

## 5. Prices and the exchange rate

In the third quarter of 2019, year-on-year inflation continued its slowdown and dropped to just 1% in October, which is below the NBS target interval ( $3 \pm 1.5\%$ ). Main reasons behind the decline in price of the average consumer basket by 0.6% in the observed period are the fall in prices of fresh vegetables more than it is seasonally common and oil products due to a favorable movement of world oil prices. The fact that the drop in the prices of a small number of products is responsible for an unexpectedly strong slowdown in yoy inflation is also confirmed by the movement of underlying inflation (measured by the Consumer Price Index excluding food, alcohol, tobacco and energy), which remained low and stable at around 1.3%. Fueled by a slowdown in domestic inflation and international circumstances that will keep financing conditions very favorable (primarily the easing of monetary policy by the ECB and the Fed), as of July the NBS has cut its key policy rate three times by 25 basis points - from 3% at 2.25%. By the end of the year, we expect slight acceleration of year-on-year inflation due to a low base effect and rise in electricity prices for households, so that December inflation is likely to be around 1.5%, while average annual inflation in 2019 will be around 1.8%. In the next year, stronger inflationary pressures are possible both on the supply and demand side. Namely, the trend of real wage growth above the growth of economic activity will continue in 2020, which should increase the cost pressures on pricing. Especially since we expect that the impact of some factors that have so far partially offset labor cost growth that was higher than productivity growth, such as declining interest expenditure, will begin to slowly disappear. Favorable developments in the labor market, recent monetary policy relaxation and excessive public sector wage increases of almost 10% on average will lead to an increase in domestic consumption and inflationary pressure strengthening on the demand side. Due to a high base effect in the first few months, the effect of these factors will only be visible in the second half of 2020, when year-on-year inflation should be within the 2-3% interval. During Q3 and October, appreciation pressures on the dinar prevailed, because of an increase in inflow of foreign direct and portfolio investments into government securities, as well as seasonal growth of foreign remittance. During the reporting period, the NBS purchased almost EUR 1.4 billion net to prevent the domestic currency from strengthening too much, so that the dinar only slightly appreciated against the euro (0.3%). As the fall in prices in Serbia was more pronounced than in the Eurozone, the real dinar exchange rate actually weakened by 0.3%. However, at the level of the whole 2019, the dinar has strengthened in real terms against the euro by 0.5%, thus continuing the trend of real appreciation of the domestic currency started at the end of 2016 - cumulatively by 6.5%, in this year as well. Considering that we have been recording deterioration in international trade flows for a long time, this is a clear signal that the real exchange rate is currently not at the level that stabilizes foreign trade balances. In addition to direct impact on deterioration of Serbia's price competitiveness, a permanently stable and overvalued dinar can, in the long run, disrupt the structure of the domestic economy by stimulating the development of non-tradable goods sector, at the expense of the export potential growth of the country. A possible stronger slowdown in European economies or shorter recession would increase depreciation pressures in the coming year, but we estimate that NBS would prevent stronger depreciation of the dinar through foreign exchange market interventions.

### Prices

*Inflation additionally slowed down in Q3 2019, with yoy inflation dropping to a mere 1% in October*

The third quarter of 2019 was marked by a strong influence of disinflationary factors, which led to an additional fall in year-on-year inflation and its drop to a mere 1% in October (Table T5-1). The main reasons for the surprisingly strong slowdown in overall inflation over the recording period are the fall in prices of fresh vegetables, noticeably above seasonally common, and petroleum products due to the previously unexpected fall in world oil prices. If we look at all ten months in

