



NATIONAL BANK OF SERBIA

**ANALYSIS OF PROFITABILITY OF
DINAR AND FX SAVINGS – H1 2021**

Belgrade, July 2021

CURRENT TRENDS

This year, despite the pandemic, household savings continued up, reaching new record highs. Savings in the domestic currency rose faster than FX savings, which illustrates citizens' trust in stability of the dinar and the financial system. In line with the strategy of dinarisation of the financial system, the NBS promotes dinar savings and underlines their higher profitability compared to FX savings, which gains particular importance in conditions of uncertainty caused by the pandemic.

Despite the crisis persisting for more than one year, Serbia managed to maintain low and stable inflation in H1 2021, at 2.3% on average. In June 2021, y-o-y inflation measured 3.3%.

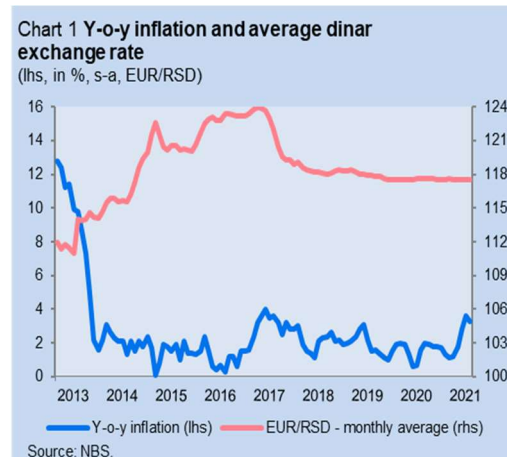
After customary depreciation pressures in January, appreciation pressures dominated in the remainder of the year. Calibrated interventions of the NBS on both sides of the FX market resulted in continued stable movements of the RSD/EUR exchange rate in H1 2021, so the dinar's value against the euro remained almost unchanged relative to December 2020. In H1 2021, the NBS net bought EUR 320.0 mn in the FX market.

In H1 2021, FX reserves gained EUR 600 mn, rising to EUR 14.1 bn. This additionally strengthened the resilience of the country's external position, which is particularly important amid the pandemic-induced uncertainty. Thanks to adequate FX reserves management, the share of gold also went up, to 12.3% at end-June 2021, bearing in mind that at end-2012 it measured only 5.7%. FX reserves ensure more than six-months' coverage of goods and services imports, twice more than the standard of adequate coverage.

Due to the prolongation of the pandemic and uncertainty as to its winding down, as an addition to packages of fiscal and monetary measures adopted with a view to mitigating negative effects on the economy and citizens, this year the Serbian Government adopted the third fiscal package of assistance to corporates and citizens worth around RSD 260 bn. As opposed to the first two packages adopted last year, this package of measures also included large enterprises. The package assumes the payment of three times half the minimum wage for employees, payment of another two minimum wages for catering and tourist companies and independent artists, sectoral assistance for city hotels and automobile transporters, assistance for adult citizens amounting to EUR 60, additional assistance for pensioners worth EUR 50, as well as assistance for the unemployed, for the vaccinated and for citizens of Kosovo and Metohija.

The Republic of Serbia successfully issued the eurobond worth EUR 1.0 bn in the international financial market, for the first time with the

Savings growth despite the spread of coronavirus pandemic



FX reserves went up, with the rising share of gold in their composition

The Serbian Government adopted the third package of measures to mitigate the effects of the pandemic.

Borrowing at the lowest rate through new eurobond issue

12-year maturity, at the coupon rate of 1.65% and yield rate of 1.92%, attracting the demand significantly higher than the planned sale amount.

Dinar government bonds with maturities of 7Y, 10Y and 12Y as of end-June 2021 were included in JP Morgan indices of local currency bonds of emerging economies, which directly spurred the interest of foreign investors in our securities and increase in their price (drop in yields).

Thanks to the full coordination of monetary and fiscal policies, the cost of government borrowing dropped considerably, which helped to reduce the currency risk. Despite the pandemic, public debt of the central government edged down from 57.4% of GDP at end-2020 to 55.6% of GDP at end-May 2021.

The last year saw the adoption of stimulating monetary measures whose application continued into the first half of 2021.

At end-2020, the NBS lowered the key policy rate to 1.00%, its lowest level in the inflation targeting regime.

Timely and adequate measures of the NBS enabled additional dinar and FX liquidity for the banking sector, ensuring unhindered lending (repo auctions, additional and regular FX swap auctions).

Also, in order to ensure additional FX liquidity for the Serbian banking sector, in case of need, the NBS and the European Central Bank made an agreement to extend the preventive repo line until March 2022, with the possibility to use up to one billion euros for up to three months term.

The share of NPLs in total loans at end-2020 fell to 3.7% which is a drop of over 80% since the beginning of implementation of the NPL Resolution Strategy (since 2015) and remained at that level in late May 2021.

