



NATIONAL BANK OF SERBIA

**ANALYSIS OF PROFITABILITY OF DINAR AND FX
SAVINGS – H1 2023**

Belgrade, August 2023

CURRENT TRENDS

In H1 2023, dinar savings rose by RSD 12.4 bn (12.9%) to **RSD 108.7 bn at end-June**, their highest end-of-month level on record. Also, FX savings increased by EUR 205.4 mn or 1.5%, to EUR 13.9 bn. What contributed to savings growth against the backdrop of persistent global uncertainty is the preserved macroeconomic and financial stability.

Though global inflationary pressures are weaker this year than last year, they remain relatively high despite the lowering of global energy and other primary commodity prices. Inflation in Serbia decelerated for the fourth consecutive month, measuring 12.5% y-o-y in July. Core inflation (excluding the prices of food, energy, alcohol and cigarettes) was considerably lower than headline inflation and measured 9.4% in July. Responding to heightened inflationary pressures and aiming to prevent second-round effects, i.e. to anchor inflation expectations, from April 2022 to August 2023 the NBS gradually increased the key policy rate, by 550 bp in total, to the present 6.50%. The rate was increased in 15 out of 17 months (May and August 2023 being exceptions). The interest rates on deposit and credit facilities were also raised, to 5.25% and 7.75%, respectively.

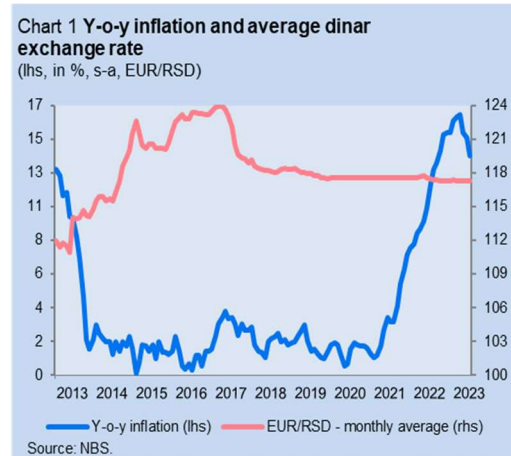
Relative exchange rate stability of the dinar against the euro was preserved in H1 2023. Appreciation pressures which prevailed since May 2022 (when the NBS net bought EUR 3.3 bn in the domestic interbank market until the end of that year) continued in 2023. They were interrupted only temporarily at the beginning of the year due to seasonal FX demand of energy importers – in January the demand in the FX market was higher than the supply, while the supply has been constantly above the demand since February. This year (until July) the NBS net bought EUR 2.4 bn in the FX market, exerting a crucial upward pressure on FX reserves which rose to EUR 23.1 bn at end-July 2023, their highest end-of-month level on record (since 2000). This level of FX reserves covers over six months' worth of imports of goods and services which is double the minimum required by international standards.

The stability of the domestic economy amid global crisis is also confirmed by the lower share of public debt in the projected GDP for 2023 (51.7% in June vs. 55.1% at end-2022).

The share of NPLs in total loans dropped significantly since the start of implementation of the NPL Resolution Strategy (2015), by 18.5 pp, to around 3% in May.

Fitch Ratings kept Serbia's credit rating at BB+ (with a stable outlook) in the first half of February and Standard&Poor's in the first half of April 2023. Standard&Poor's emphasized that a gradual increase in the

Dinar savings reached record high level again



The NBS continued to tighten monetary policy in order to mitigate inflationary pressures

The new highest level of FX reserves since 2000.

Low share of NPLs

key policy rate helped avert further heightening of inflationary pressures and that medium-term inflation expectations remained largely anchored owing to the credibility of monetary policy, tightening of monetary conditions and the maintained relative exchange rate stability. Further, the agency pointed out the credibility of the overall economic policy, the country's favourable long-term prospects, fiscal discipline, reduced financing needs and a downward public debt trajectory. At end-June, the IMF adopted the decision on successful completion of the first review of the results of Serbia's economic programme supported by a stand-by arrangement.

Global easing of inflationary pressures induced by lower energy prices coupled with less global supply chain disruptions pushed the risk premium down. At end-June, Serbia's risk premium on euro debt measured by EURO EMBIG equalled 307 bp (down by 82 bp), while the risk premium on dollar debt measured by EMBI, equalled 240 bp (down by 30 bp).

