

7. Monetary Flows and Policy

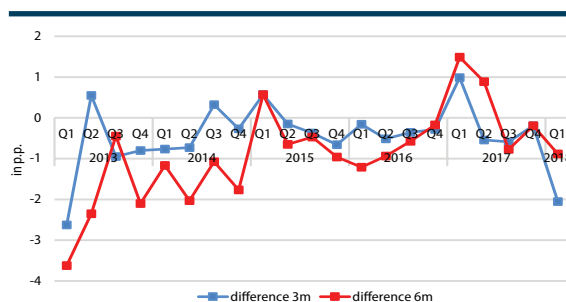
Year on year inflation continued to slow down and in the first four months of 2018 it mainly stood below the lower limit of the target framework, and in May it returned to within the target interval. That led the National Bank of Serbia (NBS) to change its key policy rate twice bringing it to the current 3%. The NBS interventions on the inter-banking foreign exchange (FX) market were mainly aimed at preventing the Dinar from growing stronger in Q1. Including the interventions in May, the NBS was net buyer of 885 million Euro on the FX market including 400 million Euro in Q1. Despite that, the NBS net own reserves dropped and that, along with the drop in net domestic assets, caused a reduction in the primary money in Q1. The y.o.y. growth rate M2 slowed down slightly compared to the previous quarter but data on the real y.o.y. growth of loans to the non-state sector showed signs of improvement. Bank net placement in Q1 recorded an increase mainly thanks to the net debts of the state and households. At the same time, banks withdrew from REPO placements while the enterprises recorded a nominal repayment of loans to the domestic banking sector. We should bear in mind that this is mainly the consequence of the writing off and sale of bad loans which were included in bank balances which led to an underestimating of net placement to the enterprises. However, in regard to cross-border loans to the enterprises, Q1 ended at an unchanged level which suggests that there is still no significant improvement in this segment. A seasonal reduction of sources for new placements has been recorded since the start of the year because of a drop in the deposit accounts of the enterprises and capital and reserves of commercial banks. The share of NPLs has been showing a significant drop for the second quarter in a row. For the first time since the crisis broke out, the share of NPLs due to speedier writing off and sales has dropped to a single digit value. There is evidence of some reduction in interest rates for certain types of indexed loans but with Dinar loans in Q1 there has been both a nominal and a growth in real terms in interest rates.

Central Bank: Balance and Monetary Policy

NBS relaxes monetary policy even further in response to lower inflation and stronger Dinar

The y.o.y. inflation over the first five months of this year is low and stable. The lower than expected level of inflation and increased pressure to strengthen the Dinar caused the NBS to lower the key policy rate in March and again in April by 0.25 percentage points each time. In the first quarter, y.o.y. inflation stood lower than 2% and in May, seasonal effects and the rise in fuel prices caused it to rise to 2.2%. The low y.o.y. inflation in the first quarter is partly the consequence of comparison with last year's high base. Since the effects of last year's high base is slowly fading, we expect inflation to draw closer to the target level by the end of the year. It is not likely that the NBS will lower the key policy rate further because that would mean that it would lose the room to maneuver that it needs for interventions in case of unplanned shocks in the international environment. In this period, business banks withdrew part of their funds from REPO placement

Graph T7-1. Deviation from planned inflation 3 and 6 months ahead of the real situation 2013-2018



Source: NBS

which did not have any significant effect on Dinar liquidity because of a significant drop in net domestic assets in Q1 (Table T7-2). In the previous period, the NBS successfully implemented its strategy to lower the share of bad loans in the domestic banking sector. Despite that, it seems that there have been no significant positive effects in speeding up credit activity in the enterprises sector. A significant rise in loans to the enterprises would signal a revival of current economic activity and a rise in trust of banks and companies in Serbia's economic perspective.

Following the stabilization of inflation at the target level at the end of 2017, inflationary pressure weakened in Q1 and inflation dropped below the lower level of the target framework. The low level of achieved inflation and pressure to strengthen the Dinar caused the NBS to change its key policy rate downwards by 0.25 percentage points in March and again in April. This should partly decrease appreciation pressure on the Dinar exchange rate and increase Dinar liquidity in the system which recorded a significant drop in Q1.

