5. Prices and the exchange rate

Since the beginning of 2013, the inflation in Serbia was exceptionally low; this trend continued until the end of the year, when the inflation stood at record low 2.2%, which is slightly below the NBS target band. The slowdown in inflation and its drop to a historically lowest level were mostly affected by a low domestic demand as well as the relative stability of the dinar. Although inflation in January 2014 amounted to a relatively high 1.5%, it is estimated that this leap is of a temporary nature, given that it was caused by a seasonal increase in the prices of food, as well as one-off growth in the prices of energy and utilities and in a small part, by an increase in special VAT rate and excise duties. Primarily due to a low domestic demand, caused by a realistically lower planned public spending on wages, pensions, goods and services, as well as the stagnation in wages caused by high unemployment, it can be expected that there will be no releasing of the inflation outside the permitted NBS target band in the following period. The nominal exchange rate was relatively stable until December, whereas, since then, the depreciation trend that has lasted in the last three months is noticed. Strong depreciation pressures are largely driven by global factors, but they are to some extent influenced by unfavorable movements in the balance of payments in Serbia. Therefore, it is not obvious whether the dinar weakening is only temporary or that trend will continue in the following months, which could then affect the inflation on a long run. Although in comparison to December dinar temporarily really appreciated in January, in real terms it is weaker by about 0.8% when compared to its value in January 2013, while February expects its further mild depreciation.

Prices

The Q4 inflation fell below the lower limit of the NBS target band

Table T5-1. Serbia: Consumer Price Index, 2008-2014

	Consumer price index				
	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
2008					
dec	122.7	8.6	8.6	-0.9	4.4
2009					
dec	130.8	6.6	6.6	-0.3	1.6
2010					
dec	144.2	10.2	10.2	0.3	11.7
2011					
dec	154.3	7.0	7.0	-0.7	2.5
2012					
mar	157.4	3.4	2.0	1.1	8.4
jun	162.4	5.4	5.3	1.2	13.2
sep	169.1	10.3	9.6	2.3	17.7
dec	173.1	12.2	12.2	-0.4	9.9
2013					
mar	175.1	11.2	1.2	0.0	4.7
jun	178.2	9.7	2.9	1.0	7.3
sep	177.3	4.8	2.4	0.0	-2.0
oct	177.6	2.2	2.6	0.2	2.3
nov	176.5	1.6	2.0	-0.6	-1.8
dec	176.9	2.2	2.2	0.2	-0.9
2014					
jan	179.5	3.1	1.5	1.5	4.4

* Moving average of the monthly price growth in three months, raised to an annual basis. (For example, the March value was obtained by increasing the average of monthly price growth in January, February and March to an annual level).
Source: SORS.

… while it returned within the target band in January

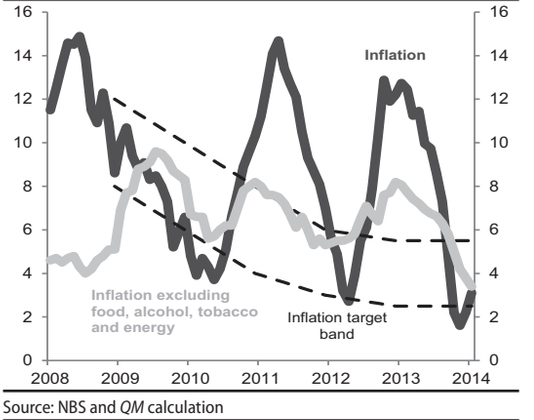
The inflation slowdown continued in Q4 and at the end of the year stood at 2.2%. After inflation reached its targeted level in September, it fell below the target tolerance band (4 ± 1.5%) in October and it stayed there until the end of 2013 (Table T5-1). Various things contributed to such a low inflation: low domestic demand, relative stability of the dinar exchange rate, negative imported inflation in Q3 and Q4, drop in the prices of primary agricultural products due to a good agricultural season in the country and the world, as well as cautious and relatively slow mitigation of the restrictiveness of monetary policy during 2013.

After reaching a record low value of 1.6% in November 2013, year-on-year inflation stabilized around the lower limit of the target corridor and stood at 3.1% in January. Underlying inflation (inflation excluding food, alcohol, tobacco and energy products) is also located within the acceptable values and in January it amounted to 3.4%, which is its lowest level in recent years (Graph T5-2). In the coming months, we can expect further moderate growth of the overall inflation and stabilization of underlying inflation and their movement within the corridor. Inflation growth could be affected by further (seasonally expected) growth in the food prices, spillover effect due to a dinar depreciation in the period from December to February and due to an increase in specific VAT rate and excise duty, which were mostly manifested in January. On the other hand, low domestic demand can influence this effect, as happened during the previous year, not to manifest completely in the following period.

