

5. Prices and the Exchange Rate

In the first quarter of 2018, the prices increased cumulatively by 0.8%, mainly due to a seasonal increase in fresh fruits and vegetables, but year-on-year inflation had a significant slowdown and fell to 1.4% in March – which is below the lower limit of NBS target tolerance band ($3 \pm 1,5\%$). An abrupt slowdown in y-o-y inflation at the beginning of 2018 was expected, as extraordinary large increases in the prices of food and petroleum products in the same period of the last year were gradually dropped out from its calculation. The high base effect also affected the inflation trend in April – despite increase in prices by 0.4% on average, y-o-y inflation was further reduced this month, amounting to 1%. Weak inflationary pressures contributed to a slowdown in total inflation in 2018, which is confirmed by the record low underlying inflation (measured by the consumer price index excluding food, alcoholic beverages, tobacco and energy), which for the first time since March has fell below 1%. Low and declining inflation and expressed appreciation pressures on the dinar encouraged the NBS to reduce the reference interest rate from 3.5% to 3% in March and April, which is in accordance with our previous recommendations and we believe that this was an adequate response from monetary policy. In the coming months, we expect year-on-year inflation to accelerate and return within the limits of targeted interval, because the high base effect, which has been reducing total inflation since the beginning of the year, is diminishing (May data confirms this), and increase in energy prices accompanied by the strengthening of the US dollar, further growth of domestic demand and recent relaxation of monetary policy should contribute to some extent to the increase in price levels. The appreciation pressures on the dinar continued in the first five months of 2018, so the domestic currency strengthened against the euro by 0.3%. In the observed period, The dinar was one of the most stable currencies in the CEE, which was also significantly contributed by the NBS with frequent interventions on the interbank foreign exchange market – in January, depreciation pressures were reduced by selling 180 million euros, followed by the reduction of appreciation pressures by purchasing 785 million euros. The real dinar exchange rate strengthened against the euro by 1.4% by April, primarily because foreign investors increasingly invested in government debt securities and due to the inflows of foreign direct investments. However, the real appreciation of the dinar in the past and current year was not in line with the development of productivity of domestic economy and it has seriously undermined the price competitiveness of Serbia, which affected the growth of the foreign trade deficit in the previous few quarters. We believe that when deciding on monetary policy and interventions on the interbank foreign exchange market in the future, the NBS should pay more attention to the economically unfavorable trend of the real dinar exchange rate.

Prices

At the end of the first quarter of 2018, year-on-year inflation fell below the lower limit of the target corridor of the National Bank of Serbia ($3 \pm 1.5\%$) and amounted to 1.4% (Table T5-1). A sudden slowdown in inflation at the beginning of 2018 was expected, as it was a result of a very low trend in price growth with which this year started and the fact that it was unlikely that some unusually large price increases from the first quarter of 2017 (primarily food prices and petroleum products) will repeat. On a quarterly basis, prices in Q1 cumulatively increased by 0.8% (monthly by 0.2-0.3%), but due to the base effect y-o-y, inflation was more than halved when compared to the level at the end of 2017. When observed by group of products, the key contribution to inflation in Q1 was given by the usual seasonal increase in fresh fruit and vegetables, and to a lesser extent, increase in tobacco products (due to January's regular increase in excise duties) and petroleum products. Similar trends were registered in April – prices increased by 0.4% on average, but y-o-y inflation was actually reduced to only 1%, as it was compared with the last year's high price growth in the same period. The high base effect that conditioned the year-on-year inflation to decline was diminished in May, thus