**Table T5-1. Serbia: Consumer Price Index, 2013-2019**

	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
<b>2013</b>					
dec	176.9	2.2	2.2	0.2	-0.9
<b>2014</b>					
dec	180.0	1.8	1.8	-0.4	-2.4
<b>2015</b>					
dec	182.8	1.6	1.6	-0.2	-1.9
<b>2016</b>					
dec	185.6	1.5	1.5	-0.2	1.8
<b>2017</b>					
dec	191.2	3.0	3.0	0.1	1.1
<b>2018</b>					
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
maj	194.7	2.2	1.8	0.6	4.9
jun	195.4	2.3	2.2	0.4	5.7
jul	194.8	2.4	1.9	-0.3	2.7
avg	195.4	2.6	2.2	0.3	1.5
sep	194.8	2.1	1.9	-0.3	-1.2
oct	195.4	2.2	2.2	0.3	1.2
nov	194.8	1.9	1.9	-0.3	-1.2
dec	195.0	2.0	2.0	0.1	0.4
<b>2019</b>					
jan	195.7	2.0	0.4	0.4	0.6
feb	197.1	2.4	1.1	0.7	4.8
mar	198.0	2.8	1.5	0.5	6.3
apr	199.4	3.0	2.3	0.7	7.8
maj	198.9	2.2	2.0	-0.3	3.7
jun	198.4	1.5	1.7	-0.3	0.8
jul	197.9	1.6	1.5	-0.3	-3.0
avg	197.9	1.3	1.5	0.0	-2.0
sep	197.0	1.1	1.0	-0.5	-2.8
oct	197.3	1.0	1.2	0.2	-1.2

Source: SORS.

2019, prices in Serbia on average increased cumulatively by 1.2%. Throughout the period, one of the key factors that determined the trend in overall inflation was the new agricultural season and consequent sharp fall in the prices of fresh vegetables (by 16.5%, a contribution of -0.7 p.p). As the prices of other products in the food and non-alcoholic beverages group went up on average (primarily fruit, meat, bread and cereals), the cumulative contribution of this group to inflation was still slightly positive, amounting to 0.2 p.p. Due to a January and July increase in excise duties, prices of tobacco products, until and including October, increased by 7.6% in total (contribution of 0.4 p.p), while energy prices contributed to inflation by 0.1 p.p so far this year. In other words, the contribution of all other products included in calculation of underlying inflation (measured by the consumer price index excluding food, alcohol, tobacco and energy) was about 0.5 p.p. Bearing in mind that year-on-

year inflation slowed down more than it was expected, an average inflation in the first ten months was lower than the NBS expectations with which we started the year 2019 and stood at 1.9%.

In the last two months of 2019, we expect a gradual acceleration of year-on-year inflation, so December inflation is likely to be a bit over 1.5% - the lower limit of the allowed deviation from the NBS target ( $3 \pm 1.5\%$ ), while the average annual inflation in 2019 will be about 1.8%. The key factors that should contribute to the realization of this forecast are the base effect (November 2018 recorded a price drop by an average of 0.3%, which is not expected this year) and announced increase in price of electricity for households as of December by 3.9%, which will contribute to inflation growth in that month by almost 0.2 p.p. In 2020, we forecast a moderate acceleration of inflation due to a gradual growth in cost pressures, as, by all odds, the trend of increasing labor costs above productivity growth will continue. The rise in unit labor costs will be affected by the insufficient supply of workforce in Serbia due to emigration, but also by relatively high increase in the minimum labor cost, which will take effect early next year. Inflationary pressures on the demand side should also increase, primarily as a result of monetary policy relaxation this year, and fiscal policy will contribute to this as well, due to a very large increase in public sector wages (nearly 10% on average). Nevertheless, in the first quarter of next year, year-on-year inflation will continue to move around the lower level of the NBS target interval due to the base effect – as a reminder- in the first four months of 2019, prices increased by a high 2.3% on average, which will in the same period next year push the total inflation downwards. In the second half of 2020, the base effect will change the direction of the impact, because during this year we had an above

