



NATIONAL BANK OF SERBIA

**ANALYSIS OF PROFITABILITY OF
DINAR AND FX SAVINGS – H2 2020**

Belgrade, February 2021

CURRENT TRENDS

Household savings continued up in H2 2020 despite the coronavirus pandemic, which regained momentum as of October 2020. As so far, dinar savings rose at a faster pace than FX savings. Given the NBS's commitment to the dinarisation of the financial system, encouraging greater use of the domestic currency is of great importance, particularly in times of crisis.

Low and stable inflation, of 1.8% on average, continued into H2 2020. In December 2020, y-o-y inflation stood at 1.3%.

The dinar remained stable against the euro until end-2020, i.e. it was almost unchanged relative to end-June 2020. Such trend was supported primarily by the timely measures of the NBS and its activity in the IFEM – it sold EUR 420.0 mn net in H2 2020, much less than in H1 (EUR 1,030.0 mn net).

In H1 2020, the Serbian Government adopted a package of measures to support citizens and businesses (tax measures, direct support to the private sector, a moratorium on dividend payments until the end of the year, and one-off aid to all adult Serbian citizens). A significant part of this package were liquidity and working capital loans with government guarantee for micro, small and medium-sized enterprises and entrepreneurs more severely affected by the crisis.

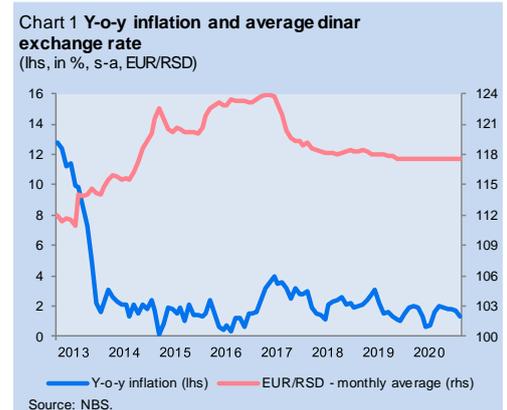
The Serbian Government issued in the international financial market a ten-year eurobond worth USD 1.2 bn, at a coupon rate of 2.125% and the yield rate of 2.35%, these being the lowest rates so far. To hedge public debt from FX risk, a swap transaction was used for the first time – the dollar liabilities were substituted with euro liabilities, and the lowest ever rate of euro financing was achieved: 1.066%. The bulk of proceeds from this transaction (USD 962.7 mn) was used for early payment of dollar eurobonds issued in 2011.

In 2020, FX reserves were maintained at an adequate and stable level (they increased by EUR 113.2 mn), whereby the resilience of the domestic financial system to external shocks was further reinforced.

The NPL ratio continued to decline. In November 2020, it stood at 3.5%, down by 0.2 pp compared to June. Since the start of implementation of the NPL Resolution Strategy in 2015, this ratio declined by more than 80%.

The adoption of monetary and fiscal stimuli continued in H2 2020. After it introduced robust measures of monetary accommodation and liquidity support to the banking sector in H1 2020, in H2 (December) the NBS cut the key policy rate by additional 25 bp (total cuts in 2020 amounted to 125 bp) to 1.00% – its lowest level in the inflation targeting regime. It also further narrowed the interest rate corridor in December

A rise in savings despite worsening epidemiological situation



The government issued the eurobond at the lowest rate so far

(from ± 1.0 pp to ± 0.9 pp relative to the key policy). Deposit and lending facilities rates now stand at 0.9% and 1.9%, respectively.

By organising auctions of repo purchase of dinar government and corporate securities, and regular and additional FX swap auctions, and through bilateral purchases of government dinar securities, the NBS provided to banks additional dinar and FX liquidity in order to make financing conditions even more favourable. To support the economy, it included dinar corporate bonds in monetary operations, which banks can sell in the secondary market or use them as financial collateral to obtain dinar liquidity from the NBS.

In H2 2020, the NBS adopted several regulations facilitating the approval and repayment of corporate and household loans. At the start of the pandemic, it introduced a moratorium on all loans which lasted for three months and was extended in July by another two months.

