7. Monetary Trends and Policy

The National Bank of Serbia (NBS) tightened its monetary policy significantly in the second half of the year even though inflation was speeding up at the end of the previous year. Inflation reached the level of 15.1 percent in November with a tendency to stop its rise in the coming period but that will depend on fuel prices in future. Appreciation pressure on the FX market have been present since the previous quarter and they carried over through Q3 and into October and November causing the NBS to end the year as a net buyer of hard currency. The purchase of hard currency in Q3 had a positive effect on the level of net own reserves which saw a significant rise of 1.48 billion Euro. The NBS interventions in Q3 had a positive effect on the increase of primary money whose further growth was partly neutralized due to the rise in bank placements into REPO and an increase in state deposits. The M2 money mass stayed at the level of the y.o.y. nominal growth from the previous quarter with a slight increase while the real growth rate of the M2 and placements to enterprises and households slid into the negative zone compared to the previous period because of a slight rise in inflation. Net loans to enterprises and households dropped compared to Q2 with cross-border loans to enterprises increasing leading the total amount of loans from domestic and foreign sources to rise to 616 million Euro. At the same time, a significant rise in the credit potential of business banks of 1.9 billion Euro was recorded, including more than 67 percent as the result of growth in deposits by enterprises and households while the rest is the result of added foreign loans taken by banks abroad and an increase in reserve and capital accounts. The share of NPLs rose slightly at the end of September despite the increased credit activity and dropped slightly but still remained above the level in Q2 according to data from November. Interest rates on indexed loans recorded a rise of about 1 percentage point on average due to the rise of all relevant interest rates on global markets while the relatively small growth of nominal interest rates on Dinar loans, along with faster rising inflation, led to the value of real interest rates on those loans sliding more into negative value.

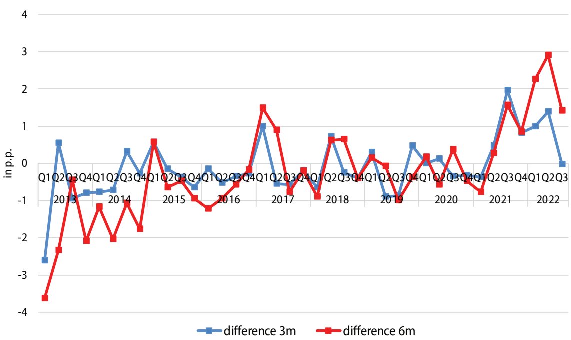
Central Bank: Balance and Monetary Policy

NBS key policy rate raised to 3.5 percent in Q3…

… and then to 5 percent at the next three meetings by years' end

The rise in y.o.y. inflation continued in Q3 and inflation reached the level of 15.1 percent by the end of November which is almost five times higher than the target framework for this year of 3±1.5 percentage points. In response to the fast rising inflation, the National Bank of Serbia (NBS) raised its key policy rate from 2.5 to 3.5 percent in Q3 in three interventions and at the end of 2022, with three more corrections, the key policy rate was raised to the current 5 percent. The rise of inflation was dominated by the rise in fuel and food prices in Q3 which caused base inflation, which does not include changes in the prices of fuels, food, alcohol and cigarettes, to record a somewhat smaller growth of 8.6 percent in September rising to 9 percent y.o.y. at the end of November. A look at NBS projections of inflation trends this year clearly shows that the effect of a possible spill over of inflation from abroad to inflation in Serbia was underestimated in the first half of the year as it was on the rise in prices of agricultural products during the drought and fuel costs due to negative global trends (Graph T7-1). An additional problem in keeping inflation in check was the stronger appreciation pressure in the second half of the year. The higher inflow of hard currency onto the FX market and NBS policies aimed at keeping the exchange rate almost at a fixed level, the purchase of hard currency by

Graph T7-1. Deviation from projected inflation for 3 and 6 months in advance 2013-2022



Source: NBS

the NBS practically increased Dinar liquidity and caused greater pressure on the side of money offer. Along with the higher key policy rate, the NBS introduced a set of regulations in October and December directed towards farmers and private individuals to ease repayment through debt reprogramming, that is an extension of the maximum repayment period compared to the conditions which were in place when the loan was approved.