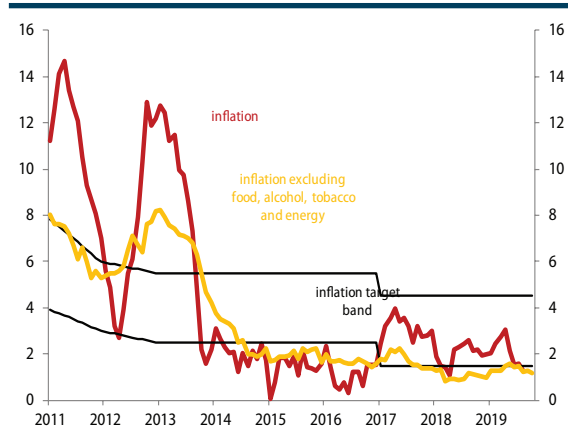
***At the end of the year, we expect inflation to be near the lower limit of the NBS target interval ( $3 \pm 1.5\%$ ), with a gradual acceleration in 2020 - especially in the second half of the year***

average decrease in prices of fresh vegetables as of May. Due to all these factors, we expect a gradual acceleration of y-o-y inflation from June, which should generally be in the 2-3% interval. Similar expectations were expressed by the NBS in its latest medium-term inflation projection, according to which the average inflation is expected to be around 2.2% in the second half of 2020.

**Despite a slight increase of inflationary pressures in 2019, they are still insufficient to outweigh the disinflationary impact of extraordinary factors**

Primera radi, podaci APR-a nedvosmisleno ukazuju na to da je zbog pada kamatnih stopa na zaduživanje privrede Underlying inflation (measured by the Consumer Price Index excluding food, alcohol, tobacco and energy) slowed slightly during Q3 and October, averaging 1.3% (Chart T5-2). Underlying inflation has been on average at that level throughout 2019, which clearly suggests that inflationary pressures in the domestic economy are still relatively weak - although they increased moderately when compared to the last year. When observed on a monthly basis, the underlying inflation in the second half of the year was generally 0.2-0.3%, except in September when we recorded its decline by 0.6%, mainly due to a seasonal decline in package tours by about 30%. In accordance with our previous expectations, real wages grew at a much faster pace than economic activity and labor productivity in the first three quarters of this year, and this should have increased cost pressures on pricing. However, while unit labor costs increased by more than 6% year-on-year, this effect is still missing. There are indications that this is happening, at least in part, because some other production costs are being reduced, which offsets the increase in labor costs in the previous period. For example, the Serbian Business Registers Agency (SBRA) data unequivocally indicate that the fall in interest rates on corporate borrowing led to a significant decrease in interest costs, and it is possible that in the meantime,

**Chart T5-2. Serbia: Y-o-y Inflation Rate and Underlying Inflation and the NBS Target Band 2011-2019**



Source: NBS and QM estimates

there was an increase in efficiency of internal processes in the form of a lower consumption of energy or raw materials. On the other hand, private consumption has grown at a rate of just over 3% since the beginning of the year, which is slightly below the growth rate of non-agricultural GDP (3.6%). We estimate that this still does not generate some stronger inflationary pressures on the demand side, but rather reflects on an increase in imports and deterioration in foreign trade balances. The weak inflationary pressures and consequently low and stable carrying inflation was also contributed by the slight strengthening of the dinar against the euro this year, as well as low inflation in the international environment.

**In 2020, inflationary pressures, both on the supply and demand side, could significantly increase**

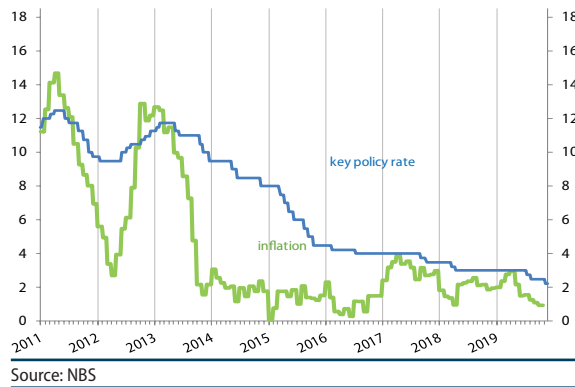
Wage growth will continue in the next year, far exceeding productivity gains in Serbian economy. Namely, as of January 2020, there will be an increase in the minimum wage by 11.1%, and wages in public sector will increase by an average of almost 10%, while we also expect further wage growth in private sector due to market pressures caused by labor migration. With a gradual depletion of the factors that partially offset the impact of rising labor costs on price formation (primarily interest rate cuts) in the past, it should increase cost pressures and contribute to acceleration of underlying inflation. Such developments in the labor market will also contribute to a further increase in domestic consumption, which, in addition to former impact on increase in imports, could start to spill over to an increase in inflation. Additionally, domestic demand growth will also be affected by accelerating growth in credit activities of banks (see chapter on Monetary Policy).

