



**NATIONAL BANK OF SERBIA**

**REPORT ON DINARISATION  
OF THE SERBIAN FINANCIAL SYSTEM**

**First Quarter Report 2021**

May 2021

## **Introductory note**

A more extensive use of the dinar in the Serbian financial system and better currency matching of income and expenses of the non-bank sector would improve the country's financial stability, lessen the risk of exchange rate volatility in the most vulnerable sectors of the economy, and enhance the effectiveness of monetary policy. To support the process of dinarisation, in April 2012 the National Bank of Serbia (NBS) and the Government of the Republic of Serbia signed the Memorandum on the Strategy of Dinarisation of the Serbian Financial System. Having in mind that macroeconomic stability was ensured and financial stability reinforced since the signing of the 2012 Memorandum, the NBS and the Government signed a new Memorandum on the Dinarisation Strategy in December 2018, affirming their resolve to additionally support the process of dinarisation and contribute to the stability of the financial system. In the new Memorandum on the Dinarisation Strategy these institutions reflected on the results of the measures and activities undertaken so far and, based on them, defined additional measures and activities that will ensure further dinarisation and reduce FX risk in the system.

Pursuant to the Memorandum, the NBS and the Government have committed to monitoring and analysing the degree of dinarisation and to regularly informing the public about the measures and activities undertaken, as well as about the progress achieved in the process of dinarisation. For that purpose, the NBS prepares and publishes the quarterly Report on Dinarisation of the Serbian Financial System as one of its supporting communication tools. The Report provides information about developments in the dinar market and highlights measures and activities taken or planned by market players and regulatory authorities with a view to supporting the process of dinarisation. Making this information accessible to the wider public will help raise awareness of the need to hedge against the exchange rate risk, as well as understanding of the measures and activities to be taken by the NBS and the Government in order to encourage additionally the process of dinarisation of the Serbian financial system.

Reports on Dinarisation of the Serbian Financial System are available on the NBS website ([www.nbs.rs](http://www.nbs.rs)).

## **Dinarisation strategy**

The dinarisation strategy in the Republic of Serbia rests on three inter-connected pillars.

**The first pillar** is the most general, but also the most important one. It envisages monetary and fiscal policy measures to maintain macroeconomic stability and ensure conditions for sustainable economic growth.

**The second pillar** consists of measures to promote development of the dinar securities market and introduce new dinar products in the domestic financial market.

**The third pillar** aims to promote hedging against the risks associated with exchange rate exposure in the non-bank sector and to discourage further build-up of those risks. The NBS will lead the efforts in this field, working together with the banking sector on introducing and developing basic FX risk hedging instruments.

#### **ABBREVIATIONS**

**rhs** – right-hand scale

**lhs** – left-hand scale

**mn** – million

**bn** – billion

**pp** – percentage point

**Q** – quarter

Other generally accepted abbreviations are not cited.

**Contents**

- I. Dinarisation of the Serbian financial system ..... 1
  - 1. Dinarisation of receivables ..... 1
    - Corporate and household receivables ..... 1
  - 2. Deposit dinarisation..... 4
    - Corporate and household deposits ..... 4
    - New corporate and household deposits..... 5
    - Dinar and FX savings ..... 6
    - Is it more profitable to save in dinars or foreign currency? ..... 8
  - 3. Dinarisation of public debt ..... 9
    - Primary market of government securities ..... 9
    - Secondary market of dinar government securities.....10
- II. FX hedging instruments .....11
  - 1. NBS FX swap auctions.....11
  - 2. FX hedging instruments .....12
- Table A Indicators of dinarisation of receivables, loans and deposits.....13
- Table B Currency structure of household savings and public debt .....14
- Table C Overview of measures and activities contributing to dinarisation of the Serbian financial system .....15

# I. Dinarisation of the Serbian financial system

In Q1 2021, the degree of dinarisation of outstanding corporate and household loans recorded a new high (37.9%). The degree of dinarisation of new loans also rose.

The share of dinar in total corporate and household deposits decreased, in terms of both outstanding amounts and new business, partly as a result of lower dinar deposits typical for the beginning of the year. Dinar savings continue to post record high levels.

Dinarisation of public debt of the Republic of Serbia stayed at its historical maximum (30.5%).

## 1. Dinarisation of receivables

Dinarisation of corporate and household receivables recorded growth, in terms of outstanding amounts and new business, driven by favourable terms of borrowing in dinars and continued dinar lending to corporates under the Guarantee Scheme.