Table T7-2. NBS interventions and hard currency reserves 2020-2022

	2020				2021				2022		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep
Repo stock (in milions of euros)	88.43	345.75	256.71	272.37	258.67	292.79	367.34	386.12	163.86	71.79	407.18
NBS interest rate	1.75	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00	2.50	3.50
NBS interest rate	-2.62	-0.36	2.88	0.20	-4.87	-2.57	-8.21	-3.72	-8.21	-15.28	-13.43
NBS interest rate	1.75	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00	2.50	3.50
NBS interventions on FX market (in milions of euros)	-185.00	1,030.00	1,635.00	1,450.00	50.00	-320.00	-1,100.00	-645.00	2,115.00	1,790.00	425.00
INCREASE	**in millions of euros, cumulative from the beginning of the year**										
NBS own resreves[1)]	-201.91	-322.89	-1127.89	-770.14	-86.00	-44.56	1317.57	1728.18	-1347.40	-907.08	572.43
NDA	592.76	1391.49	1976.15	2017.65	-484.48	-630.84	-1203.02	-1656.03	912.15	260.68	-517.48
Government, dinar deposits[2)]	100.38	487.16	665.59	420.51	-365.99	-526.99	-390.88	-176.63	-58.14	-605.39	-1091.07
Repo transactions[3)]	510.15	254.94	339.57	339.18	1.00	1.07	-109.30	-122.00	276.49	315.13	-27.66
Other items , net[4)]	-17.78	649.39	971.02	1257.97	-119.49	-104.92	-702.84	-1357.41	693.80	550.94	601.25
H	390.85	1068.59	848.29	1247.52	-570.48	-675.40	114.55	72.14	-435.25	-646.41	54.95
o/w: currency in circulation	42.56	333.93	326.93	485.89	-87.79	-18.30	115.34	243.35	-163.54	-227.18	-108.23
o/w: excess liquidity	296.70	610.39	322.16	515.50	-535.30	-756.68	-158.15	-399.57	-336.15	-473.83	13.76
	in millions of euros, cumulative from the beginning of the year										
NBS, net	-268.95	580.95	-336.74	125.20	787.48	604.17	3292.34	2933.18	-2116.45	-1644.96	83.94
Gross foreign reserves	-273.51	574.96	-349.60	110.88	786.49	605.09	3311.12	2967.24	-2149.45	-1678.88	51.62
Foreign liabilities	4.56	5.99	12.86	14.31	0.98	-0.92	-18.79	-34.07	33.01	33.92	32.32
IMF	-0.24	1.53	2.95	4.50	-2.19	-5.33	-21.99	-37.98	33.17	33.17	33.17
Other liabilities	4.81	4.46	9.91	9.81	3.17	4.40	3.21	3.91	-0.17	0.74	-0.85
NBS, NET RESERVES-STRUCTURE											
1. NBS, net	-268.95	580.95	-336.74	125.20	787.48	604.17	3292.34	2933.18	-2116.45	-1644.96	83.94
1.1 Commercial banks deposits	-175.31	-208.87	-317.35	-420.26	-19.04	-127.35	-195.78	-391.28	17.14	-129.68	-209.78
1.2 Government deposits	242.35	-694.97	-473.80	-475.07	-854.43	-521.37	-1778.99	-813.72	751.90	867.55	698.27
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	-201.91	-322.89	-1127.89	-770.14	-86.00	-44.56	1317.57	1728.18	-1347.40	-907.08	572.43

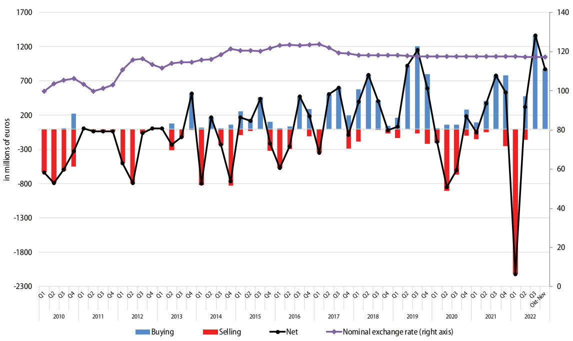
Source: NBS.
1) Definition of net own reserves NBS is given in section 8 Monetary Trends and Policy, frame 4, *QM* No. 5.
2) State includes all levels of government: republic and local.
3) This category includes NBS Treasury Bonds and repo operations.
4) Other domestic net assets include: domestic loans (net bank debts not including treasury bonds and repo transactions; net company debts) along with other assets (capital and reserves; and items on the balance: other assets) corrected by changes to the exchange rate.