Due to a low and stable underlying inflation, sharp slowdown in total inflation over the past few months and forecast according to which the inflation will continue to move in the lower half of the target interval of  $3 \pm 1.5\%$  until the end of the following year, the NBS has reduced the key policy rate three times by 0.25 p.p. since the beginning of Q3 (Chart T5-3). In this way, the key policy

**As a response to a slowdown in inflation, the NBS has reduced the key policy rate by 0.25 basis points three times since Q3 - from 3% to 2.25%**

rate has been lowered from 3% to 2.25% since November, which is its lowest level since switching to inflation targeting regime. In addition to domestic factors contributing to weak inflationary pressures in Serbia, this decision was also influenced by international factors - primarily the slowdown in global economic growth and inflation and the additional relaxation in monetary policy of key central banks. Thus, the US Fed has cut its key policy rate three times by 25 basis points (from 2.5% to 1.75%) this year, while the European Central Bank has lowered the interest rates deeper into negative territory. Also, in November, the ECB launched a new monetary stimulus cycle by purchasing the bonds worth 20 billion EUR per month (see Monetary Policy section). Thus, an exceptionally favorable conditions in the international financial market continued, which

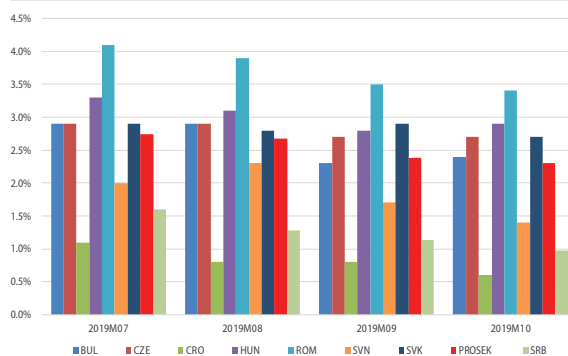
**Chart T5-3. Serbia: NBS Reference Interest Rate and y-o-y Inflation Rate, in %, 2011-2019**



**Q3 recorded inflation slowdown in most Central and Eastern European countries, but inflation in Serbia is still among the lowest in the region**

The good agricultural season and movement of oil prices in the world market contributed to a slowdown in inflation in Central and Eastern European countries during the third quarter, which dropped from an average of 2.7% in July to 2.3% in October (Graph T5-4). According to the latest available data, Romania (3.4%), Hungary (2.9%) and the Czech Republic (2.7%) currently have the highest price increases, while the countries with the lowest year-on-year inflation are Serbia (1%) and Croatia (0.6%). Although inflation in the entire region has been affected by similar factors in 2019 so far (primarily the prices of fresh fruits and vegetables and petroleum products), the fact is that year-on-year inflation in Serbia has been slightly more pronounced, and it is lower by half when compared to the average of the region. The first observation is probably the result of the fact that the share of food and non-alcoholic beverages in the average consumer basket in Serbia is higher than in the CEE countries, which is why the changes in prices of these products have a greater influence on the movement of total inflation in our country. The fact that inflation in Serbia has been chronically below the regional average is due to the fact

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



has reduced the pressure on monetary policy of developing countries and, in some cases, opened the room for its further easing. Namely, recent decisions of the world's leading central banks have led to a continuation of the trend of increased capital inflows into developing countries, creating pressure toward further strengthening of their national currencies. This effect is certainly visible in Serbia, since during Q3 and October, the NBS intervened in the interbank foreign exchange market by net purchase of almost 1.4 billion EUR to alleviate the appreciation pressures on the dinar.

that inflationary pressures in the domestic economy are still relatively weak, which is generally not the case in CEE. Extremely favorable labor market trends, as well as faster wage growth than productivity, have been present in these countries for a long time, and as a result inflationary pressures on both the supply and demand sides are already relatively strong. As previously mentioned, we have started recording similar trends in Serbia as well (we expect them in 2020), which is why the experience of comparable countries suggests that we could expect a stronger growth of inflationary pressures in the domestic economy in the coming year.