NBS continues with a gradual moderation in restrictiveness of monetary policy

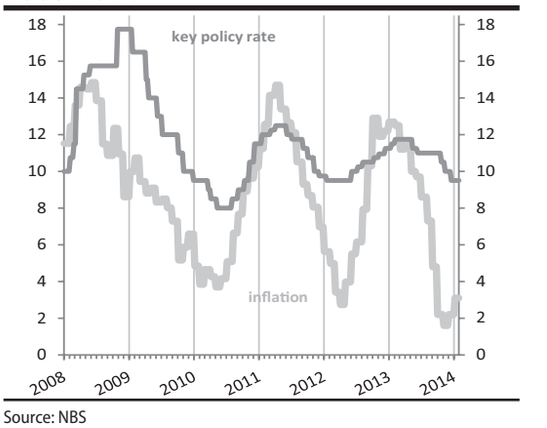
Relatively modest reduction in the key policy rate in recent months and its retention at the level of 9.5% (Graph T5-3) suggest the cautiousness of the NBS in keeping the inflation within the target band, given that there are still significant risks related to a credible implementation of fiscal adjustment measures, the decline of liquidity in the international financial market, as well as a further existence of the external imbalance and the need for external financing. Moreover, there is a risk that high imbalances existing in Serbian economy destabilize the dinar exchange rate, which would further, due to a high euroization, soon spread to inflation. Throughout Q4 the key interest rate was reduced three times by 50 base points in October, November and December, while since the beginning of 2014 until the end of February, it remained at the December level of 9.5%. The external deficit has been significantly reduced, primarily due to the growth in exports (but the possibility of the export growth on the basis of the existing capacities is largely exhausted), while the existence of multy-year high fiscal deficit and the rapid growth in Serbia's public debt, as well as the growth in the share of non-performing loans in total loans, create unfavorable conditions for the maintenance of low inflation in the economy. In these conditions, the restrictive monetary policy must be implemented even when the inflation is at its record low level, which has negative consequences for the long-term economic growth. In order to preserve macroeconomic stability, a further reduction in the restrictiveness of monetary policy by decreasing the key interest rate and the rate of required reserves would have to be accompanied by a resolution of the problem of structural imbalances- primarily by reducing the excessively high fiscal deficit and mitigating the external imbalances.

Graph T5-2. Serbia: y-o-y inflation rate and underlying inflation and the NBS target band, 2008-2014



Source: NBS and *QM* calculation

Table T5-3. Serbia: NBS reference interest rate and y-o-y inflation rate, in %, 2008-2014



Source: NBS

During the period when the NBS implements the regime of targeted inflation, one can notice high variability in inflation. For the most of this period, inflation moved outside the target band (see Graph T5-2), while the underlying inflation also moved outside this target band in a significant period of time (most of the 2012 and 2013). The main source of the inflation variability were variations in the exchange rate, and occasionally the variations in the prices of food and energy,

whose growth spilled over to the prices of a substantial part of other products, thus making underlying inflation grow as well.

Deflation in Q4 and high monthly inflation in January 2014

A total price drop of about 0.2% in Q4 was followed by a relatively high inflation in January of about 1.5%, thus the three-month inflation amounted to 4.4% when annualized. During Q4, the largest disinflationary contribution came from the fall in the prices of food and non-alcoholic beverages (Table T5-4), mainly in November. In December, food prices began to rise, which continued during January, so the total reduction of these prices in Q4 was annulled with the increase in January (contribution to inflation of -0.7 percentage points in Q4 and +0.8 pp in January). Similar effect was made by the changes in the prices of petroleum products, whose drop of about 1.5% in Q4 had a disinflationary effect with about 0.1 percentage points, while January growth of about 1.4% increased the inflation for the same amount of 0.1pp. Seasonal growth in the prices of clothing and footwear of about 2.8% (0.1pp) had a significant effect on inflation in Q4. Next to the growth in the food prices (inflationary effect of the rise in prices of vegetables by around 12%, or 0.6 percentage points is especially pronounced) and petroleum products, a significant inflationary contribution was given by the rise in the prices of tobacco (9.5%, or 0.4pp) and other products that were affected by an increase in specific VAT rates and excise duties. The prices of computers, computer equipment, audio-visual and photographic equipment increased in January by 4.1%, and a similar growth was recorded by the prices of books (4.7%), while the utility prices also increased, giving a total contribution to inflation by about 0.1pp.