Purchase of hard currency on FX market increases due to appreciation pressure in Q3…

… generating Dinar liquidity in system and raising level of primary money

Following the strong depreciation pressure at the start of the year, appreciation trends in the previous quarter continued growing stronger in Q3 causing the NBS to continue interventions (on the FX market) predominantly purchasing hard currency. In order to keep the Dinar exchange rate at a given level, the NBS bought hard currency on the FX market in Q3 totaling 1.365 billion Euro with an additional 875 million Euro bought on the FX market in October and November (Graph T7-3). Taking into account the net purchases of hard currency in the previous quarter, the NBS hard currency purchases by the end of November completely neutralized the negative effects of the sale of 2.115 billion Euro at the start of the year. Interventions to buy hard currency in Q3 had a positive effect on the level of NBS net own reserves which increased by the end of September by 1.48 billion Euro (in Q2 the NBS net own reserves were increased by 440 million Euro, Table T7-2). The increase in net own reserves had a positive effect on generating Dinar liquidity in the system which was partly neutralized with the parallel drop in net domestic assets. Within the net domestic assets, a growth was recorded in placements by business banks in REPO of

Graph T7-3. NBS interventions on FX market 2010-2022



Source: NBS

342 million Euro despite the faster inflation, neutralizing part of the Dinar liquidity in the system with an even greater effect on sterilization based on an increase of funds in state deposit accounts of 486 million Euro. The net effect of the increased growth of NBS net own reserves compared to the drop in net domestic assets resulted in an increase of the primary money in Q3 by some 701 million Euro with the increase continuing in October by another 444 million Euro due to the added growth of NBS own reserves.

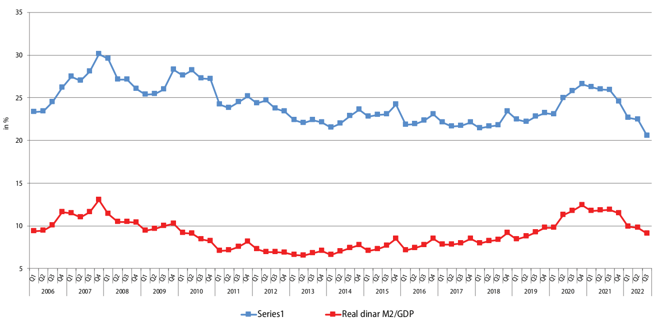
Monetary System: Money Mass Structure and Trends

M2 nominal growth level carried over from previous quarter …

… with negative real growth because of high inflation

The y.o.y. growth of the M2[1] following a slowing down in the previous quarter recorded a slight increase of 6.8 percent in Q3 (in Q2 the nominal growth of the M2 stood at 6.0 percent y.o.y., Table T7-5). Loans to the non-government sector, which are one of the greatest generators of growth for the widest monetary aggregate, saw a nominal increase at y.o.y. level of 11.24 percent. The achieved rate was lower than in the previous quarter by 1.5 percentage points which was not expected bearing in mind that in the same period a year earlier a smaller growth of credit activity was recorded which means that the base for comparison grew less then in the previous quarter. The same slower growth was recorded with loans to enterprises in the non-government sector as well as with loans to households. The continued rise of inflation in the second half of the year caused negative values in almost all real values of the mentioned indicators. The real growth rate of the M2 in Q3 slowed down more by 1 percentage point compared to the previous quarter and now stands at 6.1 percent y.o.y. A similar situation was recorded with non-government sector credit activity which is now negative in real

