the credit potential of banks rose by more than a billion Euro by the end of the year (Table T7-7). That amount is almost at the level of the overall growth achieved in 2016. Viewed from the start of the year, the banking sector increased its sources for new placements by 2.2 billion Euro. The greatest contribution to the growth of the sources for new placements came from domestic deposits which rose by 606 million Euro in Q4. The greatest part of that amount is the consequence of the growth of deposits by the enterprises by 348 million Euro while the households increased the amount of its funds in bank accounts by 259 million Euro. The structure the deposits is mainly foreign currency for the enterprises (of the total increase 277 million is in foreign currency deposits) while the households gave a small advantage to foreign currency over Dinar deposits (146 million of the total rise in deposits was in foreign currency). Business banks increased their credit potential in Q4 on the basis of net debts abroad by 229 million Euro. The continued monetary expansion of the European Central Bank through direct and portfolio investments on the European market led to an increased offer of cheap capital. Domestic banks used the situation and withdrew 607 million Euro more than their debts which fell due on earlier loans from outside the country in 2017. The rise in the credit potential of business banks was also caused by an increase in capital and reserves of 212 million Euro in Q4 which meant that the trend in the previous two quarters continued. The rise in the credit potential of banks, especially their debts abroad indirectly confirms the fact that the rise in credit activity is higher than official data shows because of the large-scale writing off of debts. The foreign debts of banks show that banks are expecting a rise in credit activity and indirectly a faster economic recovery.

Table T7-8. Participation of NPLs according to debtor type, 2008-2017

	2009	2010	2011	2012	2013	2014	2015				2016				2017				2018
	Dec	Dec	Dec	Dec	Dec	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Feb
	balance at the end of period																		
Corporate	12.14	14.02	17.07	19.06	27.76	25.5	25.85	28.63	25.52	24.40	26.89	26.26	23.56	19.48	19.92	19.24	16.86	13.83	14.16
Entrepreneurs	11.21	15.8	17.07	15.92	20.82	43.29	45.19	34.91	32.03	29.92	33.03	30.12	28.44	27.42	26.49	25.02	23.90	16.96	14.59
Individuals	6.69	6.71	7.24	8.32	8.59	9.97	10.16	11.60	10.68	10.53	10.95	10.63	10.36	9.66	9.21	8.35	7.56	6.43	6.24
Ammount of dept by NPL (in bilions of euros)	1.58	1.94	2.63	3.19	4.09	3.70	3.72	3.96	3.61	3.52	3.76	3.75	3.45	2.83	2.83	2.77	2.63	2.16	2.17

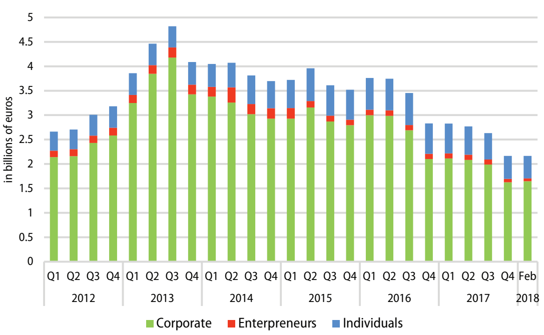
Source: *QM* calculation

The drop in the participation of NPLs speeded up significantly in the second half of the year…

…mainly thanks to the writing off of debts by banks and the rise in credit activity