Table T5-1. Serbia: Consumer Price Index, 2011-2018

	Consumer price index				
	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
2011					
dec	154.3	7.0	7.0	-0.7	2.5
2012					
dec	173.1	12.2	12.2	-0.4	9.9
2013					
dec	176.9	2.2	2.2	0.2	-0.9
2014					
dec	180.0	1.8	1.8	-0.4	-2.4
2015					
dec	182.8	1.6	1.6	-0.2	-1.9
2016					
mar	183.5	0.6	0.4	-0.1	1.5
jun	184.4	0.3	0.9	0.1	2.0
sep	184.8	0.6	1.1	-0.6	0.9
dec	185.6	1.5	1.5	-0.2	1.8
2017					
jan	188.3	2.4	1.5	1.5	4.8
feb	189.6	3.2	2.2	0.7	8.2
mar	190.0	3.5	2.4	0.2	9.8
apr	191.5	4.0	3.2	0.8	7.0
may	190.6	3.4	2.7	-0.5	2.1
jun	191.0	3.6	2.9	0.2	2.1
jul	190.2	3.2	2.5	-0.4	-2.7
aug	190.6	2.5	2.7	0.2	-0.2
sep	190.7	3.2	2.7	0.1	-0.6
oct	191.2	2.7	3.0	0.3	2.1
nov	191.1	2.8	3.0	-0.1	1.1
dec	191.2	3.0	3.0	0.1	1.1
2018					
jan	191.8	1.9	0.3	0.3	1.3
feb	192.4	1.5	0.6	0.3	2.7
mar	192.7	1.4	0.8	0.2	3.2
apr	193.5	1.0	1.2	0.4	3.6
may	194.7	2.2	1.8	0.6	4.9

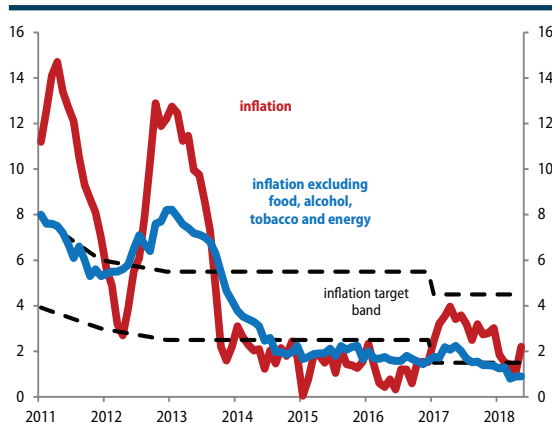
Source: SORS.

Underlying inflation has had a slowdown since the beginning of 2018 due to still weak inflationary pressure, but it is possible to expect its mild acceleration in the following period

price levels jumped and total inflation returned within the limits of the NBS target tolerance band (2.2%) in this month as it was expected. There are several reasons why an additional acceleration of inflation can be expected in the rest of 2018. First, from June to December 2017, a rather low inflation of 0.4% was recorded, thus the low base effect could boost the inflation to some extent. Inflationary pressures should also be contributed by the rise in energy prices in the previous period, which is now reinforced by the strengthening of the dollar, further growth in domestic demand due to favorable trends in the labor market (partly due to the increase in wages in the state sector) and somewhat more expansive monetary policy of the NBS.

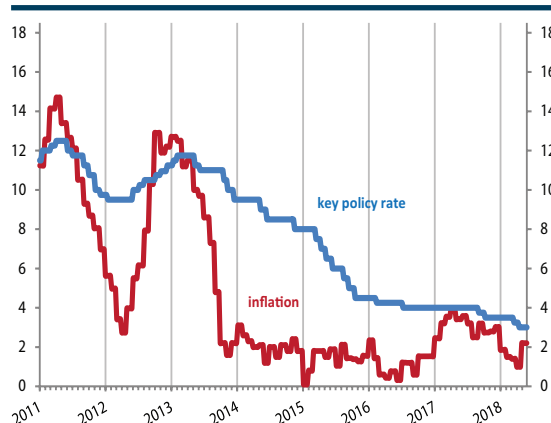
Underlying inflation (measured by the consumer price index excluding food, alcoholic beverages, tobacco and energy) has been gradually decreasing since the beginning of 2018 (Graph T5-2), which is a continuation of the trend from the second half of last year. Namely, as early as in October 2017, underlying inflation dropped below the lower limit of the NBS target band ($3 \pm 1.5\%$), while it has been at a record low level of 0.8% since March, i.e. 0.9% in April and May. We estimate that the main factors influencing the slowdown of underlying inflation in the previous period were a still insufficiently strong recovery of domestic demand which would increase inflationary pressures, which was mainly the result of a strong dinar appreciation against the euro. In the last fifteen months (since late 2016), the domestic currency has nominally strengthened against the euro by 4.3%, which did more than just neutralized already low imported inflation. Similarly, the nominal dinar strengthening against the US dollar in the observed period by 13.5% predominantly prevented the overflow of the rise in world energy prices onto domestic prices. However, the latest data indicate that it is possible to expect a reversal of existing trends in the coming months, both in demand and supply, as well as a gradual rise in inflationary pressures and underlying inflation in Serbia. Q1 recorded a solid real growth in private consumption of 3%, which represents a significant increase when compared to 2017 (1.8% annually). It also seems that the notable trend of economically adverse nominal appreciation of the dinar against the euro is currently stopped, which, with the noticeable acceleration of inflation in the Eurozone, may slightly influence the increase in import prices. At the same time, we have recorded a recovery in the value of the US dollar since May, which is why it is realistic to expect that the increase in world oil prices in the previous period will however, with a certain time shift, transmit to the costs of production and, consequently, to the level of domestic prices. Finally, the strengthening of inflationary pressures should be contributed by the additional relaxation of monetary policy to some extent, given that the NBS reduced the key policy rate on two occasions since the beginning of the year - by a total of 0.5 p.p.