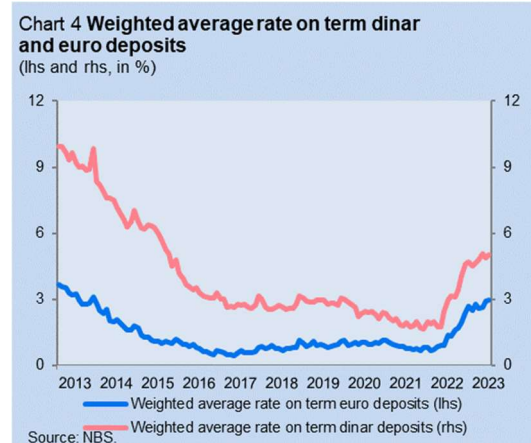
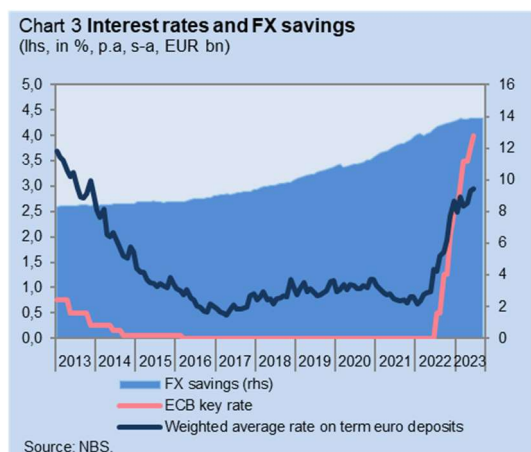
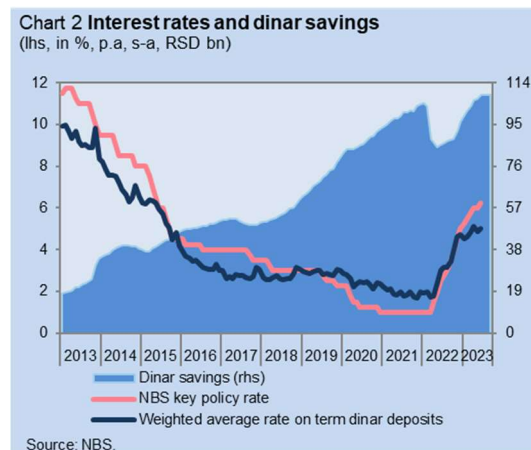
SAVINGS TREND¹

Despite multiple global crises in the recent years (the pandemic, the energy crisis, global inflation growth, geopolitical crisis), both dinar and FX savings have been on the rise as a reflection of depositors' trust in the domestic banking system. Dinar savings are increasing, exhibiting favourable changes in the maturity composition in favour of long-term deposits. This is an indicator of the preserved trust in the domestic currency.

In the last eleven years, dinar savings rose more than six times and in mid-2023 reached record RSD 108.7 bn. In this period, FX savings went up as well by over three quarters (76%) from EUR 7.9 bn in mid-2012 to EUR 13.9 bn in mid-2023.

The gradual increase in the NBS key policy rate from April 2022 to July 2023 (from 1.0% to 6.5%) and the rise in interest rates in the international money market consistent with the monetary policy tightening by leading central banks have pushed interest rates on household term deposits up in 2023 (since April 2022, the weighted average interest rate on dinar and euro savings went up by 3.3 pp and 2.1 pp, respectively).

The share of dinar in total savings increased by 4.35 pp, from 1.89% in June 2012 to 6.24% in June 2023.



¹ Residents and non-residents.

PAST ANALYSES

As of June 2018, the NBS has been publishing regular semi-annual analyses of the profitability of dinar and FX savings. In addition, the analyses of savings profitability are also published in quarterly Reports on Dinarisation of the Serbian Financial System and ahead of the World Savings Day.

ANALYSIS OF SAVINGS PROFITABILITY

The Analysis of Profitability of Dinar and FX Savings (semi-annual) was prepared for the period June 2012 - June 2023.

The profitability of savings was analysed considering two aspects: the rollover of savings and profitability by sub-periods, for three-month, one-year and two-year maturity.

Interest was calculated based on the weighted average interest rates on new deposits termed for up to one year and one-to-two years, while the income at maturity of FX savings was reduced by tax on interest income, which equals 15%² since October 2012.

Profitability of savings - rollover

The analysis of profitability of savings termed for one year, with rollover during 11 years (since June 2012) confirmed that a depositor who saved in dinars, placing a RSD 100,000 deposit, would receive, at the end of the savings term in June 2023, almost RSD 48,000 (over EUR 400) more than a depositor who deposited the equivalent amount in euros during the same period (calculated at the average RSD/EUR exchange rate in the month of depositing).

At end-June 2023, a depositor saving in dinars would have RSD 163,243 or EUR 1,392, and a depositor saving in foreign currency would have RSD 115,452 or EUR 984.

² Interest income tax for savings in dinars is not payable since 2005.