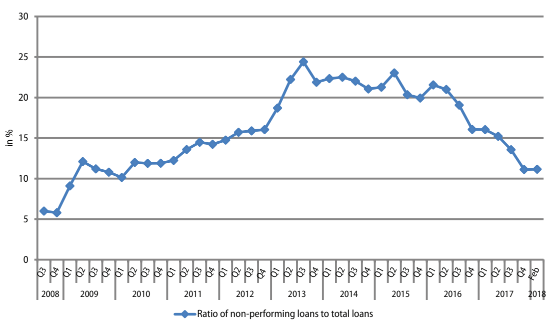
Following several quarters with no great changes in the segment of bad loans, the positive trend of an evident drop in Q3 continued to the end of the year. The overall participation of bad loans which have fallen late by more than 90 days has dropped to 11.12% at the end of Q4 according to the manner of calculation by QM[2] (Graph T7-10). If we observe the trends in the participation of bad loans in the overall from the start of the financial crisis, the level achieved at the end of Q4 was close to the amount at the end of 2009. In the last three months of 2017, the drop in the participation of bad loans by 3 percentage points which was recorded in the companies' segment mainly caused the in overall participation (Table T7-8). Although the greatest drop of 7 percentage points was in the participation of bad loans placed with entrepreneurs, their relatively small mass (around 5% of the total bad loans) could not make a significant contribution to the drop in overall participation. A similar effect on the drop in overall participation of bad loans was caused by the drop of 1.13 percentage points in the segment of bad loans placed with private individuals because of their higher amounts in the overall mass of bad loans than in the case of entrepreneurs. The rise in credit activity had a positive effect on the drop in the participation in all three segments but the greater effect was achieved because of the activities of business banks in writing off and selling bad loans to persons outside the banking system. That is confirmed by the data on the mass of bad loans (Graph T7-9) which shows a significant drop in Q4 by some 470 million Euro, the largest part of which was the writing off and sales to firms of some 360 million Euro.

Graph T7-9. Amount of remaining debt in loans falling late, 2012-2017



Source: *QM* calculation

Graph T7-10. Participation of bad loans in overall placements, 2008-2017



Source: *QM* calculation

Interest rates: state and trends

Interest rates stagnating for most number of loans…

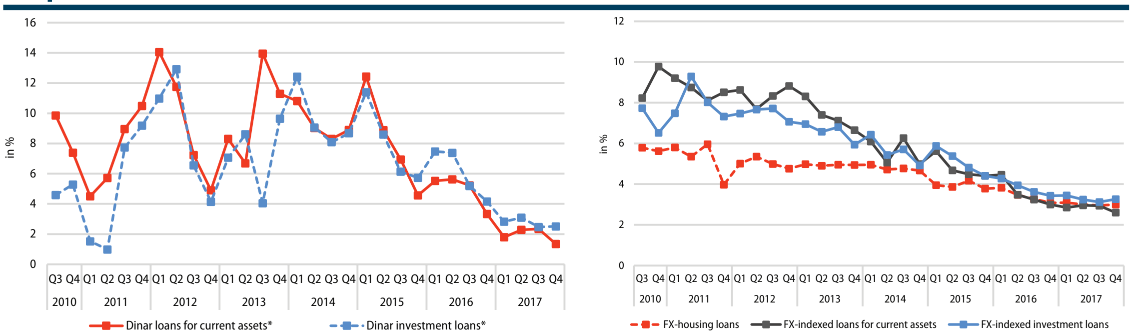
… except in turnover fund loans which continue to drop

The lowering of interest rates in the previous quarters stopped in the last three months of 2017 for a number of loans. Weighted interest rates on indexed housing loans were raised in Q4 by 0.05 percentage points and at the end of December, they were returned to the level at the end of Q2 (Graph T7-11a). The situation was similar with interest rates on indexed investment loans which saw a slightly higher rise of 0.14 percentage points bringing them back to a level similar to that of the first half of 2017. Following the rise and almost unchanged situation in the previous quarter, interest rates on indexed loans for current assets were lowered again at the end of the year by 0.34 percentage points bringing them to the lowest level ever since we have been monitoring this data. In the segment of interest rates on Dinar loans, the situation is similar with a diametric movement of the observed interest rates. On one hand, the weighted interest rates in

2 For details on the manner of calculating the participation of bad loans see *QM* 6 – Under the Magnifying Glass 1: NPLs in Serbia – What is the true measure?

real terms on Dinar investment loans recorded a minimal growth to 2.51% which is still below the level at the start of the year while, on the other hand, interest rates for current assets at the end of Q4 were lower by 1 percentage point and saw their lowest recorded value just like the indexed rates (Graph T7-11b). The fact some courts have disputed the right of banks to charge the cost of calculating loans could lead to a certain rise in interest rates so that banks could cover those costs through interest.

Graph T7-11. Interest rates on Dinar and indexed loans, 2010–2017



Source: *QM* calculation
* interest rates in real terms