Table T7-2. NBS interventions and foreign currency reserves 2016-2018

	2016				2017				2018
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
Repo stock (in millions of euros)	246.50	239.12	325.82	279.23	480.53	572.42	634.74	384.53	348.00
NBS interest rate	4.25	4.25	4.00	4.00	4.00	4.00	3.75	3.50	3.25
NBS interest rate	2.60	1.78	3.17	1.94	-5.11	1.94	4.17	2.68	0.40
NBS interest rate	-0.34	3.35	4.57	3.37	4.48	15.71	7.77	3.50	4.75
NBS interventions on FX market (in millions of euros)	-555.00	-820.00	-345.00	-160.00	-345.00	160.00	765.00	680.00	400.00
INCREASE	in millions of euros, cumulative from the beginning of the year								
NBS own reserves ²⁾	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22	364.16	-4.87	-154.90
NDA	45.62	395.60	-99.67	94.92	-171.42	-248.75	-704.00	137.47	-264.65
Government, dinar deposits ³⁾	41.52	275.36	35.00	195.73	-41.59	-358.48	-755.64	-247.10	-376.19
Repo transactions ⁴⁾	5.09	19.53	-279.20	-25.66	-207.38	-285.41	-346.27	-95.49	43.47
Other items, net ⁵⁾	-0.99	100.71	144.53	-75.15	77.56	395.14	397.91	480.06	68.07
H	-423.81	-390.27	-446.13	-68.11	-441.15	-513.96	-339.84	132.60	-419.56
o/w: currency in circulation	-68.06	-20.21	40.74	157.26	-104.02	-114.39	-103.93	39.59	-102.01
o/w: excess liquidity	-284.91	-319.01	-465.39	-241.74	-351.17	-422.08	-269.15	22.35	-335.18
	in millions of euros, cumulative from the beginning of the year								
NBS, net	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87	452.21	-280.73	64.63
Gross foreign reserves	-880.04	-1080.32	-807.49	-153.76	-469.25	-632.21	431.51	-302.83	36.47
Foreign liabilities	14.21	18.69	22.97	16.14	4.66	13.34	20.70	22.10	28.16
IMF	8.10	15.09	16.00	14.12	-0.04	5.81	7.68	8.67	9.42
Other liabilities	6.10	3.59	6.98	2.02	4.69	7.53	13.02	13.43	18.75
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	-865.84	-1061.63	-784.51	-137.62	-464.59	-618.87	452.21	-280.73	64.63
1.1 Commercial banks deposits	331.11	302.75	339.40	90.80	144.67	156.34	123.17	159.61	47.26
1.2 Government deposits	65.30	-26.98	98.65	-116.22	50.18	197.32	-211.22	116.25	-271.67
1.3 NBS own reserves	-469.43	-785.86	-346.46	-163.03	-269.73	-265.22	364.16	-4.87	-159.78
	(1.3 = 1 - 1.1 - 1.2)								

Source: NBS.

1) Initial M2 designated 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 5.

3) State includes all levels of government: republic and local.

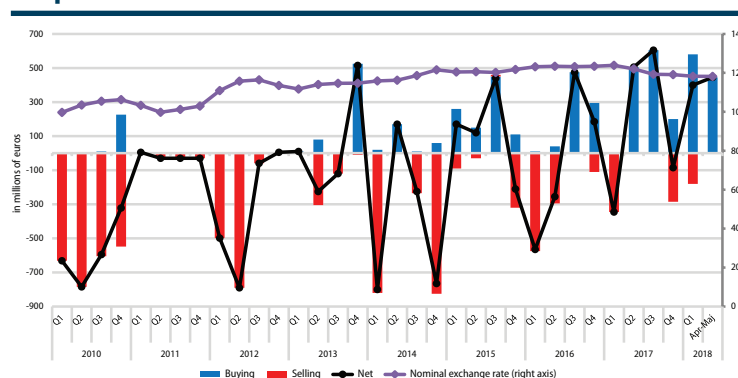
4) This category includes NBS Treasury Bonds and repo operations.

5) Other domestic net assets include: domestic loans (net bank debts, including bonds and repo transactions; net enterprises debts) along with other assets (capital and reserves; and items in the balance: other assets) and corrected by changes to the exchange rate.

Appreciation pressures dominant since start of year ...