In March 2021 the rating agency Moody's raised Serbia's credit rating from Ba3 to Ba2, based on low and stable inflation, relative stability of the exchange rate, reduced external imbalances and full coverage of the current account deficit by the FDI inflow. The agency further stated the adequate level of FX reserves, increased economic diversification and reduced fiscal risks. In the same month, Fitch Ratings affirmed Serbia's credit rating at BB+, with the stable outlook, offering similar arguments for their decision – low and stable inflation, rise in FX reserves, as well as the resilience of the Serbian economy to the global shock induced by the pandemic. Also, in June, Standard & Poor's kept Serbia's credit rating (BB+) one step away from investment grade, confirming stable outlook and stating that the credit rating is supported by the credible monetary policy and moderate public debt.

In June 2021, the International Monetary Fund approved a new cooperation programme for Serbia, advisory in nature, which is yet another confirmation of the credible economic policy.

Dinar bonds of the Republic of Serbia included in JP Morgan indices

NPLs kept at the last year's level

Serbia's credit rating upgrade and a new programme with the IMF as a confirmation of preserved macroeconomic performances in crisis conditions

Serbia's risk premium for the US dollar debt, measured by the EMBI index, equalled 128 bp at end-2020 and stayed at that level at end-June 2021 as well. Serbia's risk premium for euro debt stood at 144 bp at end-June 2021, which is a negligible increase relative to end-2020 (143 bp).

SAVINGS TREND

Dinar savings (both resident and non-resident) in the period since June 2012 until June 2021 rose almost six times (by RSD 81.2 bn) to RSD 98.8 bn at end-June 2021, the highest level thus far. The major part of total growth (RSD 45.5 bn) was realised in the last three years, which saw more vibrant growth in dinar savings, despite the fall in interest rates and negative effects of the pandemic. The maturity composition of dinar savings also improved, reflected in the rise in long-term deposits (notably deposits termed for one-to-two years and two-to-five years).

FX savings (residents and non-residents included) also recorded growth in the last nine years, though somewhat more moderate (54.0%) compared to dinar savings, from EUR 7.9 bn (RSD 911.2 bn) in June 2012 to EUR 12.1 bn (RSD 1,424.6 bn) in June 2021.

Monetary accommodation of the NBS (lowering of the key policy rate from 2.25% to 1.0% in the period since March 2020 until the end of that year) and movement of interest rates in the international money market drove interest rates on term household deposits further down.

The average weighted interest rate on household dinar savings dropped by 7.99 pp to 1.95% in the period from June 2012 until June 2021. The fall was also recorded for interest rate on euro savings, which dropped by 3.34 pp to 0.77% in the period observed.

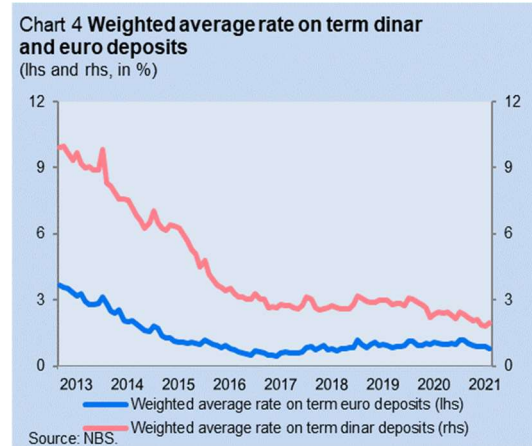
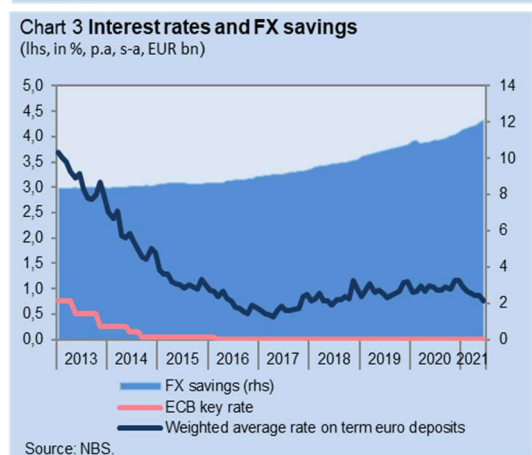
Thanks to the rise in dinar savings, the share of dinar in total savings edged up by 4.59 pp, from 1.89% in June 2012 to 6.49% in June 2021.

EARLIER ANALYSES

In the previous eleven years, the NBS published several analyses of profitability of dinar and FX savings¹. Besides, the NBS regularly published press releases on profitability of dinar and FX savings, ahead of every World Savings Day. Since June 2018, the NBS has published analyses of profitability of dinar and FX savings semi-annually (in January and July).

¹ For more details see: <http://www.nbs.rs/internet/english/90/index.html>.

Rise in dinar and FX savings to new highest levels



ANALYSIS OF SAVINGS PROFITABILITY

The Analysis of Profitability of Dinar and FX Savings was prepared for the period June 2012 – June 2021.

Two analyses of profitability of savings were carried out – deposit rollover and profitability of savings by subperiods (termed for three months, one year and two years).