Table 1 Profitability of savings - rollover in last eleven years

Type of savings	Termed	Initial deposit	Dinar exchange rate*	Maturing	Dinar exchange rate*	Deposit at the end of term period	
						in RSD	in EUR**
Savings in RSD	June 2012	100,000	115.7713	June 2023	117.2731	163,243	1,392
Savings in EUR	June 2012	864	115.7713	June 2023	117.2731	115,452	984
Difference in favour of dinar savings RSD (EUR)						47,791	408

* Average monthly middle exchange rate of the dinar against the euro

** For euro savings, amount after deduction by interest income tax.

Table 1a Profitability of savings by year - rollover in last eleven years

	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years
Savings in RSD	109,930	120,022	128,615	136,152	140,550	144,345	148,083	152,274	155,807	158,658	163,243
Savings in EUR	894	918	934	941	946	950	955	959	967	973	984
Difference in favour of dinar savings RSD (EUR)	7,991 (70)	13,931 (121)	16,060 (133)	20,040 (162)	25,103 (206)	32,088 (272)	35,509 (301)	39,464 (336)	42,081 (358)	44,363 (378)	47,791 (408)

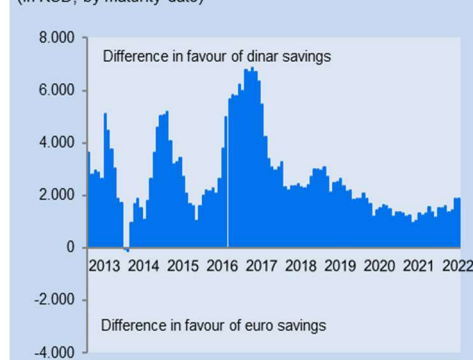
Profitability of savings – by subperiods without rollover

The analysis of profitability of savings of different maturities (three months, one year and two years) by subperiods without rollover, showed that in the past 11 years dinar savings termed for a year were more lucrative than euro savings in as many as 119 out of 121 annual subperiods³ (Chart 5). A person who deposited RSD 100,000 with one year maturity in June 2022 would receive almost RSD 1,900 more in June 2023 compared to a depositor placing RSD 100,000 in the euro equivalent in the same period.

In case of deposits termed for three months, dinar savings were found to be more lucrative than euro savings in 117 quarterly subperiods (a total of 130 subperiods were observed)⁴, that is, in 90% of cases, and in case of savings termed for two years in all 109 observed subperiods.⁵

Virtually, in the period of 11 years it was more profitable to save in dinars regardless of the maturity period.

Chart 5 Profitability of one-year savings (in RSD, by maturity date)



Source: NBS.

³ In case of savings of one-year maturity, the first observed subperiod is June 2012 – June 2013, the second observed subperiod is July 2012 – July 2013, etc. The last observed subperiod is June 2022 – June 2023.

⁴ In case of savings with three-month maturity, the first observed subperiod is June 2012 – September 2012, the second observed subperiod is July 2012 – October 2012, etc. The last observed subperiod is March 2023 – June 2023.

⁵ In case of savings with two-year maturity, the first observed subperiod is June 2012 – June 2014, the second observed subperiod is July 2012 – July 2014, etc. The last observed subperiod is June 2021 – June 2023.

Table 2 Profitability of savings termed for a year

Type of savings	Termed	Initial deposit	Dinar exchange rate*	Interest rate (in %, p.a.)**	Maturing	Dinar exchange rate*	Deposit at the end of term period	
							in RSD	in EUR**
Savings in RSD	June 2022	100,000	117.4297	2.89	June 2023	117.2731	102,890	877
Savings in EUR	June 2022	851	117.4297	1.35	June 2023	117.2731	101,013	861
Difference in favour of dinar savings - one year							1,877	16
Difference in favour of dinar savings - three months							721	6
Difference in favour of dinar savings - two years							3,892	33

* Average monthly middle exchange rate of the dinar against the euro.

** Weighted average rate on dinar and euro deposits termed for up to one year - new business.

***For euro savings, amount after deduction by interest income tax.

CONCLUSION

The analysis of savings profitability conducted for the period of 11 years, from June 2012 until June 2023 shows that it is more lucrative to save in dinars regardless of the maturity period (short or long). The results of this analysis confirmed that:

- **in the period of 11 years, savings in dinars termed for a year and rolled over after the maturity period were more lucrative** than such savings in euros;
- **savings in dinars termed for a year without rollover were more lucrative** than euro savings of the same maturity in **almost all observed annual subperiods (over 98%)**;
- **savings in dinars termed for three months** were more lucrative than euro savings in **most observed quarterly subperiods (90%)**;
- **savings in dinars termed for a longer period (two-year maturity) were more lucrative** than euro savings in **all observed two-year subperiods (100%)**.

Dinar savings more lucrative than FX savings both in the short and long run

Greater profitability and attractiveness of dinar savings rides on the back of:

1. years-long macroeconomic and financial stability (relatively stable dinar exchange rate against the euro, record high FX reserves);

2. higher interest rates on dinar than on euro savings and no taxation of dinar savings (income from euro savings is taxed at a 15% rate);
3. monetary and fiscal policy measures which enabled the preservation of macroeconomic stability amid multiannual global crisis.