... causing NBS to intervene by buying 885 million Euro in first five months

Depreciation and appreciation pressure traded places on the MDT since the start of the year, affecting the level of NBS interventions. In the first three months, the NBS was a net buyer of 400 million Euro on the MDT and in interventions in April and May, it raised its net purchases to the level of 885 million Euro (Graph T7-3). Despite that, the NBS net own reserves dropped by 155 million Euro in Q1 which had a negative effect on the primary money level. Besides the drop

Graph T7-3. NBS interventions on FX market 2010-2018


Source: NBS

in NBS net own reserves, a seasonal reduction in NDA of 265 million Euro was recorded (in the previous quarter, the NDA recorded a growth of 841 million Euro). Although the withdrawal of banks from REPO placements had a positive effect on the rise in NDA, Dinar deposits decreased by 376 million Euro in the same period. That completely neutralized the effects

of the drop in REPO stock and other net domestic assets. Due to the drop in net own reserves and net domestic assets, the primary money was reduced by 420 million Euro in Q1 which is similar to the drop recorded in the first quarter of 2017. The noted reduction of primary money at the start of the year is mainly the result of seasonal effects which can be noted on the basis of data for the same quarter in previous years.

Monetary System: Structure and Money Mass Trends

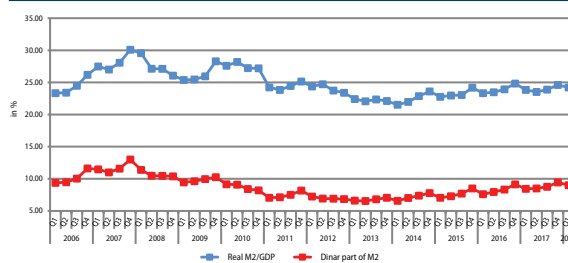
Y.o.y. growth of M2 slows slightly in Q1

...

... but real growth of loans to non-state sector shows signs of recovery

The y.o.y. nominal growth of M2¹ slowed slightly in Q1 and continued the trend of a drop in the pace of growth which has been present since the start of 2017. Compared to the level from the previous year, M2 in Q1 grew nominally by 3.3% (in Q4 2017, the nominal growth of M2 was 3.6% y.o.y., Table T7-5). Compared to the level from the end of 2017, the money mass dropped by 0.9% which is due to the drop in net foreign assets (NFA) whose negative contribution stood

Graph T7-4. Money mass trends as percentage of GDP, 2005-2018



Source: QM calculation

at 2.5 percentage points and was larger than the positive contribution of the growth of NDA of 1.6 percentage points. Following the correction for inflation over the previous year, the real y.o.y. growth rate M2 stood at 2% while loans to the non-state sector increased their real growth rate to 4.6%. The real growth rate of loans to the enterprises speeded up somewhat but continues to stand at a modest 1.5% y.o.y. while the real growth of loans to the households continued from 8.9% y.o.y.

Table T7-5. Growth of money and accompanying aggregates, 2016-2018

	2016				2017				2018
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	y-o-y, in %								
M2 ¹⁾	7.9	7.8	10.2	9.9	10.3	7.4	5.6	3.6	3.3
Credit to the non-government sector ²⁾	2.2	4.7	5.9	2.6	4.1	2.0	0.7	1.8	1.9
Credit to the non-government sector ²⁾ , Households	0.6	3.1	3.9	1.5	3.5	3.5	2.9	4.7	5.1
Enterprises	3.8	5.8	8.4	9.4	11.0	11.8	10.8	10.9	10.2
Enterprises	-1.4	1.4	1.0	-3.3	-1.3	-2.1	-2.4	0.4	1.3
	real y-o-y, in %								
M2 ¹⁾	7.2	7.3	9.4	8.0	6.4	3.8	2.3	0.6	2.0
Credit to the non-government sector ²⁾ , Households	0.2	2.3	2.8	0.9	2.1	2.7	2.4	4.0	4.6
Enterprises	2.9	4.6	6.6	7.5	8.6	9.7	9.0	9.2	8.9
Enterprises	-1.5	0.9	0.4	-3.2	-1.7	-2.0	-2.1	0.4	1.5
	in billions of dinars, end of period								
M2 ¹⁾	1,979.6	2,023.2	2,087.0	2,196.8	2,182.7	2,173.3	2,204.5	2,275.5	2,255.1
M2 ¹⁾ dinars	645.5	685.0	727.1	808.0	772.7	785.2	808.3	872.1	838.6
Fx deposits (enterprise and households)	1,334.1	1,338.2	1,359.9	1,388.7	1,410.0	1,388.1	1,396.2	1,403.4	1,416.5
	quarterly growth M2⁴⁾ and shares								
M2 ¹⁾	-1.0	2.2	3.2	5.3	-0.6	-0.4	1.4	3.2	-0.9
NFA, dinar increase	-2.9	2.0	2.1	3.9	-1.6	0.6	1.1	2.9	-1.5
NDA	1.9	0.2	1.1	1.4	1.0	-1.0	0.4	0.3	0.6