Graph T7-4. Money mass trends as percentage of GDP, 2005-2022



Source: *QM* calculation

Table T7-5. Growth of money and contributing aggregates, 2020–2022

	2020				2021				2022		
	Mar	Jun	Sep	Dec	Mar	Jun	Spe	Dec	Mar	Jun	Sep
	y-o-y, in %										
M2 1)	10.1	19.0	18.8	18.1	18.7	12.4	12.7	13.3	8.3	6.0	6.8
Credit to the non-government sector 2)	11.1	13.4	15.1	11.9	9.8	8.0	6.4	9.7	11.6	12.7	11.2
Credit to the non-government sector 2), adjusted 3)	11.4	13.6	15.0	11.9	9.8	8.0	6.4	9.7	11.5	12.8	11.4
Households	9.3	12.8	14.3	11.8	11.9	10.6	8.9	10.6	10.4	9.7	8.3
Enterprises	13.1	14.2	15.7	11.9	8.1	6.0	4.3	8.9	12.3	15.5	14.1
M2 1)	8.7	17.1	16.6	16.6	16.7	8.9	6.7	5.1	-0.7	-5.1	-6.1
Credit to the non-government sector 2), adjusted 3)	9.4	11.1	12.2	9.7	7.9	6.2	4.6	7.0	8.3	0.9	-2.2
Households	7.6	10.5	11.6	9.7	9.6	8.4	6.7	7.7	7.4	-1.9	-4.9
Enterprises	10.8	11.7	12.8	9.7	6.5	4.5	2.9	6.4	9.0	3.3	0.2
	in bilions of dinars, end of period										
M2 1)	2,850.7	3,104.7	3206.4	3,334.7	3384.4	3489.3	3614.1	3778.0	3666.1	3699.1	3858.2
M2 1) dinars	1,210.2	1,403.7	1463.3	1,553.8	1514.5	1587.8	1661.8	1768.0	1608.4	1607.1	1707.1
Fx deposits (enterprise and housholds)	1,640.5	1,701.1	1743.1	1,780.9	1869.9	1901.5	1952.3	2010.0	2057.7	2092.0	2151.1
	quarterly growth M2 4) and shares										
M2 1)	1.0	8.9	3.3	4.0	1.5	3.1	3.6	4.5	-3.0	0.9	4.3
NFA, dinar increase	0.8	6.8	1.9	2.8	-1.2	2.2	2.1	2.9	-4.2	0.0	2.7
NDA	0.1	2.1	1.4	1.2	2.7	0.9	1.5	1.6	1.3	0.9	1.6

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

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

terms standing at -2.2 percent y.o.y. with a negative real growth of 4.9 percent y.o.y. recorded with households and a marginal increase of just 0.2 percent with enterprises compared to the same operiod a year earlier. At quarterly level, the level of the M2 in Q3 rose by 4.3 percent compared to the previous quarter which is the dominant effect of the growth of net domestic assets explaining the 2.7 percentage points of the overall growth of the M2. The remaining 1.6 percentage points of growth of the M2 in Q3 is due to the growth of the net foreign assets in the observed period.

Nominal growth of M2 generated by increases of both hard currency and Dinar deposits

The slight rise in the recorded y.o.y. nominal growth rate of the M2 in Q3 was due to the growth of savings compared to the previous quarters. Separating the overall growth to its individual contributing elements of nominal M2 growth confirms that savings and timed deposits have significantly increased their contribution to the overall growth of the M2 to 1.58 percentage points, that is they explain almost a quarter of the achieved growth which is a multiple increase compared to previous quarters. At the same time, the hard currency deposits' contribution of 5.5 percentage points again had the most significant individual effect on overall growth but this is a drop compared to previous quarters. Finally, the smallest monetary aggregate M1 recorded a negative contribution of 0.32 percentage points for the first time since 2011 in the overall nominal y.o.y. growth of the M2 which is an indicator of the complex trends in the domestic monetary system.