Chart T5-2. Serbia: Y-o-y Inflation Rate and Underlying Inflation and the NBS Target Band 2011-2018



Source: NBS and QM estimates

Chart T5-3. Serbia: NBS Reference Interest Rate and y-o-y Inflation Rate, in %, 2011-2018



Source: NBS

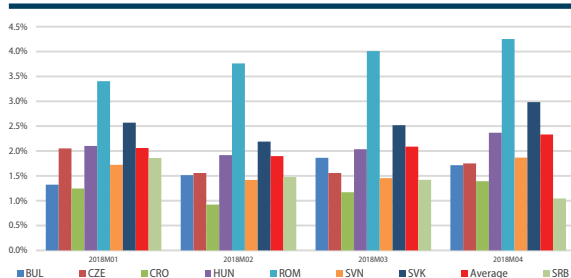
Low underlying inflation and appreciation pressures on the dinar in the previous period encouraged the National Bank of Serbia to reduce the key policy rate in 2018 from 3.5% to 3%

Since the beginning of 2018, the NBS reduced the key policy rate on two occasions - in March and April - by 25 basis points, from 3.5% to 3% (Graph T5-3). Namely, the underlying inflation has been at a record low level of around 1% since the beginning of the year, with the prevailing appreciation pressures on the dinar (depreciation pressures were recorded only in January). In order to prevent excessive appreciation of domestic currency against the euro, the NBS intervened in the interbank foreign exchange market by buying 785 million euros from February to April. These are also the main reasons why in the previous issue of the Quarterly Monitor we suggested that there is room for additional relaxation of monetary policy, and therefore we assess the decision of the NBS to reduce the key policy rate as favourable. Taking into account the latest mid-term projection of the inflation of the National Bank of Serbia, the inflation should remain relatively low by the end of 2019 - below the target interval (3%). Nevertheless, we do not suggest further relaxation of monetary policy in the next few months. We identified several potential sources of inflation acceleration by the end of the year, and the following steps will be strongly defined by the conditions in the international environment - primarily the movement of world oil and food prices and the normalization of monetary policies of the US Fed and the European Central Bank.

Inflation in Serbia since the beginning of 2018 lower in regard to comparable countries of CEE

Since the beginning of the year, most CEE countries have recorded a gradual acceleration of year-on-year inflation, on average from 2% to 2.3% (Graph T5-4). When countries are observed individually, y-o-y inflation in April was above the level in Serbia (1%) in the whole region and ranged from 1.4% in Croatia to as much as 4.3% in Romania. The seasonal increase in food prices and increase in energy prices caused by the movement of world oil prices have been some of the key drivers of inflation in CEE since the beginning of the year, but in many countries there is also a noticeable gradual increase in inflationary pressures due to a strong growth of domestic demand. This is supported by highly favorable trends in the labor market and a solid growth in domestic demand, and central banks of the Czech Republic and Romania have already responded to such trends by increasing key policy rates.

Chart T5-4. Inflation in Serbia and selected countries in Central and Eastern Europe



Source: Eurostat, SORS and QM calculations

Bearing in mind that the dynamic growth of earnings in these countries has continued, it is highly possible that by the end of 2018, an additional monetary tightening will occur. On the other hand, Serbia is slowly catching up with the region in terms of basic macro-economic indicators – real GDP growth and private consumption, as well as the growth of employment and wages are still lagging behind. Consequently, total and core inflation are below the CEE level and we do not

First quarter of 2018 recorded a mild inflation of 0.8% mostly due to the increase in the prices of food and tobacco products

exclude the possibility of further relaxation of monetary policy in the coming period, contrary to the tendencies in the region.