Source: NBS

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

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

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

4) Trends are corrected by changes to the exchange rate and inflation. Corrections are introduced under the assumption that 70% of loans to the non-state sector (both households and the enterprises) are indexed in Euro.

1 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. That means that the aggregate M2 which we observe is equal to the monetary aggregate M3 in NBS reports

Narrowest monetary aggregate records biggest contribution to M2 growth again ...

The structure of the y.o.y. nominal growth of the M2 in Q1 was relatively unchanged compared to the previous quarter when we observe narrower monetary aggregates. The greatest contribution comes once again from the growth of the narrowest aggregate M1 which stood at 2.48 percentage points. The next most important contributions are savings and timed deposits which contributed to the overall growth of M2 with 0.54 percentage points while the smallest contribution came from the growth of foreign currency deposits. Of the overall nominal growth of M2 which stood at 3.32%, the increase in foreign currency deposits accounted for just 0.3 percentage points which is one of the lowest values recorded over the past few years.

... while foreign currency deposits record lowest deposit in past few years.

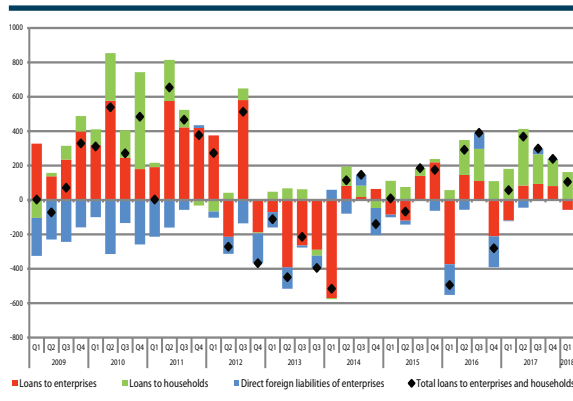
Banking Sector: Placements and Sources of Financing

A rise in overall net placements by business banks was recorded in Q1 ...

Despite the significant write-off of bad loans, business banks recorded a rise in net placements in Q1 in terms of increased net loans to the state and non-state sector. In the first three months, those net placements were worth 219 million Euro with net placements to the enterprises and households increasing by 105 million Euro (Table T7-7). That growth included a rise of net placements to the households of 154 million Euro which is almost identical to the growth recorded in the previous quarter (in Q4 2017 the rise in net loans to the households stood at 151 million Euro). Unlike the previous quarter when new debts to the enterprises were higher because of the

...mainly thanks to a rise in net debts of the state and households

Graph T7-6. Yield of new loans to the enterprises and households, 2009-2018



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

write-off of bad loans, the net placements to the enterprises in Q1 dropped by 58 million Euro. If we know that a significant amount of bad loans was written off in Q1, the real net placements to the enterprises are very probably positive. Along with the growth in net placements to the enterprises and the households, the state also increased its debts to business banks by 154 million Euro in Q1. A part of the rise in net placements by commercial banks was neutralized with the withdrawal of banks from REPO bonds. In Q1, commercial banks reduced their REPO placements by 39 million Euro which continued in April when the REPO stock was reduced by another 62 million Euro.

The real increase in net placements to the enterprises is hidden ...

Despite indications that a further recovery of credit activity can be expected we still see no changes in trends among cross-border net loans. In Q1, the net state of cross-border loans remained unchanged which means that domestic companies borrowed money from foreign creditors equal to payments on earlier loans. Because of the unchanged net state of cross-border loans, overall credit activity is equal to the placements by domestic banks to the enterprises and households (Graph T7-6).

