5. Prices and the Exchange Rate

After a very high rate in the first quarter, inflation slowed down significantly from the second quarter. Thus, the year-on-year inflation rate fell from 14.7% in April to 8.7% in October, with a clear tendency to further reducing. Such a dynamics is in accordance with the expectations set out in the previous number of QM. Disinflation was primarily caused by the drop in growth of the prices of foodstuffs, and then weak domestic demand, which is confirmed by relatively low and stable level of underlying inflation[1] (under 5% annualized) throughout the whole year. After the strong appreciation in the first half of the year, the nominal dinar/euro exchange rate depreciated during June and July, only to be mostly stable during August, with slight appreciation trend. The real exchange rate was stable in Q3, but due to the nominal appreciation and high inflation in the first half of the year, real appreciation from the beginning of the year to September amounted to about 9%.

Prices

Inflation significantly slows down in Q2 and Q3

The increase in prices (measured by the Consumer Price Index – CPI) stood at 1.2% during the second quarter (just 4.8% annualized), and in the third quarter Consumer Price Index dropped by -0.4% (i.e. -17% annualized). As a reminder, a price rise recorded in Q1 was 5.5 % (24.1% annualized), so it is evident that there was significant slowdown in inflation (see Table T5-1).

Table T5-1. Serbia: Consumer Price Index, 2007–2011.

	Consumer price index				
	Base index (avg. 2006 =100)	Y-o-y growth	Cumulative index	Monthly growth	3m moving average, annualized
2007					
dec	113.0	11.0	11.0	1.2	13.1
2008					
mar	116.4	13.6	3.0	1.6	12.7
jun	121.2	14.8	7.2	0.7	17.4
sep	121.4	10.9	7.5	1.0	0.9
dec	122.7	8.6	8.6	-0.9	4.4
2009					
mar	127.4	9.4	3.8	0.4	16.3
jun	131.3	8.3	7.0	0.0	12.6
sep	130.3	7.3	6.2	0.3	-2.9
dec	130.8	6.6	6.6	-0.3	1.6
2010					
mar	133.4	4.7	1.9	1.2	8.0
jun	136.7	4.2	4.5	0.4	10.4
sept	140.3	7.7	7.2	1.3	10.9
oct	141.7	8.9	8.3	1.0	15.5
nov	143.8	9.6	9.9	1.5	16.0
dec	144.2	10.2	10.2	0.3	11.7
2011					
jan	146.2	11.2	1.4	1.4	14.4
feb	148.3	12.6	2.9	1.5	13.3
mar	152.2	14.1	5.5	2.6	24.1
apr	153.8	14.7	6.7	1.1	22.6
may	154.4	13.4	7.1	0.4	17.5
jun	154.0	12.6	6.8	-0.3	4.8
jul	153.2	12.1	6.2	-0.5	-1.6
aug	153.1	10.5	6.2	-0.1	-3.3
sept	153.3	9.3	6.3	0.2	-1.7
oct	154.0	8.7	6.8	0.4	2.1

Source: SORS

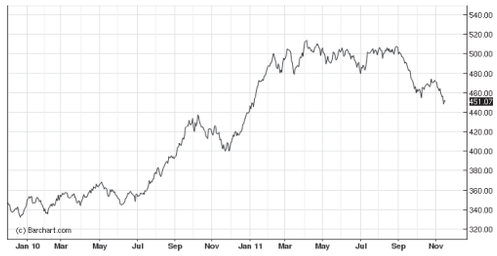
1 *QM* defines underlying inflation as the Consumer Price Index excluding the prices of food, energy, alcoholic beverages and tobacco. The share of underlying inflation in total inflation is 41%. Underlying inflation is conceptually similar to core inflation monitored by the NBS. The principal difference between underlying and core inflation is that underlying inflation excludes all foodstuffs, while core inflation excludes fresh fruit and vegetables only.