Interest income was calculated based on 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 since October 2012 equals 15%².

Profitability of savings – rollover

The analysis of profitability of savings termed for one year, with rollover during nine years would confirm that the depositor who saved in dinars, placing a RSD 100,000 deposit, would receive, at the end of the savings term in June 2021, over RSD 42,000 (EUR 358) more than the 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 the end of the savings term, the depositor who saved in dinars would receive RSD 155,807 or EUR 1,325, while the depositor who saved in euros would receive RSD 113,726 or EUR 967.

Table 1 Profitability of savings - rollover

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 2021	117.5703	155,807	1,325
Savings in EUR	June 2012	864	115.7713	June 2021	117.5703	113,726	967
Difference in favour of dinar savings						42,081	358
RSD (EUR)							

* 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

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

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

The second profitability analysis covers three maturities (three months, one year and two years), by subperiods, without rollover.

Profitability of savings – by subperiods without rollover

As for savings termed for one year, a total of 97 subperiods³ were observed within the last nine years and the analysis showed that in as many as 95 subperiods it was more profitable to save in the domestic currency than in euros (Chart 5). A person depositing RSD 100,000 in June 2020 would receive around RSD 1,500 more in June 2021 compared to a depositor placing RSD 100,000 in the euro equivalent in the same period.

In savings termed for three months a total of 106 subperiods were observed, where in 93 subperiods⁴ dinar savings turned out more remunerative than euro savings, while in savings termed for two years, in all 85 subperiods observed⁵ it was more profitable to save in the domestic currency.

Thus, regardless of the maturity period (short or long term), the same conclusion holds true – in the previous nine years it was more profitable to save in dinars.

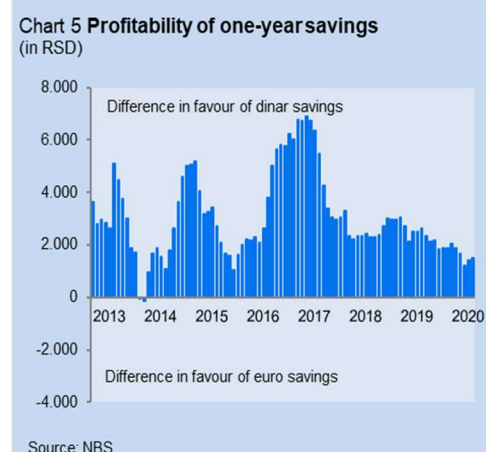


Table 2 Profitability of savings - without rollover

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 2020	100,000	117.5852	2.32	June 2021	117.5703	102,320	870
Savings in EUR	June 2020	850	117.5852	0.97	June 2021	117.5703	100,812	857
Difference in favour of dinar savings - one year							1,508	13
Difference in favour of dinar savings - three months							330	3
Difference in favour of dinar savings - two years							5,702	49

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

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

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

CONCLUSION

This semi-annual analysis of savings profitability, for the period from June 2012 until June 2021, confirm that for a series of years, it has

³ In case of savings with one-year maturity, the first observed period is June 2012 – June 2013, the second observed subperiod is June 2013 – June 2014 etc. The last observed subperiod is June 2020 – June 2021.

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 2021 – June 2021.

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 2019 – June 2021.

been more lucrative to save in the domestic currency. More precisely, the analysis showed that:

- **In the last nine years dinar savings rolled over for a one-year term was more lucrative** than the rolled-over euro savings;
- **Dinar savings with one-year maturity were more lucrative** than savings in euros **in almost all observed subperiods;**
- **In the majority of subperiods observed, dinar savings** termed for **three months** were more remunerative than euro savings;
- **In all subperiods observed, dinar savings** termed for **two years** were **more lucrative** than euro savings.

In summing up the above conclusions, it follows that **dinar savings were more profitable than euro savings across all maturities observed.**

Higher profitability of dinar savings is supported by:

1. Macroeconomic, financial and fiscal stability over a series of years (primarily low inflation, relatively stable dinar exchange rate, high level of FX reserves, low level of NPLs, moderate public debt);
2. Relatively higher interest rates on dinar compared to euro savings;
3. More favourable tax treatment of savings in the domestic currency (interest on dinar savings is non-taxable, while interest on euro savings is subject to 15% tax);
4. Timely and adequate measures of monetary policy (cutting key policy rate, ensuring liquidity, prescribing moratorium in repayment of liabilities etc.) and fiscal policy (three packages of assistance to corporates and households), which helped to preserve macroeconomic stability in conditions of a health crisis.

* * *

As in the previous period, the NBS will continue to contribute to the dinarisation process by emphasizing the importance of dinar savings and their profitability. In the coming period the NBS will continue to regularly publish the semi-annual Analyses of Profitability of Dinar and FX Savings, the quarterly Report on Dinarisation of the Serbian Financial System, and the relevant press releases ahead of the World Savings Day.

Dinar savings were more profitable both in the short and in the long term in the last nine years.

As so far, the NBS will remain committed to the dinarisation process.