...because of the write-off of a significant portion of bad loans in Q1

A seasonal drop in sources for new placements by business banks was recorded in Q1 which is typical for the start of the year. Compared to the previous three quarters when banks increased their credit potential, it was reduced in Q1 by 286 million Euro (in Q4 the sources of new placements increased by around a billion Euro, Table T7-7). The drop in credit potential caused a drop in the level of domestic deposits and capital and reserves while, on the positive side it had an effect on the bank debts abroad. Domestic deposits in Q1 dropped by 65 million Euro which is the consequence of a greater reduction of deposits by the enterprises compared to the growth recorded in the deposits by the households. From the start of the year, the deposits by the households with business banks increased by 166 million Euro which continues the trend from the previous year but at a slower pace (in Q4 deposits by the households increased by 259 million Euro). This growth was completely neutralized due to the withdrawal of deposits by the enterprises totaling 231 million Euro which caused a drop in overall domestic deposits with business banks. Following several quarters of growth, business banks reduced the funds in capital

Seasonal drop in sources for new placements was recorded in Q1...

... because of the withdrawal of deposits by the enterprises and drop in capital and reserves of business banks

and reserve accounts by 390 million Euro in Q1 which also caused a drop in the sources for new placements along with the reduced domestic deposits. The positive contribution to increasing credit placements by commercial banks was recorded only in terms of bank debts abroad. On that basis, sources for new placements increased in Q1 by 169 million Euro which suggests that commercial banks expect a further recovery of domestic credit activity (in 2017 banks increased their net debts abroad by 547 million Euro.)

Table T7-7. Bank operations – sources and structure of placements, corrected¹⁾ trends, 201-2018

	2016				2017				2018
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	in millions of euros, cumulative from the beginning of the year								
Funding(-, increase in liabilities)	377	168	-363	-1,130	354	-252	-1,138	-2,185	286
Domestic deposits	223	-235	-708	-1,425	107	-104	-426	-1,032	65
Households deposits									
dinar deposits	-16	-235	-362	-625	-69	-164	-258	-517	-166
fx deposits	3	-75	-154	-290	27	-7	25	-121	15
Enterprise deposits	-19	-161	-208	-334	-96	-157	-283	-395	-181
dinar deposits	239	0	-346	-800	175	60	-167	-515	231
fx deposits	385	222	5	-352	207	142	-30	-307	170
Foreign liabilities	-146	-222	-351	-448	-31	-82	-137	-208	61
Capital and reserves	181	397	427	335	218	49	-317	-546	-169
Gross foreign reserves(-, decline in assets)	-27	6	-82	-40	29	-198	-395	-607	390
Credits and Investment¹⁾	214	337	284	244	-35	-153	-286	-261	215
Credit to the non-government sector, total	128	426	1,129	997	255	856	1,162	1,237	219
Enterprises	-316	32	329	186	61	474	740	972	105
Households	-374	-228	-118	-372	-119	-36	58	138	-58
Placements with NBS (Repo transactions and treasury bills)	57	260	447	559	180	510	682	833	162
Government, net ²⁾	-7	-14	276	27	202	289	341	90	-39
Government, net ²⁾	452	408	525	784	-8	93	82	176	154
MEMORANDUM ITEMS									
Required reserves and deposits	-598	-864	-859	-565	-161	-94	-83	-30	120
Other net claims on NBS ³⁾	-107	160	6	201	-324	-401	-220	62	-338
o/w: Excess reserves	-102	160	3	187	-326	-415	-223	42	-339
Other items ⁴⁾	0	-204	-175	253	-79	18	545	1,176	-514
Effective required reserves (in %) ⁵⁾	17	16	15	16	16	15	15	15	15

Source: NBS

1) Calculating yield is done under the assumption that 70% of overall placements are indexed in Euro. Yield for original Dinar deposit values are calculated by the average exchange rate for the period. For foreign currency deposits – as the difference in the state calculated by the exchange rate at the start and end of the period. Capital and reserves are calculated by the Euro exchange rate at the start and end of the period and do not include the effects of exchange rates from the calculation of the remained of the NDA.

