



NATIONAL BANK OF SERBIA

**ANALYSIS OF PROFITABILITY
OF DINAR AND FX SAVINGS**

October 2013

Analysis of profitability of dinar and FX savings

Introduction

From end-2001 to September 2013, dinar savings in the Republic of Serbia increased from RSD 1,559 mln to RSD 23,704 mln, or fifteen times over. The structure of dinar savings shows a rise in long-term deposits from 5.2% in 2001 to 6.1% in 2013. In the same period, FX savings went up from EUR 7,782 mln (RSD 911,234 mln) to EUR 8,134 mln (RSD 932,228 mln). Like those denominated in dinars, FX savings show an increase in long-term deposits by 16.8 pp.

As the volume of FX savings is still much higher than that of dinar savings, this year again the NBS carried out a comparative analysis of the profitability of dinar versus FX savings.

The analysis of profitability of dinar versus FX savings was first conducted in October 2010¹. The results of that analysis showed that from January 2001 to August 2010, it was more profitable to save in dinars than in FX in a greater number of sub-periods observed.

The NBS revisited this topic in October 2011 to analyse the profitability of saving in dinars versus FX in the period ending October 2011. In addition, the NBS analysed the profitability of dinar and FX savings placed on deposit for a year around the World Savings Day 2010 (31 October). Both analyses confirmed that saving in dinars was more profitable than saving in FX in a greater number of sub-periods observed, and/or over the last year².

Ahead of the World Savings Day 2013, the NBS decided to do another round of testing the profitability of dinar savings relative to FX savings. This time, the NBS analysed profitability in the period ending October 2013 with a special emphasis on savings placed on deposit for a year around the World Savings Day 2012. The results of that analysis only confirmed the earlier findings. Savings in dinars placed on deposit for a year around the World Savings Day 2012 proved more profitable than savings in FX. The analysis further confirmed that saving in dinars was also more profitable in the period 2001–2013.

1. Data

In the analysis of savings profitability by period, January 2001–October 2013, interest on dinar and FX savings was calculated based on the methodology and assumptions used in the October 2010 analysis. It is important to note, however, that the interest rates on FX savings used in the analysis after September 2010 are the official rates, not the assumed ones.

In the calculation of interest income from savings placed around the World Savings Day 2012, we used the official NBS statistics on interest rates on one-year dinar and FX deposits.

¹ For more details see:

http://www.nbs.rs/export/sites/default/internet/english/90/analize/Analysis_dinar_and_FX_savings_2011.pdf

² Ibid.

2. Analysis

As in 2011, two comparative analyses were conducted – Profitability of savings by period, January 2001–October 2013 and Profitability of savings placed on deposit for a year at the time of the World Savings Day 2012.

2.1. Profitability of savings by period, January 2001–October 2013

The first analysis compared the profitability of one-year dinar and FX savings, in the period January 2001–October 2013. The period observed was broken down into sub-periods as in the analysis of October 2011. Thus, the first period observed is January 2001–January 2002 and the last October 2012–October 2013, their total number equalling 142. Similar to the analysis carried out in 2011, this analysis started from the assumption that a depositor would term for a period of one year RSD 100,000 and its euro equivalent (re-calculated at the exchange rate valid on the date of deposit placement). Interest income on dinar savings remains tax-free, while tax on interest income from FX savings was raised in October 2012 from 10% to 15%.

2.2. Profitability of savings placed on deposit for a year at the time of the World Savings Day 2012

The second analysis focused on the profitability of dinar savings placed on deposit for a year on the occasion of the World Savings Day 2012 relative to the profitability of FX savings deposited at the same time and termed for the same period. The analysis assumes that one-year time deposits of RSD 100,000 and the euro equivalent of RSD 100,000 (re-calculated at the exchange rate valid on the date of deposit placement) were placed on 31 October 2012.