Table T5-4. Serbia: Consumer Price Index: Contribution to Growth by Selected Components

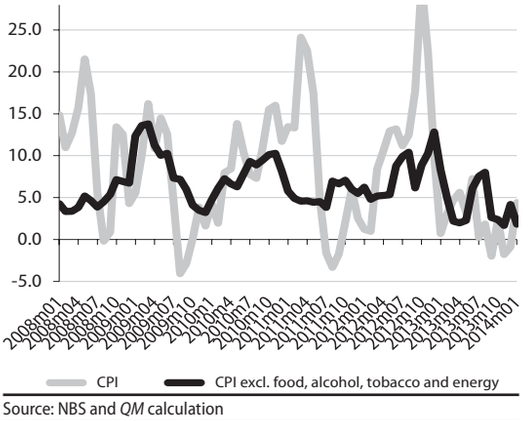
	Share in CPI (in %)	price increase in Q4 2013	Contribution to overall CPI increase (in p.p.)	Price increase in January 2014	Contribution to overall CPI increase (in p.p.)
Total	100.0	-0.2	-0.2	1.5	1.5
Food and non-alcoholic beverages	34.5	-2.0	-0.7	2.3	0.8
Food	30.9	-2.0	-0.6	2.5	0.8
Alcoholic beverages and tobacco	7.8	1.2	0.1	5.9	0.5
Tobacco	4.2	1.1	0.0	9.6	0.4
Clothing and footwear	4.6	2.8	0.1	-1.1	0.0
Housing, water, electricity and other fuels	13.0	0.3	0.0	0.8	0.1
Electricity	5.1	0.0	0.0	0.0	0.0
Furniture, household equipment, routine maintenance	4.1	0.8	0.0	-0.4	0.0
Health	6.4	0.1	0.0	1.2	0.1
Transport	12.3	-0.8	-0.1	1.0	0.1
Oil products	5.1	-1.5	-0.1	1.4	0.1
Communications	5.0	0.7	0.0	-0.5	0.0
Other items	12.2		0.2		0.0

Source: NBS and *QM* calculation

Overall, as well as underlying inflation are at a relatively low level

Underlying inflation (inflation excluding food, alcohol, tobacco and energy) stabilized at a relatively low level from November, thus the three-month average in January amounted to 0.46%, or 1.8% when annualized (Graph T5-5), while the overall inflation amounted to 1.08%, or about 4.4% when annualized. Such a low underlying inflation was affected by a relatively stable dinar exchange rate, as well as a fall in inflationary expectations of the citizens, economy and financial sector in recent months of 2013. However, the dinar exchange rate has moderately depreciated since the beginning of 2014, and the inflationary expectations of all three sectors have grown, both because of the reduction in Serbia's credit rating by Fitch agency, and the growth in the risk premium for Serbia (measured by the EMBI index), thus in the coming months we could expect a moderate growth in underlying inflation, which would still stay within the target band. Inflationary pressures could slightly increase in February due to the expected seasonal rise in the prices of the unprocessed food (vegetables), but this would be followed by similar disinflationary pressures in the coming months, when the prices of the same products would decrease. On

Graph T5-5. Serbia: CPI and Underlying Inflation Trend, Annualized Rates, in %, 2008-2014



Source: NBS and *QM* calculation

the other hand, it is almost certain that there won't be stronger inflationary pressures from the demand side, given that the overall domestic demand will decline in real terms due to a planned real decline in government spending that affects the demand for goods and services (salaries, pensions, spending on goods and services). In addition, the movement of wages in the private sector will not have inflationary effect since they are expected to stagnate due to a high rate of unemployment. The increase in the special VAT rate from 8% to 10%, as well as an increase in administratively controlled prices (utilities and natural gas) has influenced the rise of inflation in January, but their overall effect was modest.

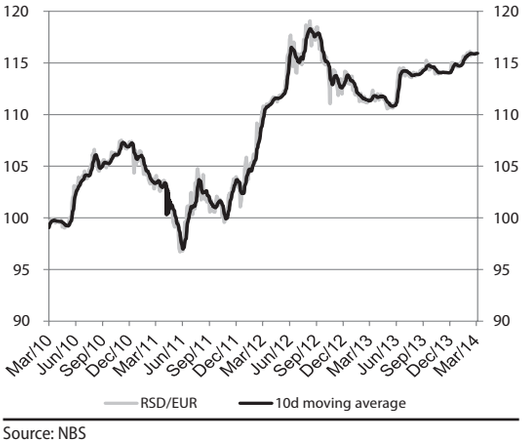
Control of inflation in Serbia is predominantly managed by using the foreign exchange rate

