



NATIONAL BANK OF SERBIA

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

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Analysis of profitability of dinar and FX savings

Introduction

In the last ten years, dinar savings in the Republic of Serbia increased from RSD 1,559 mln (December 2001) to RSD 15,699 mln (October 2011)¹, or ten times over. Though the volume of dinar savings remains modest in comparison to the volume of FX savings, their maturity structure shows a positive shift towards a greater share of long-term deposits (up from 5.2% in 2001 to 23.1% in 2011). At the same time, FX savings rose from EUR 352 mln (RSD 20,994 mln) to EUR 7,332 mln (RSD 742,235 mln), the share of long-term deposits also rising from 1.8% to 16.9%.

Considering that the volume of FX savings is much higher than that of dinar savings, one begins to wonder whether saving in foreign currency is really more profitable than saving in dinars. In October 2010, the National Bank of Serbia carried out an analysis of the profitability of dinar and FX savings². The results of that analysis have shown 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. Ahead of the World Savings Day (31 October), the National Bank of Serbia revisited this topic and analysed the profitability of saving in dinars and FX in the period ending with October 2011. In addition, the National Bank analysed the profitability of one-year dinar and FX savings termed on the occasion of the 2010 World Savings Day. Both analyses have confirmed that it was more profitable to save in dinars than in FX in a greater number of sub-periods observed, and/or over the last year.

1. Data

In the analysis of savings profitability by period, January 2001–October 2011, interest on dinar and FX savings was calculated based on the methodology and under the assumptions used in the October 2010 analysis.

The analysis of the profitability of savings deposits termed on the occasion of the 2010 World Savings Day relies on data on interest rates offered by banks at the time.

¹ As at 12 October 2011, operating data.

² For more information go to: <http://www.nbs.rs/internet/english/90/index.html>

2. Analysis

Two comparative analyses were conducted – Profitability of savings by period, January 2001–October 2011 and Profitability of savings termed on the occasion of the World Savings Day 2010.

2.1. Profitability of savings by period, January 2001–October 2011

Similar to the analysis carried out in October 2010, this one compared the profitability of one-year and three-month dinar and FX savings. This analysis however started from the assumption that each month a depositor would term for a period of one year and/or three months RSD 100,000 and its euro equivalent (re-calculated at the exchange rate valid on the date of deposit placement).

The period observed was broken down into sub-periods as in the analysis of October 2010. Thus, for one-year savings, the first period observed is January 2001–January 2002 and the last October 2001–October 2011, their total number equalling 118. As regards three-month savings, the first period observed is January 2001–April 2001, and the last July 2010–October 2011, their total number being 127.

2.2. Profitability of savings termed on the occasion of the World Savings Day 2010

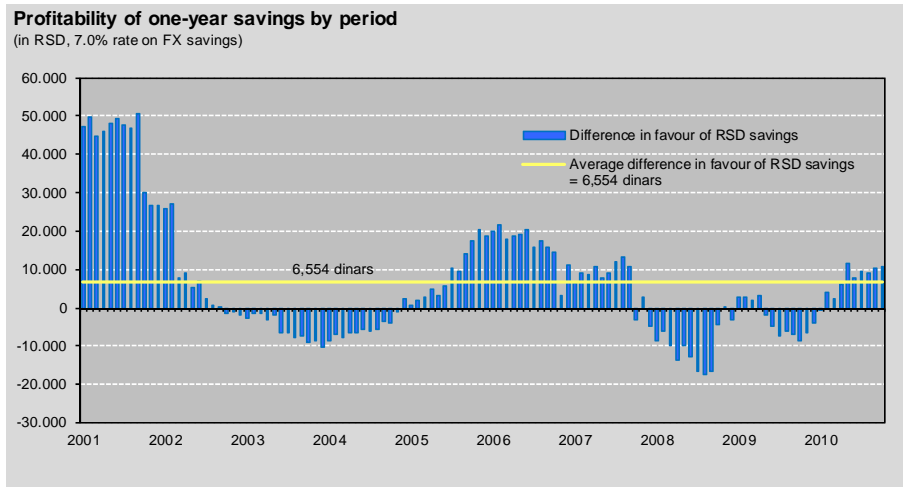
The second analysis focused on the profitability of dinar savings deposited on the occasion of the World Savings Day 2010 and termed for a period of one year relative to the profitability of FX savings deposited at the same time and termed for the same period. The analysis assumes that one-year time 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) are placed on 1 November 2010.

3. Results

3.1. Profitability of savings by period

When comparing one-year time savings in dinars against the same maturity FX savings with a per annum interest of 5.0%, dinar savings turn out to be more profitable in 77 out of 118 periods. Saving in dinars paid off more in a larger number of periods even at 7.0 and 7.5% interest on FX savings – in 70 periods in case of the former and in 68 periods in case of the latter. Greater profitability of one-year dinar savings relative to the same maturity FX savings is further confirmed by the average difference in favour of dinar savings, which equalled RSD 6,554 throughout the period under review (Chart 1).