In July, stimulating measures were adopted within the Guarantee Scheme, contributing to better conditions of dinar corporate lending. Banks approving dinar loans under the Guarantee Scheme at more favourable interest rates, which are by at least 50 bp lower than the maximum rate (1M BELIBOR + 2.5 pp) are entitled to the remuneration rate higher by 50 bp compared to the regular rate on the amount of allocated required reserves in dinars. Until end-2020, total EUR 1.4 bn worth of loans were approved under the Guarantee Scheme, with almost 80% going to small and medium-sized enterprises.

In addition, the NBS enabled loan refinancing or the extension of the repayment term for additional two years for loans approved before the pandemic (consumer loans, motor vehicle purchase loans, cash and other loans, excluding housing loans and current account overdrafts).

In mid-August, the NBS adopted a new set of measures, extending the repayment term for housing loans by five years at most. The mandatory downpayment for first-time homebuyers was reduced from 20% to 10%, as well as the minimum degree of completion of a building whose purchase can be financed by bank housing loans.

Moreover, the NBS established with the ECB a pre-emptive repo line, in case of need for additional FX liquidity for the Serbian banking sector. The line has still not been activated.

In September 2020, Fitch affirmed Serbia's credit rating at BB+, with a stable outlook. In explaining its decision, the agency stated that inflation in Serbia was preserved at a low and stable level, that FX reserves were boosted and public finances put in order. In December, Standard & Poor's also affirmed Serbia's rating at BB+, with a stable outlook, stating similar arguments behind its decision – preserved price, financial and fiscal stability, relative stability of the exchange rate, orderly public finances and higher FX reserves. Serbia's risk premium, measured by EMBI, went up by 109 bp to 128 bp in late December. In

FX savings at a stable level; NPLs at a historical low

The NBS and Government adopted a number of measures to mitigate the effects of the pandemic

Serbia's credit rating affirmed; the PCI-supported program with the IMF successful; concluded

January and February, it moved at a low level (32 bp on average). When the pandemic broke out, it went up, mirroring elevated uncertainty in the international market.

In late 2020, the Government adopted additional measures, concerning the payment of another minimum wage for employees in catering, hotel and tourist sectors and car rental agencies, as well as one-off aid for pensioners. All this led to a successful conclusion of the fifth (final) review of Serbia's economic programme with the IMF.

SAVINGS

Owing to preserved macroeconomic stability, the negative effects of the health crisis on the economy have been mitigated. This supported a further rise in savings, meaning that citizens trust the stability of the dinar and the domestic financial system.

Dinar savings (of residents and non-residents) increased by over five times from December 2012 to December 2020 (RSD 75.2 bn). **In late 2020, they reached a record high of RSD 93.1 bn.** The major part of total growth (RSD 42.9 bn) was achieved in the **past three years**, when dinar savings grew at a quicker pace. In addition, **positive changes in the maturity structure** of dinar savings took place, reflected in an **increased share of long-term deposits** (one–two and two–five year deposits).

FX savings (of residents and non-residents) have also been rising in the past eight years, although somewhat more moderately (38.2%) compared to dinar savings – from EUR 8.3 bn (RSD 940.7 bn) in December 2012 to EUR 11.4 bn (RSD 1,344.6 bn) in December 2020.

Monetary policy easing by the NBS (the key policy rate was cut from 2.25% to 1.0%) and movements in interest rates in the international money market drove further down the rates on term household deposits.

From December 2012 to December 2020, the weighted average rate on dinar household savings fell by 7.57 pp to 2.35%. The rate on euro savings also declined, by 2.99 pp to 1.16 %.

The share of dinar in total savings was up by 4.60 pp in the past eight years – from 1.87% at end-2012 to 6.47% at end-2020.

The dinarisation of the financial system being its strategic commitment, the NBS will continue to promote dinar savings, highlighting their higher profitability compared to FX savings.

Dinar and
FX savings rose to
new historical highs

EARLIER ANALYSES

The NBS periodically published analyses of profitability of dinar and FX savings¹ in the past ten years. In addition, press releases on profitability of dinar and FX savings were regularly published ahead of every World Savings Day. As of June 2018, the NBS has published analyses of profitability of dinar and FX savings semi-annually (in January and July).