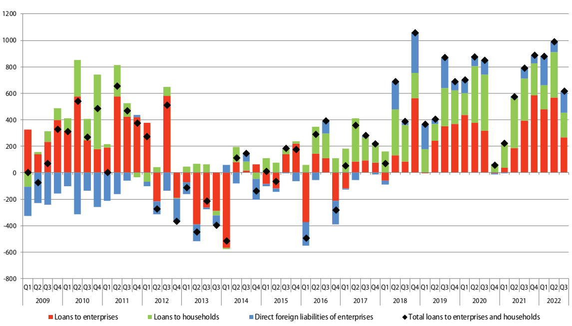
Banking Sector: Placements And Sources of Financing

The growth of net placements by business banks was maintaine…

… but the contribution of loans to households and enterprises dropped compared to previous quarters

The growth of net placements recorded in the previous quarter continued in Q3 with the overall increase of net placements standing at more than a billion Euro compared to the 350 million in Q2 (Table T7-7). The single greatest contribution of 453 Euro to the overall growth of net placements is due to the growth of net placements to households and enterprises. Of that amount, 185 million Euro are an increase in the net debts of households while 268 million Euro is the growth of net placements to enterprises (in Q2, households took net loans of 343 million Euro while enterprises took loans of 577 million Euro, Table T7-7). Despite faster rising inflation, a positive contribution to the growth of loan placements came from the increased placement by business banks in REPO bonds by 336 million Euro in Q3 while the net loans to the state increased by 230 million Euro. A look at the sector structure of the new loans to enterprises in Q3 shows that the greatest growth was recorded with loans to enterprises in the processing industry, retail and agriculture while enterprises in the construction industry and electricity supply recorded a drop in new loans. Liquidity and current asset loans led the field again accounting for almost 60 percent of the new loans. In the households sector, about 60 percent of the new loans were cash loans while new housing loans continued to stand at around 25 percent of the total.

Graph T7-6. Growth of new loans to households and enterprises, 2005-2022



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

Growth of cross-border loans had positive effect on higher credit activity in Q3

In Q3 standards for loans to enterprises and households made stricter…

The growth of credit activity in the previous quarter, despite the global rise of inflation and deteriorating geo-political trends, did not not continue in Q3 when the overall growth of new placements to enterprises and households slowed down to 616 million Euro (in Q2 the overall net placements to enterprises and households stood at more than a billion Euro, Graph T7-7). In Q3 the overall cross-border loans taken by enterprises once again recorded a relatively high value of 163 million Euro which shows that, despite the higher interest rates, domestic enterprises and still trying to use that channel to access sources of financing which raises the overall net growth of loans to enterprises in Q3 by 431 million Euro. The spilling over of the negative effects of higher interest rates is mainly reflected in the level of credit activity for households causing the overall quarterly increase of net credit placements from domestic and foreign sources to be one of

… with indications of trend continuing

the lowest even compared to the time of the COVID-19 pandemic. Bearing in mind the fact that high inflation will have an even greater effect on rising interest rates we can expect credit activity to slow down further in both segments. Data from a poll on bank credit activities in Q3 suggests that loan standards for enterprises and households have been made stricter in line with earlier expectations with similar predictions for the next quarter. The stiffening of loan standards for enterprises was predominantly for Dinar loans and was focused mainly on big enterprises. The reasons given by banks for the stricter loan standards were higher costs of financing sources and lower expectations in terms of overall economic activity. At the same time, the prices conditions under which the loans were approved for enterprises in Q3 were made stricter in terms of shorter maximum repayment terms, requirements for collateral and the maximum loan that can be drawn. For the households sector, almost all elements of loans standards were stricter compared to the previous quarter with the greatest effect record with Dinar cash and re-financing loans as well as housing loans. Banks feel that the slump on the real estate market with lower competition between banks and more NPLs led to the household loans standards being made stricter in Q3.

Table T7-7. Bank operations – sources and structure of placements, corrected1) trends, 2020-2022