The y-o-y inflation rate stood at 8.7% in October, noticeably lower in relation to the 14.7% recorded in April (see Table T5-1). Furthermore, based on monthly data on inflation trends, it is almost certain that the y-o-y inflation rate will continue to decline throughout the fourth quarter of 2011, and the first quarter of 2012. Although the inflation rate will be slightly over the upper limit of the NBS target band at the end of 2011, we can expect that the inflation rate will return to the NBS target band probably at the end of Q1 2012.

...primarily because of the fall in prices of food

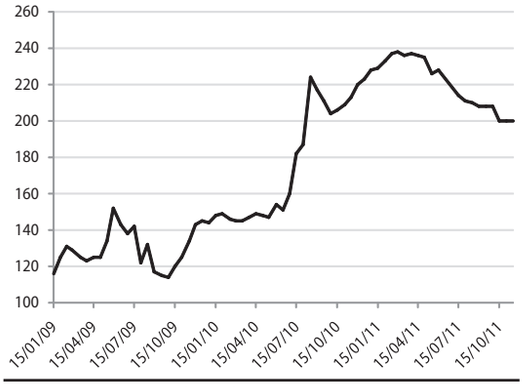
Inflation slowdown is primarily the result of the fall in food prices and it is in accordance with the expectations set out in the previous QM issue.[2] After an exceptionally high increase in global and local food prices, which lasted from the middle of the year 2010, in Q2 these prices stabilized (Graph T5-2 and Graph T5-3). In accordance with that trend is the dynamics of food products entering consumer price index. Thus, from July to December in 2010, food products from CPI have a rise in prices by 8.7%, and then from the beginning of 2011 to May, the prices increase by as much as 11.4%. But, from May to October, food products from CPI get cheaper, as much as by -3.9% (Table T5-2). Given their great share in CPI and such high price volatility, it is clear that the dynamics of the total CPI was determined precisely by the dynamics of food products price movements.

Graph T5-2. World: Movements in the Thomson Reuters/Jefferies CRB Foodstuffs, 2010–2011



Source: www.barchart.com

Graph T5-3. Serbia: Movements in the Prodex Index (Novi Sad Commodity Exchange) 2007-2011



Source: Novi Sad Commodity Exchange

Inflation Dynamics over 2011 is, primarily, the result of food price movement...

Total CPI growth, from the beginning of 2011 to May, stood at 7.1%, and out of which, as much as 4 percentage points (or about 56% of total rise) is the consequence of rise in the price of food products (Table T5-4). In addition, over this period, overall inflation was significantly driven by the price growth of electricity (about 13% of total rise), tobacco (around 8% of total rise) and oil derivates (about 4% of total rise). These four groups of products accounted for nearly 80% of total growth in prices from the beginning of the year to May (Table T5-4). In contrast, from May to October, food prices have a disinflationary effect. A total drop of CPI from May to October amounted to -0.3%, and the food prices contribution reached as much as -1.3 percentage points.

2 As a reminder, in the last issue we have brought the expectation that inflation at the end of 2011 could be around 8%; based on the current dynamics of inflation seems likely that inflation will be slightly below this level.

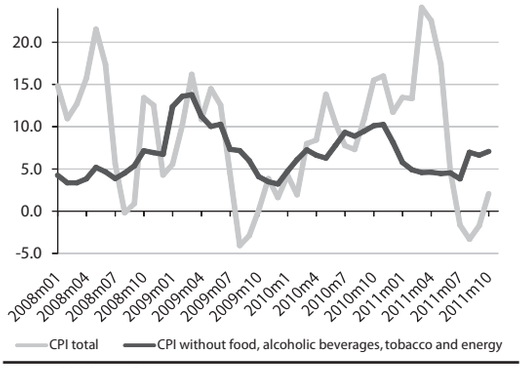
Table T5-4. Serbia: Consumer Price Index: Contribution to Growth by Selected Components