After relatively strong acceleration of inflation in the first four months of 2019, we recorded a slowdown as of May, which continued throughout the third quarter. Prices fell by an average of

**In Q3 2019, disinflationary trends continued and prices decreased on average by 0.7%**

0.7% during Q3, contributing to a further fall in year-on-year inflation - from 1.5% in June to 1.1% in September. The key disinflationary factor in the observed period was the movement in prices of fresh vegetables, which, with the arrival of the new agricultural season, dropped more than it is seasonally usual - by as much as 22% (contributing to overall inflation by -0.9 p.p.). Prices of the remaining products in the food and non-alcoholic beverages group went up slightly on average, reducing this group's negative contribution to -0.8 p.p. (Table T5-5). Due to a fall of oil prices in the world market in past few months, oil prices have decreased by an average of 1.5%, which crucially influenced the products and services in transport group to make a negative contribution to the overall inflation of 0.1 p.p. Also, as usual, the prices of clothing and footwear decreased by an average of 2.3% during the summer season (contribution of -0.1 p.p.). Actually, the only significant inflationary factor in Q3 was the increase in price of tobacco products, which rose by an average of 3.7% due to a regular July stock reconciliation (contribution of 0.2 p.p.). The prices of other products and services did not change significantly, and their aggregate contribution to inflation was slightly negative (below 0.1 p.p.).

**Deflation stopped in October on a monthly basis, but year-on-year inflation nevertheless dropped to 1%**

After five consecutive months where we had a fall in price levels, October recorded a low inflation of 0.2%. This is primarily the result of a seasonal rise in clothing and footwear prices by an average of 1.8% (contribution of 0.1 p.p.), and to a similar extent, total inflation was also contributed by the increase in prices of oil products by about 0.9%. Despite a slight rise in price level this month, year-on-year inflation continued to slow down (as monthly inflation in October last year amounted to 0.3%) and stood at 1%. If we look at all ten months in 2019, the cumulative price increase was 1.2%, while the average annual inflation in that period amounted to 1.9%.

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

	Share in CPI (in %)	price increase in Q3 2019.	Contribution to overall CPI increase (in p.p.)	price increase in October 2019.	Contribution to overall CPI increase (in p.p.)	price increase in 2019.	Contribution to overall CPI increase (in p.p.)
Total	100.0	-0.7	-0.7	0.2	0.2	1.2	1.2
Food and non-alcoholic beverages	32.8	-2.4	-0.8	0.0	0.0	0.7	0.2
Food	29.2	-2.7	-0.8	0.0	0.0	0.7	0.2
Alcoholic beverages and tobacco	7.4	2.3	0.2	0.0	0.0	5.2	0.4
Tobacco	4.7	3.7	0.2	0.0	0.0	7.6	0.3
Clothing and footwear	4.5	-2.3	-0.1	1.8	0.1	-1.7	-0.1
Housing, water, electricity and other fuels	13.6	0.5	0.1	0.0	0.0	1.3	0.2
Electricity	4.8	0.2	0.0	0.0	0.0	0.2	0.0
Furniture, household equipment, routine maintenance	4.6	-0.3	0.0	-0.1	0.0	0.9	0.0
Health	5.0	0.3	0.0	0.2	0.0	1.5	0.1
Transport	12.9	-0.9	-0.1	0.4	0.1	0.6	0.1
Oil products	5.8	-1.5	-0.1	0.9	0.1	1.0	0.1
Communications	5.0	0.4	0.0	0.0	0.0	1.6	0.1
Other items	14.3		0.0		0.0		0.3