	2020				2021				2022		
	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)	0	-2,196	-3,190	-3,999	-170	-931	-1,979	-3,879	1,153	457	-1,448
Domestic deposits	-178	-2,082	-2,931	-3,836	-417	-1,154	-2,001	-3,391	871	673	-605
Households deposits	-66	-724	-1,095	-1,642	-352	-885	-1,279	-2,022	646	264	2
dinar deposits	-63	-552	-756	-1,041	-15	-218	-410	-776	716	646	459
fx deposits	-4	-173	-339	-601	-337	-667	-869	-1,246	-70	-383	-457
Enterprise deposits	-111	-1,358	-1,836	-2,194	-65	-270	-722	-1,369	225	409	-606
dinar deposits	-75	-983	-1,270	-1,578	326	89	-137	-671	548	762	223
fx deposits	-36	-375	-566	-616	-391	-358	-586	-698	-323	-353	-829
Foreign liabilities	-216	-403	-432	-290	78	95	31	-485	-22	-377	-862
Capital and reserves	393	290	173	127	169	129	-9	-3	303	162	19
Gross foreign reserves(-,decline in assets)	-60	450	504	672	860	987	891	895	-12	-328	54
Credits and Investment[1)]	269	1,332	2,276	2,451	211	985	1,705	2,711	16	368	1,386
Credit to the non-government sector, total	602	1,407	2,149	2,214	225	784	1,491	2,307	663	1,583	2,036
Enterprises	438	815	1,133	1,131	38	219	610	1,191	475	1,052	1,320
Households	164	592	1,016	1,083	187	565	881	1,116	188	531	716
Placements with NBS (Repo transactions and treasury bills)	-514	-257	-346	-330	-14	20	95	114	-221	-314	22
Government, net[2)]	181	182	472	567	0	180	119	290	-426	-902	-672
MEMORANDUM ITEMS											
Required reserves and deposits	1,076	1,213	1,117	1,086	-269	-186	40	128	89	154	729
Other net claims on NBS[3)]	-730	-271	-277	-44	-195	-383	-130	223	-836	-596	-627
o/w: Excess reserves	-594	-348	-340	48	-220	-430	71	9	-443	-487	-420
Other items[4)]	-562	-567	-492	-219	-436	-470	-526	-80	-421	-35	-67
Effective required reserves (in %)[5)]	19	18	19	17	16	16	16	16	16	16	17

Source: NBS

1) Growth is calculated based on the assumption that 70 percent of overall placements are indexed against the Euro. Growth of originally Dinar deposit values are calculated based on the average exchange rate for the period. For hard currency deposits – as the difference calculated by the exchange rate at the end of periods. Capital and reserves are calculated based on the Euro exchange rate at the ends of periods and do not include the effects of changes to the exchange rate in calculating the remainder of the balance.

2) NBS bonds include state and NBS treasury bonds sold at repo rates and rates 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 reduced by state deposits in business banks; the negative prefix denotes 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 cash banks request from NBS and free reserves and dues towards the NBS.

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

6) Effective mandatory reserve is the share of mandatory reserve and deposits in the total deposits (households and companies) and bank debts abroad. The basis to calculate mandatory reserves does not include subordinate debt because that data is not available.

Credit potential shows significant growth in Q3…

… mainly because of growth of Dinar deposits by companies and households

Following a significant rise in the previous quarter, the credit potential of the banking sector picked up more speed in Q3 mainly thanks to the growth of domestic deposits. At the end of September, the sources for new placements by business banks increased by more than 1.9 billion Euro with the growth of enterprises and household deposits standing at 1.28 billion Euro which greatly explains the growth of the credit potential of the banking sector in Q3 (Table T7-7). Most of the growth of domestic deposits was enterprises deposits which were increased by more than a billion Euro in Q3 while household deposits recorded a growth of 262 million Euro in the same period. Similar to the previous quarter, the growth of credit potential in Q3 was mainly led by the increase in Dinar deposits accounting for some 57 percent of the overall increase in domestic deposits. Besides domestic deposits, the growth of credit potential in Q3 was helped by the added net loans taken by business banks abroad of 485 million Euro and the increase in capital and reserves of business banks of 143 million Euro (in Q2, the net foreign loans taken by business banks totaled 355 million Euro and the growth of capital and reserves totaled 141 million Euro, Table T7-7).