	Share in CPI (in %)	Price increase from the begining of 2011 until May	Contribution to overall CPI increase (in pp)	Price increase May - October 2011	Contribution to overall CPI increase (in percentage points
Total	100.0	7.1	7.1	-0.3	-0.3
Food and non-alcoholic beverages	37.8	11.0	4.2	-3.3	-1.3
Food	34.1	11.4	3.9	-3.9	-1.3
Alcoholic beverages and tobacco	5.1	12.8	0.6	-0.6	0.0
Tobacco	3.8	16.0	0.6	-1.3	0.0
Clothing and footwear	6.0	-0.3	0.0	1.7	0.1
Housing, water, electricity,gas and other fuels	15.1	7.1	1.2	1.0	0.2
Electricity	6.6	13.5	0.9	0.0	0.0
Furniture, household equipment, routine maintenance	4.9	2.1	0.1	4.8	0.2
Health	4.3	5.0	0.2	-0.4	0.0
Transport	11.0	6.0	0.6	2.0	0.2
Oil products	4.7	10.1	0.4	2.6	0.1
Communications	3.5	-1.8	-0.1	5.2	0.2
Other items	12.3		0.3		0.1

Source: SORS and QM estimates

...while underlying inflation remains stable in the most part of the year

Graph T5-5. Serbia: CPI and Underlying Inflation Trend, Annualized Rates, in %, 2008–2011



Source: SORS and *QM* estimates

Over a bigger part of the year, underlying inflation was low and stable. Apart from August, monthly underlying inflation rate in all other months of the year 2011 stood at around 0.3% to 0, 4%, i.e. below 5% annualized (Graph T5-5). The only exception is August, when underlying inflation was considerably higher (as much as 1.1%), but this was the immediate consequence of the increase in the price of landline telephony. Immediately after that, monthly underlying inflation rate, in September and October, drops again below 0.4%. Underlying inflation is more reliable indicator of medium-term price movement trend than is total inflation, as it excludes products with prices that are highly volatile (primarily food and energy). Low and stable underlying inflation level resulted from the low level of domestic demand, but, to some extent, it was the consequence of dinar's appreciation in the first six months of the year.

Exchange Rate

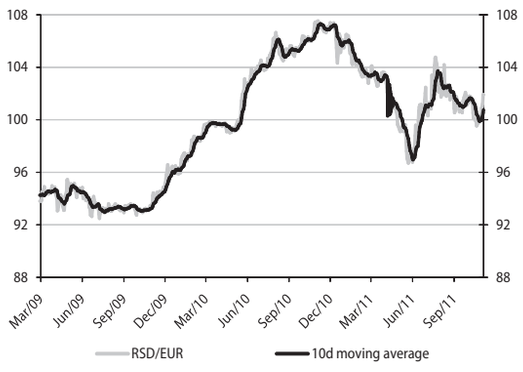
After the appreciation in the first part of the year, and then depreciation over June, nominal dinar/euro exchange rate remained stable over Q3. From the end-2010 to May 2011, Dinar dramatically appreciated against euro; nominal appreciation from the middle of December in 2010 to May in 2011, reached nearly 10% (Table T5-6). This appreciation is closely associated with the substantial inflows of portfolio investments directed to government securities (see Graphs T5-8 and T5-9 shown in the previous issue of QM). Owing to the slowdown in portfolio inflows, slight corrections are seen, hence the depreciation during June. Following that, dinar/euro exchange rate stabilized throughout third quarter, as did in October and the first half of November (Graph T5-6). These movements resulted in strengthening of the nominal dinar/euro exchange rate for about 3,5%, compared to the beginning of the year.

Real dinar/euro exchange rate appreciated for about 10% since the beginning of the year

After the appreciation in the first six months of the year, real dinar/euro exchange rate remained stable in Q3. Over the first part of the year, Serbian currency recorded a strong real appreciation against euro, which was a direct result coming from nominal appreciation and relatively high inflation over this period. Thus, the real dinar exchange rate against euro grew roughly 10% stronger in comparison to the end-2010 (Graph T5-7). In Q3, inflation decelerated and nominal

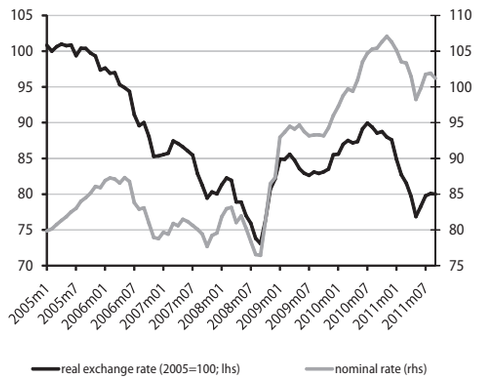
exchange rate stabilized, consequently making the real exchange rate stable during that period. At the end of the third quarter real euro/dinar exchange rate stood at approximately same level as it was in the end of year 2007 and in the beginning of year 2008.