A strong correlation between the exchange rate movements and inflation suggests that in the conditions of a high euroization, it is not possible to apply a clean model of a targeted inflation in Serbia. A model of the targeted inflation implies that the central bank, primarily through the key policy rate, affects the interest rates of commercial banks, and the interest rates of commercial banks affect the movement of the domestic demand (investments, personal consumption) and inflation. In the conditions of a high euroization, the NBS impact on inflation is achieved indirectly- interest rates and interventions in the foreign exchange market influence the exchange rate movement, and the exchange rate movement has a crucial influence on inflation. In such circumstances, the exchange rate variations are transmitted on the inflation variations to a large extent, thus making this impact asymmetric- the dinar weakening (depreciation) transfers to inflation in a much higher level than its strengthening (appreciation). With regard to the impact of the exchange rate on the inflation, the NBS has intervened in the foreign exchange market more frequently and intensively than the other central banks do, particularly more frequent than those implementing a model of targeted inflation. The intensity of the NBS interventions in the foreign exchange market significantly exceeds the volume that could be explained by the intention to prevent the excessive daily volatilities of the exchange rate. It is obvious that the NBS, with strong interventions, has repeatedly tried, and more or less managed to influence the long--term exchange rate movement, and not only to alleviate the daily volatilities.

The Exchange Rate

Moderate dinar depreciation from December

Graph T5-6. Serbia: Daily RSD/EUR Exchange Rate, 2010-2014



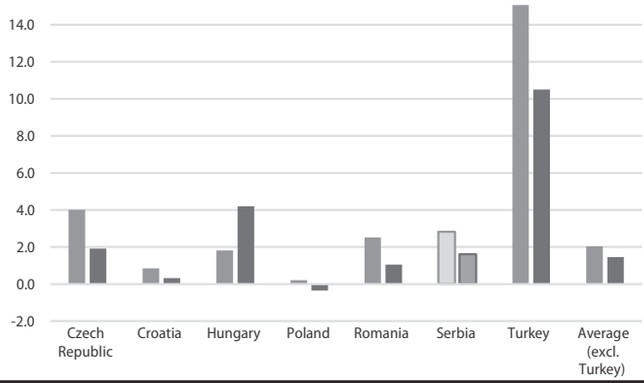
Source: NBS

The dinar exchange rate from July to the end of November was relatively stable, but the early December has shown the depreciation pressures that still persist. Since the exchange rate was sharply brought down in September and October of 2012, a moderate appreciation continued until the first significant shock in June 2013, when it came to depreciation of about 3%. Since then up until December, the exchange rate was relatively stable, at the level of about 114 dinars per euro. However, in early December a slight depreciation trend can be noticed, in January, the level of 115 dinars per euro was exceeded, and by the end of February in comparison to the early December, dinar depreciated by about 1.6% (Graph T5-6). NBS responded to appre-

Box 1. The exchange rate in the countries of Central and Eastern Europe

By observing the exchange rate in the countries of Central and Eastern Europe which conduct a flexible exchange rate policy, one can notice, on average, the trend of a mild depreciation (an exception is Turkey, where the strong depreciation of the lira has started since June 2013) and when observed in individual countries the exchange rate varies depending on the specific factors- discrete measures and circumstances in the economy of the specific country. In the observed group of countries (the Czech Republic, Croatia, Hungary, Poland, Romania, Turkey, see Graph T5-7), the highest depreciation occurred in Turkey- after the outbreak of social riots in Istanbul last summer, political instability and corruption affairs within the members of Turkish government, as well as due to the inadequate and non-credible measures of the central bank (the first decision not to raise the key interest rate, but to increase only a part of the required reserves in foreign currencies, and then making a necessary decision to nevertheless increase the reference rate by a significant amount) the lira has continued to weaken rapidly up until now. In other, politically stable, selected countries, the significant depreciation occurred in the Czech Republic at the end of 2013 and in Hungary in February of 2014. In addition to developments in the global financial market (reduced volume of quantitative easing by the FED), in both countries, depreciation was highly influenced by the implementation of the central bank measures: in Czech Republic, increased offers of domestic currency in order to stimulate economic growth and avoid expected deflation; and in Hungary, reduction in the key interest rate to a record low value, although the forint weakening was affected by the crisis in the neighboring Ukraine. On the other hand, the exchange rate in Poland was relatively stable and there was a record of a slight appreciation in the period of December 2013- February 2014. The stability of the exchange rate in Poland is the result of a high economic growth, low inflation and improvement in the foreign trade balance compared to the previous year, and is probably in part a result of transferring the interest of foreign investors to the markets of more stable Eastern Europe countries from the increasingly unstable Russian market (due to the crisis of political relations between Russia and the U.S. and EU, which has already led to a withdrawal of capital from Russia and drop of Ruble)