Share of NPLs remain low in Q3…

… with slight rise expected in coming period

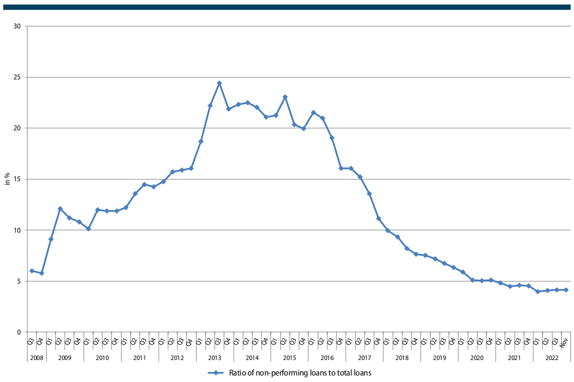
Table T7-8. Share of NPLs according to debtor type, 2008-2022

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019				2020				2021				2022			
	Dec	Dec	Dec	Dec	Dec	Dec	Dec	Q4	Q4	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Nov
balance at the end of period																										
Corporate	12.14	14.02	17.07	19.06	27.76	25.5	24.40	19.48	13.83	9.63	9.57	9.07	8.35	7.69	6.90	6.32	6.08	5.90	5.66	5.04	5.16	4.91	4,13	4.22	4.25	4.22
Entrepreneurs	11.21	15.8	17.07	15.92	20.82	43.29	29.92	27.42	16.96	9.07	8.82	8.57	8.67	7.82	7.82	6.93	6.42	6.10	5.64	5.32	5.03	6.01	6,08	6.48	6.51	6.46
Individuals	6.69	6.71	7.24	8.32	8.59	9.97	10.53	9.66	6.43	4.72	4.66	4.62	4.46	4.36	4.43	3.36	3.55	3.46	3.69	3.63	3.84	3.90	3,6	3.69	3.93	3.88
Ammount of dept by NPL (in bilions of euros)	1.58	1.94	2.63	3.19	4.09	3.70	3.52	2.83	2.16	1.52	1.51	1.46	1.43	1.38	1.32	1.18	1.22	1.19	1.20	1.13	1.19	1.21	1.08	1.14	1.19	1.17

Source: *QM* calculation

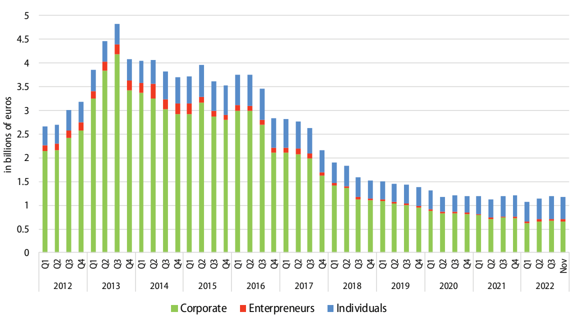
According to Credit Bureau data and QM methodology[2], the share of NPLs grew slightly just as we predicted in previous issues and continued that growth in Q3 carrying over from the previous quarter. In percentages of remaining repayment of all placed loans, the share of loans whose debtors failed to make payment for more than 90 days stood at 4.16 percent at the end of September which is still below the levels recorded in earlier years (Graph T7-9). A somewhat greater growth of NPLs can be expected next year when we see greater effects of the growth of the Euribor on variable interest rates on indexed loans. At present that growth is still moderate because of the way the six-month levels are calculated and in combination with preventative measures implemented by the NBS to make repayments easier causes NPLs to rise slightly. The share of NPLs in Q3 among enterprises rose slightly by 0.03 percentage points compared to Q2 but the data from the end of November shows that the share rolled back to the level in June of 4.22 percent. A similar growth of 0.03 percentage points was recorded among entrepreneurs in Q3 and dropped to the current 6.46 percent by the end of November. A somewhat greater increase in the share of NPLs among households was recorded at the end of Q3 of 0.14 percentage points compared to the previous quarter but unlike the previous two segments a slight drop was recorded at the end of November which means that the recorded level of 3.88 percent is higher than at the end of Q2. Despite indications that we can expect the share of NPLs to grow in the coming period, we need to say that the current level is close to the historic minimum and is lower than in the period before the global financial crisis of 2008/2009. Considering the absolute among of NPL stock, we not that the overall mass in Q3 compared to the previous quarter grew by some 50 million Euro with 80 percent of that as the consequence of the growth of the remaining debt on NPLs held by households. According to the latest data for November, the remaining loan repayments falling late by more than 90 days stands at 1.17 billion Euro which is a slight drop compared to the end of Q3 (Graph T7-10).