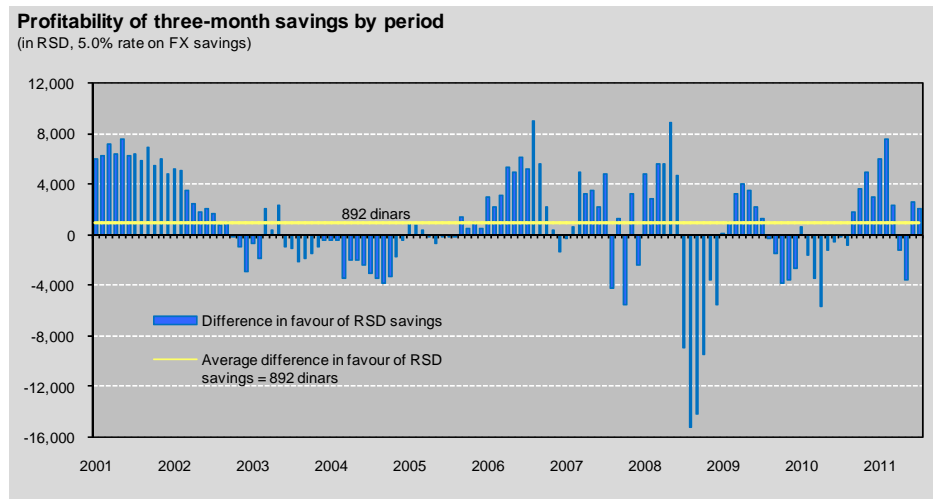
Chart 1:



Source: NBS.

The analysis shows that three-month time deposits in dinars were more profitable in a larger number of periods than those in FX. At a 5.0% p.a. interest on three-month FX deposits, savings in dinars proved more profitable in 73 periods and savings in FX in 54 periods. At an interest rate of 7.0% on FX savings, dinar savings continue to be more profitable in 69 periods. The outcome is similar even at a 7.5% interest on FX savings, in which case savings in dinars are more profitable in 67 periods. Greater profitability of three-month dinar savings relative to the same maturity FX savings is further confirmed by the average difference in favour of dinar savings, which equalled RSD 892 throughout the period under review (Chart 2).

Chart 2:



Source: NBS.

3.2. Profitability of savings termed on the occasion of the World Savings Day 2010

When comparing one-year dinar and FX savings termed on the occasion of the World Savings Day 2010 at the then average interest rates (13.4% and 6.6%, respectively), the analysis shows that at the end of the term, a depositor who saved in dinars received RSD 13,593 (EUR 134) more than a depositor who saved in euros (Table 1-a).

Table 1:

Type of savings	Date of deposit placement	Initial deposit	Middle RSD exchange rate (1/11/2010)	Interest rate in % p.a.	Maturity date	Middle RSD exchange rate (12/10/2011)	Deposit at the end of term	
							Amount in RSD	Amount in EUR

a) average interest rate on dinar and FX deposits

1. RSD savings	11.1.2010	100.000	107,4581	13,40	11.1.2011	101,2273	113.400	1.120
2. EUR savings	11.1.2010	931	107,4581	6,56	11.1.2011	101,2273	99.807	986
3. Difference (1-2)							13.593	134

b) maximum interest rate on dinar and FX deposits

1. RSD savings	11.1.2010	100.000	107,4581	18,00	11.1.2011	101,2273	118.000	1.166
2. EUR savings	11.1.2010	931	107,4581	7,75	11.1.2011	101,2273	100.816	996
3. Difference (1-2)							17.184	170

c) minimum interest rate on dinar and FX deposits

1. RSD savings	11.1.2010	100.000	107,4581	11,00	11.1.2011	101,2273	111.000	1.097
2. EUR savings	11.1.2010	931	107,4581	5,00	11.1.2011	101,2273	98.484	973
3. Difference (1-2)							12.516	124

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

1. RSD savings	11.1.2010	100.000	107,4581	11,00	11.1.2011	101,2273	111.000	1.097
2. EUR savings	11.1.2010	931	107,4581	7,75	11.1.2011	101,2273	100.816	996
3. Difference (1-2)							10.184	101

Saving in dinars proved more profitable than savings in FX even when calculations are made using the maximum (Table 1-b) and/or minimum interest rates (Table 1-c). Namely, at the end of the term, a depositor who saved in dinars would receive RSD 17,184 (EUR 170) and/or RSD 12,516 (EUR 124) more than a depositor who saved in euros.

Dinar savings were more profitable than those denominated in euros even if dinar savings are calculated at the lowest (11.0%) and euro savings at the highest interest rate (7.8%) offered on the occasion of the World Savings Day. In that case, depositors who saved in dinars received RSD 10,184 (EUR 101) more than those who saved in FX (Table 1-d).

4. Conclusion

Comparative analyses of the profitability of dinar and FX savings from January 2001 to October 2011 have shown that:

- one-year and three-month dinar savings paid off better than FX savings of the same maturities in a larger number of periods observed,

- dinar savings deposited on the occasion of the World Savings Day 2010 and termed for a period of one year were more profitable than FX savings of the same maturity even when dinar savings are calculated at the lowest and FX savings at the highest interest rate offered at the time.

Though one can never tell with certainty whether it will be more profitable to save in dinars or in FX in the coming period, this analysis clearly shows that in the last 11 years, as well as in the last year, it was more profitable to save in dinars. However, despite greater profitability of dinar savings, the majority of citizens continue to save in FX.