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

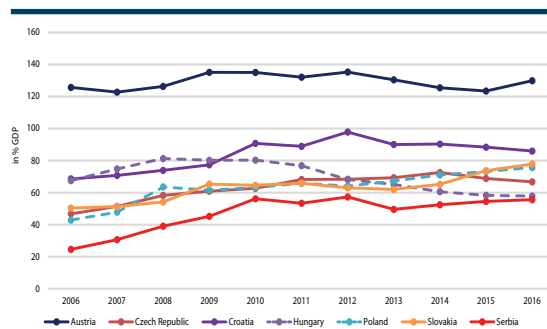
3) Net loans to the state: loans approved to the state are reduced by state deposits in business banks; a negative prefix designates a higher rise in deposits than of loans. State includes all levels of government: republic and local.

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

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

6) Effective mandatory reserves are the share of mandatory reserves and deposits in the sum total of overall deposits (households and enterprises) and bank debts abroad. The basis for calculation of the mandatory reserve does not include subordinate debts because that is not available

Graph T7-8. Share of domestic loans in GDP, 2006-2016



Source: World Bank

Data on the share of loans placed by domestic financial institutions in the GDP show that the Serbian economy is less indebted than other Central European economies. This data does not include cross-border loans but since companies in Serbia have paid off debts over the past few years, the lag behind the observed economies is probably even greater. The relatively low indebtedness of the Serbian economy indicates that a potential exists for loans to grow in future. The progress achieved in the field of reducing the share of bad loans and the trend of low interest rates on the international capital market have opened the door to incre-

ase credit activity on the domestic market. For now, the recovery of demand for loans has been noted only in the household sector while the enterprises are still failing to achieve the expected growth.

Table T7-9. Share of non-performing loans according to debtor type, 2008-2018

	2009	2010	2011	2012	2013	2014	2015	2016				2017				2018	
	Dec	Dec	Dec	Dec	Dec	Dec	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	May
	balance at the end of period																
Corporate	12.14	14.02	17.07	19.06	27.76	25.5	24.40	26.89	26.26	23.56	19.48	19.92	19.24	16.86	13.83	12.51	12.51
Entrepreneurs	11.21	15.8	17.07	15.92	20.82	43.29	29.92	33.03	30.12	28.44	27.42	26.49	25.02	23.90	16.96	12.60	12.16
Individuals	6.69	6.71	7.24	8.32	8.59	9.97	10.53	10.95	10.63	10.36	9.66	9.21	8.35	7.56	6.43	5.84	5.71
Amount of debt by NPL (in billions of euros)	1.58	1.94	2.63	3.19	4.09	3.70	3.52	3.76	3.75	3.45	2.83	2.83	2.77	2.63	2.16	9.93	9.80

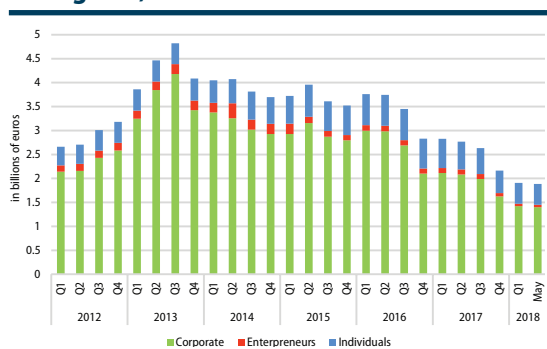
Source: QM calculation

Commercial banks continued writing off and selling non-performing loans ...