Source: SORS and QM estimates

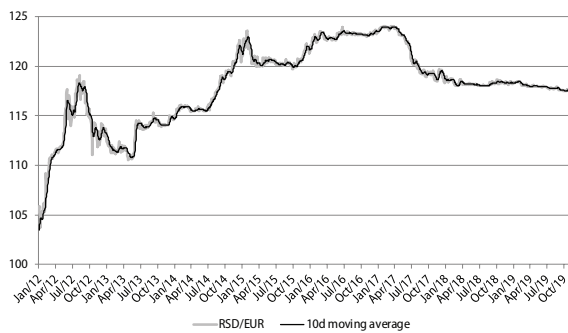
**During Q3 and until mid-November, appreciation pressures on the dinar were prevailing, which has nominally strengthened against the euro by 0.5% since the beginning of the year.**

## The Exchange Rate

As in the previous period, during the second half of 2019 appreciation pressures on the dinar mostly prevailed, which nominally strengthened against the euro by 0.3% during Q3 and October. Thus, the total nominal strengthening of the dinar against the European currency in the first ten months amounted to 0.6%. The key factors that were contributing to the growth of foreign currency supply in the domestic foreign exchange market, as well as appreciation pressures, were the increased inflows from foreign direct investment and portfolio investments in government bonds. Despite strong pressures to strengthen the domestic currency, the exchange

rate has remained fairly stable since the beginning of Q3, fluctuating at a narrow interval between 117.5 and 117.8 dinars per 1 euro (Graph T5-6). The NBS made a crucial contribution to this by frequent and extensive interventions in the interbank foreign exchange market, which in the observed period bought 1,505 billion EUR in order to prevent an excessive strengthening of the

**Chart T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2012-2019**

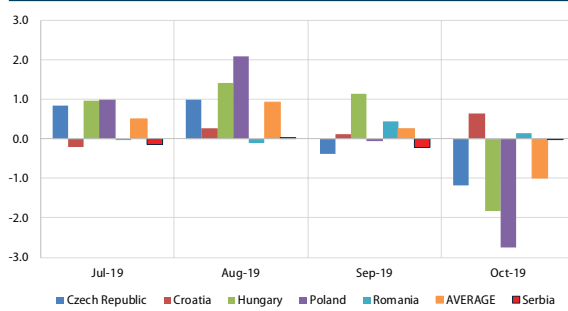


Source: NBS

**NBS continues to strongly suppress exchange rate oscillations in both directions, which is why the dinar is one of the most stable currencies in the region**

Unlike dinar, most of the CEE countries' currencies were exposed to depreciation pressures during Q3, so they generally weakened against the euro - mostly the Hungarian forint (3.5%), Polish zloty (3%) and the Czech koruna (1.5%). The situation changed completely in October, when the currency basket in the countries of the region with a similar exchange rate regime strengthened on average by 1% against the euro (Chart T5-7). It is characteristic that the fluctuations in the exchange rate in Serbia for a longer period of time have been, as a rule, smaller than in comparable countries. We believe that this is largely due to the NBS's frequent interventions on IFEM, which in the first ten months of this year bought over 2.5 billion euros to prevent excessive strengthening of the domestic currency, and also appeared as a buyer of foreign currencies in order to prevent the dinar weakening (250 million). Thus, in 2019, the NBS continued to implement its policy of de facto targeting the level of nominal exchange rate, making the dinar one of the most stable currencies in the region in previous period. Preventing an excessive strengthening of the dinar is