Graph T5-6. Serbia: Daily RSD/EUR exchange rate, 2009–2011



Source: NBS

Graph T5-7. Serbia: Nominal and Real RSD/EUR Exchange Rate, Monthly averages, 2005–2011



Source: NBS, SORS and *QM* estimates

Table T5-8. Serbia: RSD/EUR Exchange Rate, 2006–2011

	Nominal				Real [5]			
	exchange rate (FX)[1]	base index[2] (2005=100)	y-o-y index[3]	cumulative index[4]	real FX[5] (2005=100)	y-o-y index[3]	cumulative index[4]	USD/EUR rate[6]
	monthly exchange rate							
2006								
December	78.7812	95.0	91.7	91.7	85.4	87.7	87.7	1.3210
2007								
December	79.5669	96.0	101.0	101.0	80.0	93.8	93.8	1.4563
2008								
March	83.1319	100.3	102.8	104.5	81.9	93.7	102.4	1.5516
June	80.2460	96.8	98.9	100.9	77.0	89.5	96.2	1.5556
September	76.4226	92.2	96.3	96.0	73.1	90.0	91.3	1.4387
December	87.3002	105.3	109.7	109.7	82.1	102.6	102.6	1.3482
2009								
March	94.4951	114.0	113.7	108.2	85.6	104.4	104.2	1.3041
June	93.7408	113.1	116.8	107.4	82.9	107.7	101.0	1.4027
September	93.2990	112.5	122.1	106.9	82.9	113.4	100.9	1.4554
December	95.9833	115.8	109.9	109.9	85.5	104.1	104.1	1.4597
2010								
March	99.7048	120.2	105.5	103.9	87.5	102.3	102.4	1.3576
June	103.5079	124.8	110.4	107.8	89.2	107.5	104.3	1.2219
September	105.4352	127.2	113.0	109.8	88.6	106.8	103.6	1.3043
October	106.3318	128.2	114.1	110.8	88.8	106.8	103.8	1.3891
November	107.0668	129.1	113.6	111.5	88.0	105.4	102.9	1.3675
December	106.2771	128.2	110.7	110.7	87.6	102.4	102.4	1.3222
2011								
January	105.1350	126.8	108.1	98.9	84.9	99.1	96.9	1.3368
February	103.5239	124.8	104.8	97.4	82.7	95.1	94.4	1.3667
March	103.3352	124.6	103.6	97.2	81.5	93.2	93.1	1.3998
April	101.4395	122.3	102.0	95.4	79.7	91.4	90.9	1.4435
May	98.2374	118.5	97.3	92.4	76.9	88.0	87.8	1.4306
June	99.7960	120.4	96.4	93.9	78.3	87.8	89.4	1.4390
July	101.7663	122.7	97.2	95.8	79.8	88.7	91.1	1.4246
August	101.9105	122.9	96.8	95.9	80.1	89.6	91.4	1.4432
September	101.2112	122.1	96.0	95.2	80.0	90.3	91.3	1.3767
October	100.5981	121.3	94.6	94.7	..	..	..	

Source: NBS, Eurostat

1) Monthly average, official daily NBS mid rate

2) Ratio of fx in Column 1 and average fx during the year 2005

3) Ratio of fx in Column 1 and fx for the same period in previous year

4) Cumulative is the ratio of the given month and December of previous year

5) The calculation of the real exchange rate takes into account Eurozone inflation. Index calculation: RE = (NE/p) x p*, where: RE - real fx index; NE -nominal fx index; p - Serbia RPI index; p* - Euro area CPI index

6) Period average

Note: Y-o-y averages for annual data, quarterly averages for quarterly data.