ANALYSIS OF SAVINGS PROFITABILITY

The Analysis of Profitability of Dinar and FX Savings was prepared for the period December 2012 – December 2020.

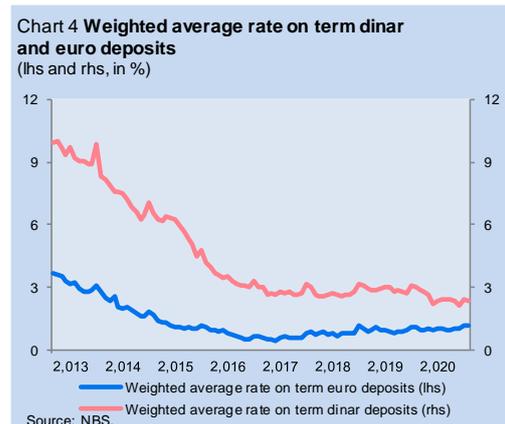
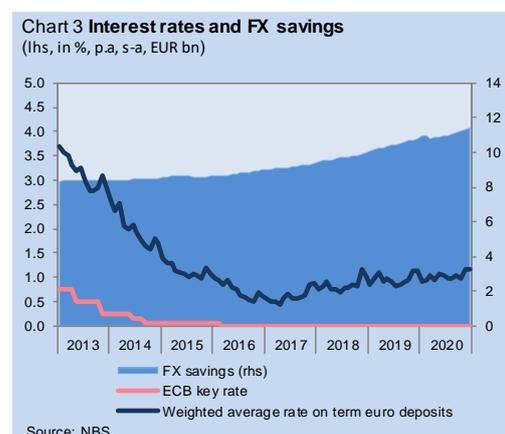
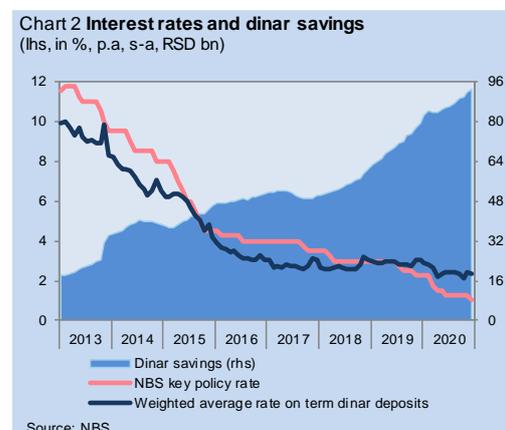
Two analyses of profitability of savings were carried out – deposit rollover and profitability of savings by subperiods (termed for three months, one year and two years).

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 profitability of savings in dinars and euros with rollover was observed for an eight-year period. This analysis started from the assumption that the amounts of RSD 100,000 and RSD 100,000 in the euro equivalent (calculated at the average exchange rate in the month of depositing) were deposited in December 2012 with one year maturity, and that savings (increased by interest) were rolled over upon the expiry of the maturity for one additional year at interest rates at the time when the deposits were placed until December 2019 (the last rollover).

Under these assumptions, at the end of the eighth year, the person who saved in dinars would receive over RSD 33,600 (close to EUR 300) more than the person who saved in euros.



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

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

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	Dec 2012	100.000	113.5413	Dec 2020	117.5777	147.891	1.258
Savings in EUR	Dec 2012	881	113.5413	Dec 2020	117.5777	114.280	972
Difference in favour of dinar savings RSD (EUR)						33.611	286

* 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

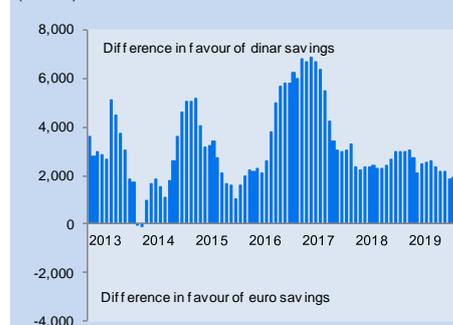
	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years
Savings in RSD	109.890	118.967	126.616	131.744	135.605	139.673	143.863	147.891
Savings in EUR	911	931	942	949	953	957	963	972
Difference in favour of dinar savings RSD (EUR)	5,426 (47)	5,819 (48)	11,902 (98)	14,659 (114)	22,108 (186)	26,490 (224)	30,622 (261)	33,611 (286)