Graph T5-7. Nominal exchange reate depreciation (in%) in the period June-November 2013 and December-February 2014, in selected countries of Central and Eastern Europe



Note: blue color marks nominal depreciation in the period June-November 2013; red color marks nominal depreciation in the period December 2013- February 2014.
Source: Eurostat, NBS

When we exclude the extreme case of depreciation in Turkey (due to specific factors that have contributed to the instability in the country), we get the average moderate depreciation trend in both observed periods in the countries of Central and Eastern Europe. Serbia is slightly above this average, so it could be concluded that the dinar depreciation is largely a consequence of general international movements, and only to a minor part is the result of the specific factors related to Serbia. The improvement of the factors that negatively affect the stability of the financial market in Serbia, such as the poor state of public finances, (rapidly growing public debt, and high fiscal deficit), a low credit rating, low economic growth and others, could, as in the case of Poland, compensate for the impact of global trends and result in a stable exchange rate of the domestic currency.

ciation pressures that acted until December by purchasing a total of 525 million Euros. In this way, the NBS prevented the weakening of the competitiveness of the Serbian economy, alleviated the future depreciation pressures, and formed the foreign exchange reserves for the prevention of a sudden depreciation in the future. The depreciation pressures, "defense"of the dinar exchange rate and the sale of the foreign exchange rate have ensued from December. The NBS interventions in the interbank market intensified in February, so from December 2014 to the end of February, NBS has sold over 600 million Euros, while the exchange rate reached the level of about 116 dinars per euro.

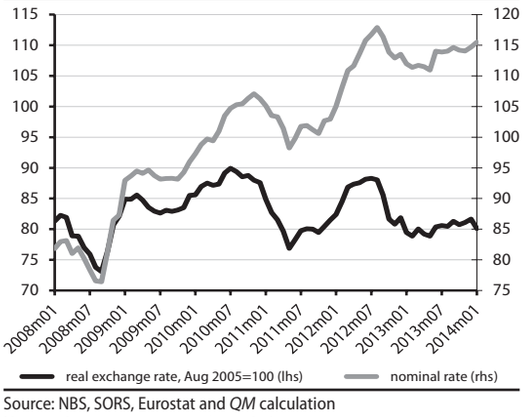
Global factors had the most impact on the exchange rate trend during the period appreciation and depreciation of the exchange rate. Following the FED decision on the postponement of reducing the volume of quantitative easing, appreciation pressures appeared as a result of calming down the reaction of financial market. Since January, FED has begun with gradual reduction in the volume of quantitative easing, which led to depreciation pressures not only in Serbia but also in most countries with emerging markets. Serbia is particularly exposed to the effects of FED's monetary policy due to a high fiscal imbalances and the fact that a large part of government securities is held by non-residents.

The excessively giving the importance to daily monitoring of the dinar exchange rate against the euro by all kinds of media and dramatized reporting which insists on changing the rate by a few tenths of per mile, can only have the purpose to fill a free media space, and usually does not contain any relevant information that would be of use for local businessmen, foreign investors and citizens in general. In contrast to the arbitrary assessment of the dinar exchange rate, based only on daily changes in its value, a certain amount of intention could be given to a long-term analysis of the exchange rate movement by economic experts, which certainly cannot be changed and communicated on a daily basis, and a serious economic journalism should be based on such an analysis.

Real depreciation reached its maximum at the end of Q4

The dinar really depreciated against the euro by 0.3% during Q4 and at the end of December, it was at approximately the same level as at the end of 2012 (Graph T5-8). However, since the beginning of 2014, not only due to a slightly higher inflation in Serbia, but also because of high deflation in the eurozone, the dinar really depreciated by about 2% in January. It is expected that this strengthening of the dinar will be only temporary, given that Serbia expects the reduction in the monthly rate of inflation, while further disinflationary trend in the eurozone would be unsustainable (January monthly deflation was 1.15%). Moreover, dinar continued to nominally depreciate during February, and a significant „drop"of the exchange rate has been prevented by a substantial NBS interventions in the interbank market. The continuation of the trend of moderate real dinar depreciation would improve the competitiveness of the economy with eligible costs of the foreign inflation and the costs of the loans.

Graph T5-8: Serbia: Nominal and Real RSD/ EUR Exchange Rate, Monthly Averages, 2008-2013



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