Q1 2018 recorded a moderate inflation of 0.8% (Table T5-4), due to a rise in the price level in January and February by 0.3% and March inflation of 0.2%. When observed by product groups, the highest contribution to inflation in Q1 was made by the increase in food prices of 2.3% (contribution of 0.7 p.p.), primarily due to a seasonal increase in fresh vegetables by 9% (contribution of 0.4 p.p.) and fresh fruit by 9.5% (contribution of 0.2 p.p.). In addition, prices of tobacco products increased by 4.1% (contribution of 0.2 p.p.) due to a regular increase of excise duties in January and petroleum products by 1.4% (contribution of 0.1 p.p.). The seasonal decrease in the prices of clothing and footwear by 3.7% (contribution -0.2 pp) had the opposite effect, while the prices of other products did not change significantly - which confirms the prevailing weak inflationary pressures since the beginning of the year. This is also evidenced by the fall of underlying inflation (measured by the consumer price index excluding food, alcoholic beverages, tobacco and energy) by 0.4% in Q1. If we look at the three-month annualized average, which was 3.2% in Q1 (Table T5-1), one cannot say that the inflation in the observed period was extremely low. However, due to the already explained base effect, Q1 registered a relatively sharp decrease in y-o-y inflation - from 3% in December 2017 to 1.4% in March.

Inflation slightly increased in April and May (0.4% and 0.6%, respectively), due to the increase in the prices of limited number of products

April recorded a moderate inflation of 0.4% (Table T5-4), due to an increase in the prices of the same product groups, which decisively influenced the movement of inflation during Q1. Food prices increased by 0.7% on average (a contribution of slightly over 0.2 p.p.), which basically can entirely be attributed to the increase in the prices of fresh vegetables by 4.2% (contribution of almost 0.2 p.p.). The prices of petroleum products gradually continued to grow and the increase in April amounted to 1.1% (contribution almost 0.1 p.p.), and there was also usual seasonal increase in clothing and footwear by 2.1% (contribution of 0.1 pp). Changes in the prices of other groups of products were negligible and they cancel each other out. Inflation measured by three-month annualized averages accelerated to 3.6% in April, but due to the high base effect, the y-o-y inflation rate was reduced to a level of 1%. However, in May, the base effect, which in the previous part of 2018 was contributing to the decline of year-on-year inflation, changed the direction. This month's inflation was 0.6%, mainly due to a rise in prices of fresh vegetables by 6.6% (contribution 0.4 p.p.) and petroleum products by 2.8% (contribution of 0.2 p.p.). When taking into consideration the fact that last year in May the price level dropped by 0.5%, y-o-y inflation was more than doubled compared to the level in April and it amounted to 2.2%.

Table T5-5. Serbia: Consumer Price Index: Contribution to Growth by Selected Components

	Share in CPI (in %)	price increase in Q1 2018.	Contribution to overall CPI increase (in p.p.)	price increase in april 2018.	Contribution to overall CPI increase (in p.p.)	price increase in may 2018.	Contribution to overall CPI increase (in p.p.)
Total	100.0	0.8	0.8	0.4	0.4	0.6	0.6
Food and non-alcoholic beverages	31.7	2.3	0.7	0.7	0.2	1.2	0.4
Food	28.1	2.3	0.7	0.7	0.2	1.3	0.4
Alcoholic beverages and tobacco	6.9	2.9	0.2	-0.1	0.0	0.1	0.0
Tobacco	4.4	4.1	0.2	0.0	0.0	0.0	0.0
Clothing and footwear	4.7	-3.7	-0.2	2.1	0.1	0.4	0.0
Housing, water, electricity and other fuels	13.8	0.1	0.0	0.0	0.0	0.0	0.0
Electricity	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Furniture, household equipment, routine maintenance	4.9	0.1	0.0	0.2	0.0	0.0	0.0
Health	4.9	0.5	0.0	0.1	0.0	0.4	0.0
Transport	12.4	0.5	0.1	0.6	0.1	1.4	0.2
Oil products	5.9	1.4	0.1	1.1	0.1	2.8	0.2
Communications	5.0	-0.7	0.0	0.4	0.0	-0.5	0.0
Other items	15.7		0.0		0.1		0.0