Profitability of savings – by subperiods without rollover

Also analysed was the profitability of dinar savings relative to euro savings with different maturities – three months, one year and two years. The assumption was that in the period from December 2012 the amount of RSD 100,000 and RSD 100,000 in the euro equivalent (calculated at the average exchange rate in the month of depositing) was termed each month at the then current interest rates with the said maturities. Unlike the analysis of savings with rollover where savings profitability was observed over the entire eight-year period, in this analysis each maturity was observed separately, and profitability was assessed separately for each subperiod.

As for savings termed for one year, a total of 85 subperiods were observed³ and the analysis showed that in as many as 83 subperiods it was more profitable to save in the domestic currency than in euros (Chart 5). A person depositing RSD 100,000 in December 2012 would receive around RSD 1,900 more in December 2020 compared to a depositor placing RSD 100,000 in the euro equivalent in the same period.

Chart 5 Profitability of one-year savings (in RSD)



Source: NBS.

³ In case of savings with one-year maturity, the first observed subperiod is December 2012 – December 2013, the second observed subperiod is January 2013 – January 2014, etc. The last observed subperiod is December 2019 – December 2020.

In savings termed for three months a total of 94 subperiods were observed, where in 81 subperiods⁴ dinar savings turned out more remunerative than euro savings, while in savings termed for two years, in all 73 subperiods observed⁵ it was more profitable to save in the domestic currency.

Thus, regardless of the maturity period (three months, one or two years), the same conclusion holds true – in the previous eight 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	Dec 2019	100.000	117.5383	2.80	Dec 2020.	117.5777	102,800	874
Savings in EUR	Dec 2019	851	117.5383	1.04	Dec 2020.	117.5777	100.918	858
Difference in favour of dinar savings - one year							1,882	16
Difference in favour of dinar savings - three months							362	3
Difference in favour of dinar savings - two years							5,189	44

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

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

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

CONCLUSION

The latest analysis of profitability of savings shows one more time that it was more lucrative to save in dinars in the period December 2012 – December 2020. More precisely, the analysis showed that:

- **dinar savings with one-year maturity (and rolled over) were more lucrative** than savings in euros **in the past eight years;**
- **dinar savings with one-year maturity were more lucrative** than savings in euros **in almost all subperiods observed;**
- **dinar savings with three-month maturity were more lucrative** than savings in euros **in most subperiods observed;**
- **dinar savings with two-year maturity were more lucrative** than savings in euros **in all subperiods observed;**

Dinar savings were more lucrative both over the short and long-term, in the past eight years

⁴ In case of savings with three-month maturity, the first observed subperiod is December 2012 – March 2013, the second observed subperiod is January 2013 – April 2013, etc. The last observed subperiod is September 2020 – December 2020.

⁵ In case of savings with two-year maturity, the first observed subperiod is December 2012 – December 2014, the second observed subperiod is January 2013 – January 2015, etc. The last observed subperiod is December 2018 – December 2020.

The afore said leads to the conclusion that **dinar savings were more lucrative than savings in euros both in the short and long run.**

Higher profitability of dinar savings resulted from:

1. monetary and financial stability over a longer period (primarily low inflation, a relatively stable exchange rate, financial stability and a high level of FX reserves);
2. relatively higher interest rates on dinar savings than on euro savings;
3. more favourable tax treatment of dinar savings – dinar savings are not subject to tax, while interest on euro savings is subject to a 15% tax rate.
4. timely adopted monetary and fiscal policy measures which helped the corporates and households mitigate the effect of the crisis caused by the pandemic.

* * *

By regularly preparing analyses of profitability of dinar and FX savings, the NBS continues to promote dinar savings and stimulate dinarisation, which remains its commitment in the coming period as well. The NBS will 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.

In the coming period
the NBS will continue to
focus on
dinarisation