**Chart T5-7. Nominal exchange rate change (in %) in selected countries**



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

**Despite nominal appreciation, the dinar fell in real terms against the euro in Q3 due to lower domestic inflation**

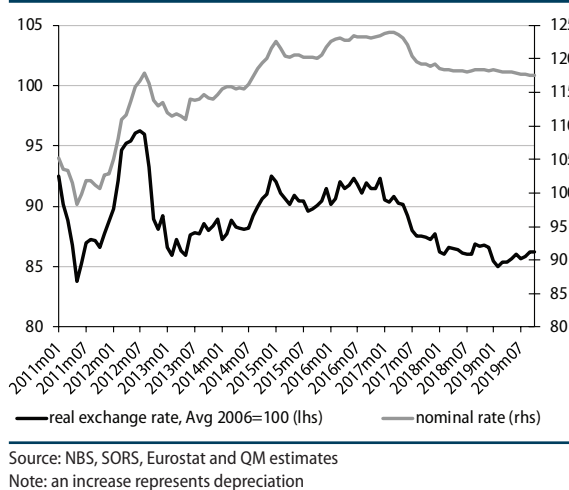
Trends from the previous quarter continued in Q3, so that the real dinar exchange rate weakened slightly against the euro again - by 0.3% (Graph T5-8). Bearing in mind that the domestic currency strengthened nominally by 0.3% in the observed period, this movement of the real exchange rate is the result of a lower domestic inflation compared to the Eurozone (-0.7% versus -0.1%). However, if we look at the entire 2019, the dinar strengthened in real terms against the European currency by 0.5%, which means that the trend of real appreciation of the domestic currency continued during this year as well, which was established at the end of 2016. In addition to the dinar, in 2019 the currencies that strengthened in real terms in the CEE region were only the Czech koruna (by 3.1%) and the Polish zloty (by 0.7%) - but this is no surprise bearing in

dinar - mostly in the second half of the year. We record contrary tendencies when it comes to the dinar exchange rate against the US dollar and Swiss franc. During Q3, October and November, the euro depreciated mainly against the dollar, which subsequently resulted in a 2.9% weakening of the dinar against the US currency. Since the beginning of the year, the dinar nominally weakened by 3.3% in total against the dollar. As the euro was also weakening against the Swiss franc for most of the year, the domestic currency depreciated against the franc by 1.9% until and including November.

currently a good policy because the extended period of appreciation of the domestic currency (as of the end of 2016) has a negative impact on the price competitiveness of the domestic economy and it contributed to the deterioration of foreign trade balances in this and previous years. However, the problem comes from the fact that the NBS is reacting even to first signs of depreciation pressures on the dinar, as happened in the second half of November, because that is not in line with the policy of directing the exchange rate to a level that keeps the country's external balances in equilibrium.

mind the macroeconomic fundamentals of these countries. Such an assessment does not stand for Serbia, in fact we can say that the real appreciation of 6.5% when compared to December 2016 was in contradiction with other basic macroeconomic trends. The policy of an excessively strong real dinar exchange rate is problematic for two reasons. Although not the only cause, the real dinar strengthening in the past few years is undoubtedly one of the explanations for the deterioration of foreign trade flows and the growth of foreign trade deficit, which in turn indicates that the domestic currency is not at the level that keeps foreign trade balances in equilibrium (i.e.

**Chart T5-8. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly Averages, 2011-2019**



it is overvalued). Namely, in combination with an expansionary monetary policy, an extremely stable and strong dinar exchange rate contributes to growth in domestic demand largely spilling over to an increase in consumer goods imports. Moreover, the development of economy sectors that produce non-tradable goods at the expense of tradable goods intended for export is being encouraged, which can have negative long-term effects on Serbia's economic growth. Therefore, we once again point out to the fact that a mild and controlled real depreciation of the dinar would have a much more positive effect on the domestic economy than the policy of a firm defense of the current nominal dinar exchange rate.

**Unfavorable international macroeconomic trends could increase the depreciation pressures on the dinar**

Any stronger slowdown in European economies or a shorter recession would also cause a fall in capital inflows in Serbia, which would, in conditions of a high current account deficit, increase the depreciation pressures on the dinar. However, we do not expect a stronger depreciation of the dinar in this case either, as the NBS has a high amount of foreign currency reserves, and so far has shown a willingness to use them to preserve the stability of the dinar. Higher depreciation of the dinar could only be expected in the event of a stronger recession in Europe, which is not likely for now.