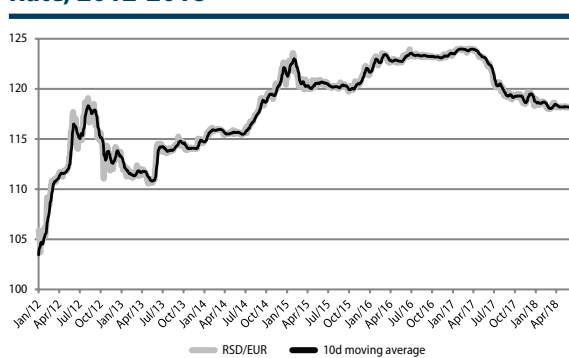
Source: SORS and QM estimates

The Exchange Rate

The Dinar in Q1 maintained almost the same value against the euro, while it nominally strengthened against the US dollar by about 3%

Following the usual seasonal depreciation pressures in January 2018, which the NBS mitigated by selling the euro in the interbank foreign exchange market – a total amount of 180 million euros, the domestic currency continued to slightly strengthen against the euro (Graph T5-6). At the end of March, the dinar nominally strengthened against the euro by 0.1% when compared to the end of 2017, while appreciation at the quarterly average was somewhat higher, amounting to 0.6%. The dinar strengthening in February and March could have been even more notable, but the appreciation pressures were quite mitigated by NBS interventions in the interbank foreign exchange market (a total of EUR 580 million was bought). Key factors that contributed to the strengthening of the domestic currency in Q1 were not only mild y-o-y increase in inflows of foreign direct investments, but also a strong net inflow of portfolio investments of around 330

Chart T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2012-2018



Source: NBS

million euros – primarily due to investments made by foreign investors in government debt securities. Given that the euro strengthened against the US dollar and the Swiss franc at the same time, the dinar strengthening against these currencies was even more noticeable – as was the case during the greater part of 2017. During Q1, the dinar strengthened by an additional 3.1% against the US dollar (at the quarterly average by 4.7%), after strengthening by as much as 15.4% in 2017. Similarly, the domestic currency strengthened by an additional 0.6% against the Swiss franc (at the quarterly average by 0.2%), after last year’s appreciation of almost 12%.

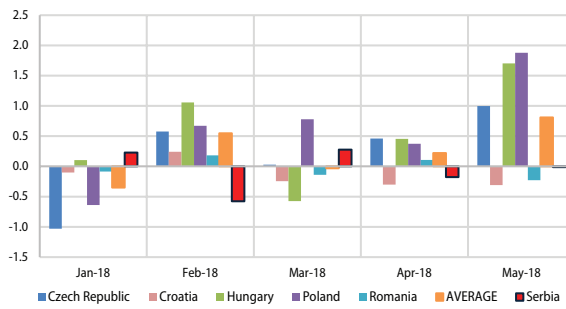
Continuation of the trend of slight dinar appreciation against the euro in April and May, but also a sharp turn in movement of the dinar exchange rate against the US dollar

The main factors that caused the appreciation pressures on the dinar during Q1 were present during April and May as well, so the dinar nominally strengthened against the euro by an additional 0.2% – despite the fact that the NBS bought another 205 million euros in the observed period in the interbank foreign exchange market. Since the beginning of the year, the value of the dinar against the European currency has fluctuated in a relatively narrow corridor between 118 and 118.5 dinars per euro, and the NBS prevented major daily oscillations of the exchange rate in the first five months of 2018 by purchasing 785 million euros and selling 180 million euros. However, the financial markets reacted strongly to the political crisis in Italy, because of which the euro recorded a sharp decline against the US dollar in May, and that automatically affected the weakening of the dinar against the US currency – a total of 5.4% when compared to Q1. The continuation of the US dollar strengthening trend could have several important implications for Serbia. First, the last year’s dollar weakening greatly amortized the rise in world petroleum prices, which still hasn’t transferred completely to the movement of domestic prices. If the May dollar strengthening continues in the coming months, it would certainly contribute to the strengthening of inflationary pressures in Serbia, which is already confirmed by the recently announced price increase of petroleum products. Noticeable dollar strengthening would also be a fiscal risk, as it would affect the increase in budgetary costs for interest rates and the increase in public debt expressed as a percentage of GDP, despite fairly favorable fiscal developments in the current part of 2018.