Graph T7-9. Share of NPLs in overall placements, 2008-2022



Source: *QM* calculation

Graph T7-10. Remainder of debt on loans falling late, 2012-2022



Source: *QM* calculation

2 For details on how the share of NPLs is calculated see *QM* 6 – Spotlight On 1: NPLs in Serbia – what is the right measure?

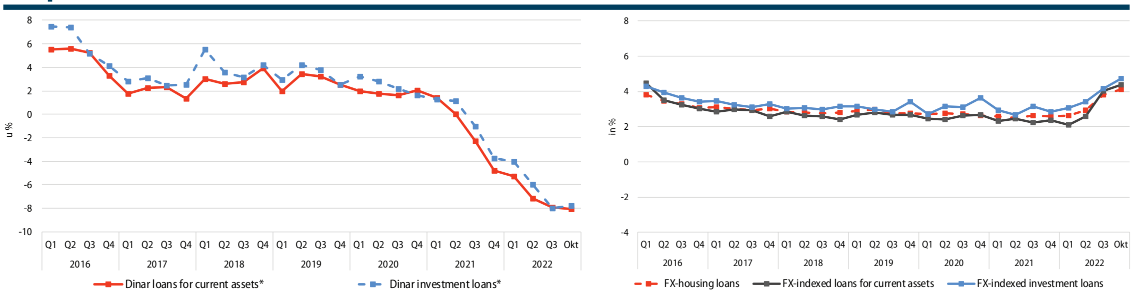
Interest rates: state and trends

Inflation continues rising faster than nominal interest rates …

… with announcements of stricter monetary policy from leading monetary institutions

Following relative restraint in the first half of the year, the European Central Bank completely changed the course of its monetary policy by the end of the year realizing that it had lost control of inflation which reached double digits. At the latest meeting of its board of governors the key policy rate was raised by another 0.5 percentage points to 2.5 which is the highest level in the past 14 years. The board said that it does not expect interest rates to stop rising next year. The latest ECB meeting said that at least another two increases of 0.5 percentage points would come in February and March because of the latest assessments that inflation in the Euro zone would remain above the target 2 percent in the next three years. Just like the European Central Bank, the Bank of Englad raised its key policy rate by 0.5 percentage points following an equivalent raise in the first half of December by the US Federal Reserve. The current FED key policy rate stands at between 4.25 and 4.5 percent and is the result of the sixth increase this year, four of which were by 0.75 percentage points. Central banks on both sides of the Atlantic warned that further action is needed to keep prices in check despite signs that inflation had peaked. It seems that the American and European economies will slowly slide towards recession in the coming months which could additionally complicate the situation with the stiffening of monetary policy which is necessary to return inflation to the expected interval in the medium term. When it comes to interest rates on loans in Serbia, the trend from the previous quarter continued into Q3. The average weighted interest rate on new business on indexed housing loans recorded growth of almost an whole percentage point and stood at 3.79 percent at the end of Q3 with data from October suggesting that the trend of growth continued at a similar tempo (Table T11-b). A more evident increase of 1.46 percentage points was recorded with the average weighted interest rate on new business for indexed current asset loans which stood at 4.04 percent at the end of September and rose to 4.37 percent in October. A somewhat smaller growth despite continued high inflation both in Serbia and at global level was recorded with the average weighted interest rates on new business for indexed current asset loans. In Q3 this rate rose by 0.75 percentage points compared to the end of Q2 with data from the end of October showing fater growth rising to the level of 4.74 percent. The further drop into the negative zone of real interest rates on Dinar loans continued to the end of September because the speeding up of inflation was higher than the growth of nominal interest rates. The real average weighted interest rate on new business for Dinar current asset loans dropped by 0.81 percentage points in Q3 reaching the negative value of -7.95 percent. A significantly greater drop of the real weighted interest rate on new business for Dinar investment loans was lowered in Q3 by 2.02 percentage points to -8.0 percent and in October it recorded a slight rise for the first time to -7,75 percent.

Graph T7-11. Interest rates on Dinar and indexed loans, 2016–2022



Source: *QM* calculation
* real interest rates