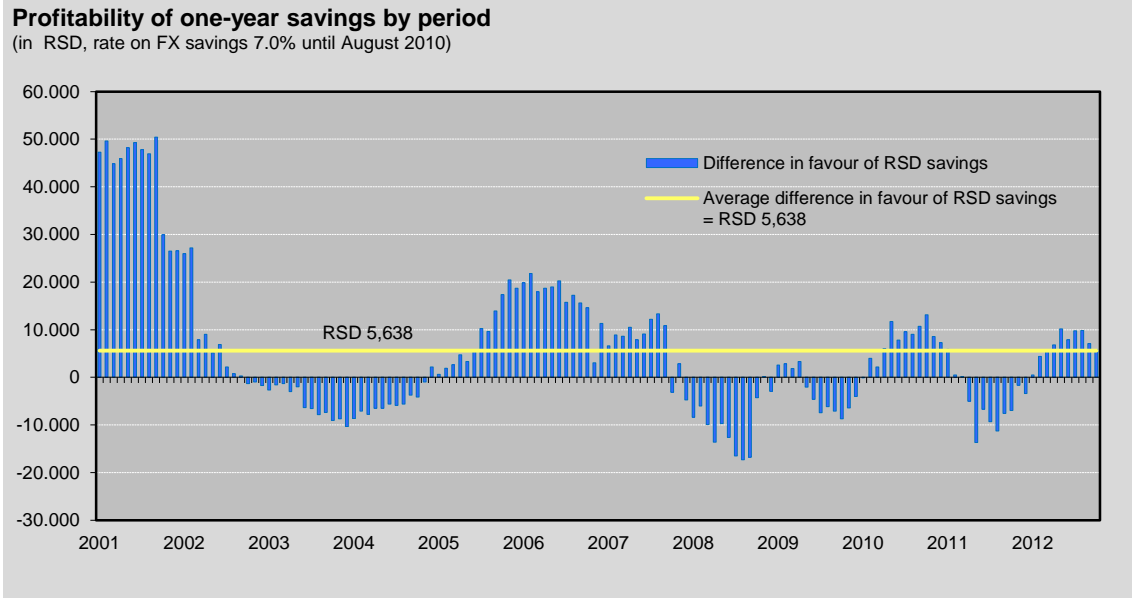
3. Results

3.1. Profitability of savings by period

When comparing one-year savings in dinars against FX savings of the same maturity at a per annum interest of 5.0% until August 2010 and using official interest rate as of September 2010³, dinar savings turn out to be more profitable in a greater number of sub-periods from 2001 to 2013 (92 periods in dinars and 50 periods in FX). Saving in dinars paid off more in a larger number of periods even at 7.0 interest on FX savings – in 85 periods in case of the former and in 57 periods in case of the latter. Greater profitability of one-year dinar savings relative to the same maturity FX savings (calculated at the rate of 7% until August 2010) is further confirmed by the average difference in favour of dinar savings, which equalled RSD 5,638 throughout the period under review (Chart).

³ Data on FX deposit rates are published as of September 2010.

Chart:



Source: NBS.

3.2. Profitability of savings placed on deposit for a year at the time of the World Savings Day 2012

When comparing dinar and FX savings placed on deposit for a year around the World Savings Day 2012 at the weighted average interest rates prevailing at the time (10.0% and 3.9%, respectively), the analysis shows that at the end of the term, a depositor who saved in dinars received RSD 6,012 (EUR 53) more than a depositor who saved in euros (Table 1-a).

Saving in dinars proved more profitable than saving in FX even when the maximum (Table 1-b) and/or minimum interest rates (Table 1-c) are applied. Namely, at the end of the term, a depositor who saved in dinars received RSD 7,433 (EUR 65) and/or RSD 5,258 (EUR 46) more than a depositor who saved in euros.

Dinar savings were more profitable than those denominated in euros even if they are calculated at the lowest (7.0%) and euro savings at the highest interest rate (4.5%) offered on the occasion of the World Savings Day. In that case, depositors who saved in dinars received RSD 2,433 (EUR 21) more than those who saved in FX (Table 1-d).

Table 1:

Type of savings	Date of deposit placement	Initial deposit	Middle RSD exchange rate (31/10/2012)	Interest rate (% p.a.)	Maturity date	Middle RSD exchange rate (10/10/2013)	Deposit at the end of term	
							Amount in RSD	Amount in EUR

a) average interest rate on dinar and FX deposits

1. Savings in RSD	31.10.2012.	100.000	113,2836	10,04	31.10.2013.	114,0936	110.040	964
2. Savings in EUR	31.10.2012.	883	113,2836	3,87	31.10.2013.	114,0936	104.028	912
3. Difference (1-2)							6.012	53

b) maximum interest rate on dinar and FX deposits

1. Savings in RSD	31.10.2012.	100.000	113,2836	12,00	31.10.2013.	114,0936	112.000	982
2. Savings in EUR	31.10.2012.	883	113,2836	4,50	31.10.2013.	114,0936	104.567	917
3. Difference (1-2)							7.433	65

c) minimum interest rate on dinar and FX deposits

1. Savings in RSD	31.10.2012.	100.000	113,2836	7,00	31.10.2013.	114,0936	107.000	938
2. Savings in EUR	31.10.2012.	883	113,2836	1,20	31.10.2013.	114,0936	101.742	892
3. Difference (1-2)							5.258	46

d) minimum interest rate on dinar and maximum interest rate on FX deposits

1. Savings in RSD	31.10.2012.	100.000	113,2836	7,00	31.10.2013.	114,0936	107.000	938
2. Savings in EUR	31.10.2012.	883	113,2836	4,50	31.10.2013.	114,0936	104.567	917
3. Difference (1-2)							2.433	21

4. Conclusion

Comparative analyses of the profitability of dinar and FX savings from January 2001 to October 2013 have shown that:

- one-year dinar savings paid off better than FX savings of the same maturity in the majority of periods observed,

- dinar savings placed on deposit on the occasion of the World Savings Day 2012 and termed for a period of one year were more profitable than FX savings of the same maturity,

- the stability of the exchange rate of the dinar over the last year has made saving in dinars much more lucrative than saving in FX during that period.

A decision to save in dinars and the profitability of such saving in the coming period will depend on macroeconomic stability, inflation rate, difference between interest rates on dinar and FX deposits, tax treatment of interest income from savings and movements in the exchange rate of the dinar.