Since the beginning of 2018, the Dinar has been one of the most stable currencies (along with the Romanian Leu) compared to the CEE countries with a flexible exchange rate regime

In the first five months of 2018, the dinar nominally strengthened against the euro by mere 0.3%, while the currency volatility of other CEE countries with the same exchange rate regime was generally more pronounced (Graph T5-7). Thus, by the end of May, the Croatian currency strengthened against the euro by 0.7%, while the Czech Republic Koruna depreciated by 1%, the Hungarian Forint by 2.8% and the Polish Zloty by 3.1%. Despite the fact that the currencies of some countries have declined nominally against the euro since the beginning of the year, due to a higher inflation than in the Eurozone, the whole region of the CEE is still characterized

Chart T5-7. Nominal Exchange Rate Change (in %) in Selected Countries

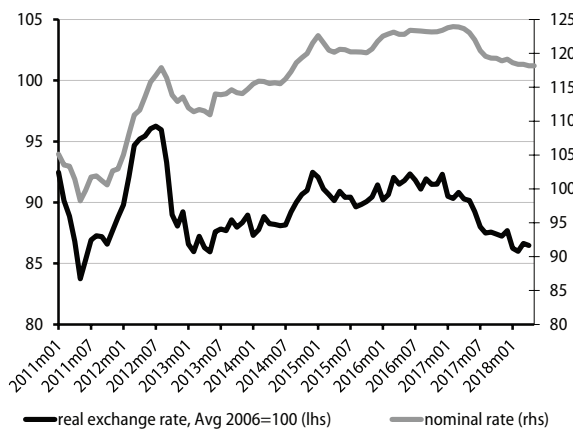


Source: Eurostat, NBS, QM estimates
Note: an increase represents depreciation

Unlike some CEE countries where the real appreciation of national currencies is firmly supported by macroeconomic fundamentals, this is not the case in Serbia

beginning of 2013 (Graph T5-8). A pronounced real appreciation of domestic currency is not necessarily a bad thing if it has a support in other macroeconomic trends, and the Czech Republic example can serve as a good illustration of such situation. Namely, the real strengthening of the Czech koruna against the euro in the previous period (5.9% in 2017 and an additional 1.3% in the previous period of 2018) is quite comparable with the movement of the real dinar exchange rate. Given that the Czech economy simultaneously achieved a strong growth in labor productivity thanks to the growth of investments in modernization of production capacities, automation and robotization of production processes, the real strengthening of the koruna did not adversely affect the competitiveness of the Czech economy and the opening of external imbalances. However, the real dinar appreciation is, in all probability, the dominant consequence of the movement in financial markets and the inflow of capital which does not lead to a significant increase of labor productivity in Serbia for the time being. The latest data show a modest increase of productivity in Q1 by 1.6%, as well as that a total labor productivity is below the level

Chart T5-8. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly Averages, 2011-2018



Source: NBS, SORS, Eurostat and QM estimates
Note: an increase represents depreciation

by a trend of real appreciation of national currencies - including Serbia. By the end of April, in real terms, the Croatian Kuna was the strongest (by 2%), followed by the Dinar (1.4%), the Czech Koruna (1.3%), the Hungarian Forint (1.2%) and the Romanian Leu (0.6%), whereby Polish Zloty is the only one that slightly depreciated in real terms (0.1%).

The real dinar appreciation by 1.3% in the first five months of 2018 was only a continuation of the trend that was practically present throughout entire 2017, when the dinar strengthened against the euro by 5% in real terms. Historically, the real dinar exchange rate has not been at this level since the be-

beginning of 2014 - meanwhile the dinar increased by almost 3% in real terms. This has resulted in deterioration of price competitiveness of Serbian economy when compared to the countries of the European Union, which are our most important trade partners, as is confirmed by the trends in foreign trade in the last few quarters. For example, in Q1, the foreign trade deficit amounted to over 900 million euros, which is more than 200 million euros above the level recorded in the same period of 2017. Therefore, we believe that, when making decisions on monetary policy in the coming period, the NBS should pay more attention to the movement of the real foreign exchange rate, which has not been the case so far.