... with a strong drop in their share recorded in Q1

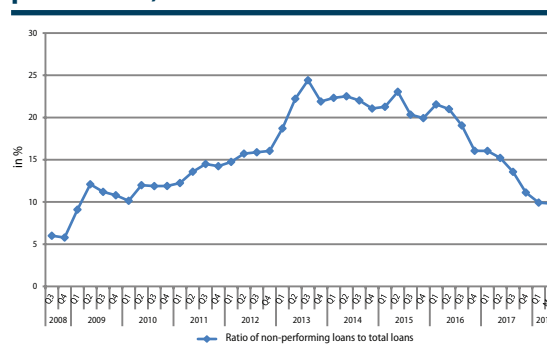
The positive trend of a reduction of non-performing loans (NPLs) both in absolute and relative amounts continued in Q1 with their value standing at single digits for the first time since 2008. The overall share of loans whose installments debtors have not repaid for more than 90 days stood at 9.93% at the end of Q1 according to QM² calculations (Graph T7-11). Improvements were recorded in all three segments in the structure of NPLs with the biggest relative drop among entrepreneurs while in absolute terms the most significant drop in NPLs was in the company segment. NPLs placed with companies dropped to 12.5% in Q1 which is a drop of 1.3 percentage points compared to the previous quarter (in Q4 2017, NPLs to companies dropped by 3 percentage points Table T7-9). The share of NPLs to companies dropped by 6.36 percentage points compared to the end of 2017 but those loans are just 3% of the total NPLs and their share in the overall drop is marginal. The households segment saw its share of NPLs drop by 0.6 percentage points to 5.84% which is the closest to the level from the period prior to the crisis. A part of the reduction in NPLs is owed to the moderate recovery of credit activity which is evident in the household segment while placements to the enterprises are still not showing significant growth. Most of the reduction of the share of NPLs was achieved through a reduction of the stock of NPLs in all debtor segments. Viewed in nominal amount, NPLs recorded a drop of some 260 million Euro in Q1 including 200 million Euro in written off and sold loans to companies.

Graph T7-10. Remainder of debt in loans falling late, 2012-2018



Source: QM calculation

Graph T7-11. Share of NPLs in overall placements, 2008-2018



Source: QM calculation

Interest Rates: State and Trends

Real interest rates on Dinar loans rose in Q1...

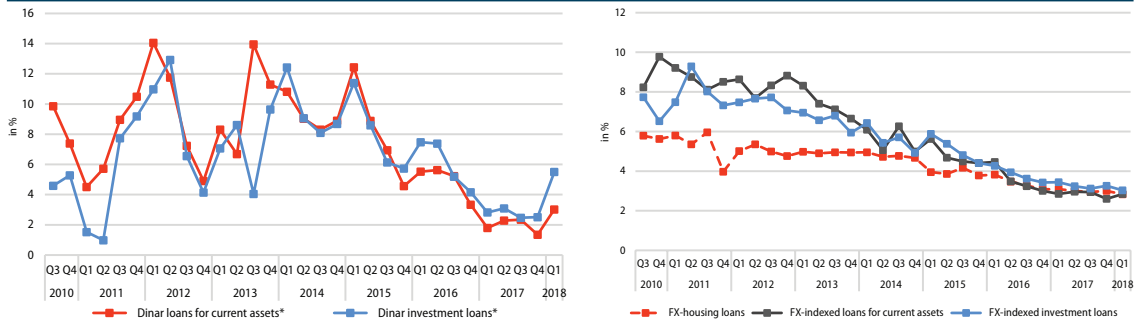
... with different trends present depending on type of indexed loan

Trends with interest rates from the start of the year suggest that we should expect moderate growth following the historic minimum in the previous year. The indexed loan market still shows a slight drop in interest rates on housing loans and investment loans. In Q1 the weighted interest rate on housing loans was reduced to 2.83% which is 0.17 percentage points lower than at the end of 2017 (Graph T7-12b). The weighted interest rate on investment loans at the end of Q1 stood at 3.03% which is a drop of 0.23 percentage points compared to the previous quarter. On the other hand, the weighted interest rate on indexed loans for current assets, which accounts for the ma-

2 For details of the manner of calculation of share of bad loans see QM 6 – Spotlight On 1: NPLs in Serbia– what is the true measure?

majority in the structure of bank placements to companies, increased compared to the previous quarter by 0.24 percentage points bringing it to 2.84% at the end of Q1. The Dinar loans segment recorded an increase in nominal interest rates which was additionally reinforced with a drop in inflation stronger than predicted. The real weighted interest rate on Dinar loans for current assets was raised to 3.02% in Q1 which is a growth of 1.68 percentage points (Graph T7-12a). The rise is even more pronounced in real weighted interest rates on Dinar loans for investments which rose by 3 percentage points at the end of Q1 compared to the previous quarter to stand at 5.5%.

Graph T7-12. Interest rates on Dinar and Indexed loans, 2010–2018



Source: QM calculation
* real interest rates