### Corporate and household receivables

Corporate and household receivables continued growing, supported by past NBS monetary policy easing, approval of loans under the Guarantee Scheme, effects of measures aimed at sustainable household lending and low interest rates in the domestic money market and in the euro area.

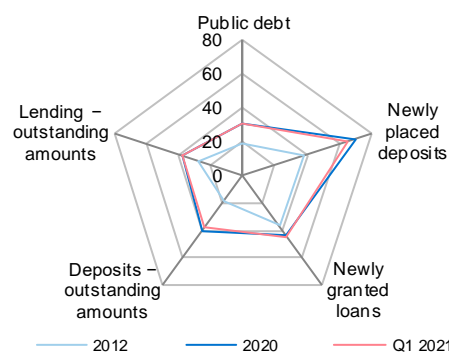
In Q1 2021, these receivables increased by a nominal RSD 26.2 bn, rising much faster than in the previous quarter.

The rise in receivables was almost entirely driven by the dinar component (by RSD 25.3 bn) which boosted the dinarisation of corporate and household receivables by 0.6 pp, to 37.9%. This is an increase of 4.7 pp from Q1 2020 and the highest value of this indicator on record.

Excluding the exchange rate effect, this indicator measured 37.6% at end-Q1, up by 0.5 pp compared to the end of the previous quarter.<sup>1</sup>

Dinarisation of corporate receivables rose by 1.3 pp, to 22.3%, reflecting an increase in dinar receivables (by RSD 19.3 bn) and a concurrent decrease in FX receivables (by RSD 14.9 bn). Such changes in the loan currency composition were particularly pronounced for working capital loans, the most dominant category of corporate loans (44%). Under the impact of past NBS monetary

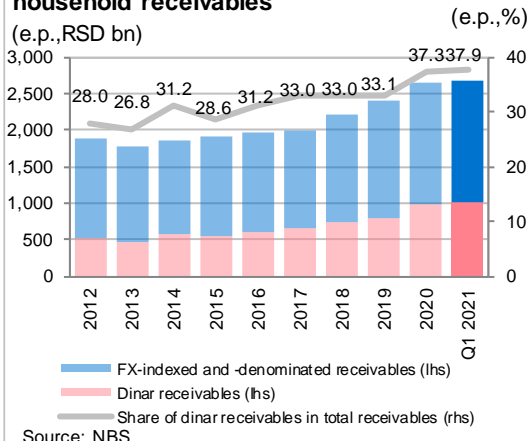
Chart I.1 Dinarisation indicators\* (%)



\*Apart from public debt, all categories include the household and corporate sector component. Within each category - the share of dinar component in total of the category.

Sources: NBS, Ministry of Finance.

Chart I.1.1 Share of dinar receivables in total corporate and household receivables



Source: NBS.

<sup>1</sup>Calculated at the exchange rate of the dinar against the euro, US dollar, Swiss franc, pound sterling and Japanese yen as at 30 September 2014, taking into account the currency structure of loan receivables.

policy easing and the Guarantee Scheme, interest rates offered by banks on dinar loans for this purpose continued decreasing and reached in Q1 their lowest level so far (2.8%), getting still closer to the interest rates on FX-indexed loans (2.2%).

As for loans for other purposes, investment loans recorded the highest increase in Q1 (RSD 8.0 bn). These loans were still approved primarily in foreign currency (87%) and were, beside working capital loans, the most dominant category of corporate loans (43%). Interest rates on dinar loans for this purpose continued to be the lowest so far, on average (3.2%), and slightly higher compared to FX-indexed loans for the same purpose (3.0%).

Loans under transaction accounts recorded significant growth, too (RSD 4.1 bn), while loans for other non-categorised purposes went down (by RSD 4.8 bn).

Dinarisation of corporate receivables is expected to increase in the coming period as a result of continued implementation of the Guarantee Scheme and low interest rates on dinar loans. Dinarisation will continue to benefit from the Guarantee Scheme that was expanded in April (by additional EUR 500 mn, to EUR 2.5 bn) and extended by one more year, until end-July 2022. Further, positive impact on dinarisation is also anticipated from **the second Guarantee Scheme**, adopted in April. This one will enable the affected companies to use liquidity and working capital loans under certain terms and to refinance all types of loans (including investment loans). The second Guarantee Scheme is worth EUR 500 mn and applies to loans disbursed until end-July 2022.

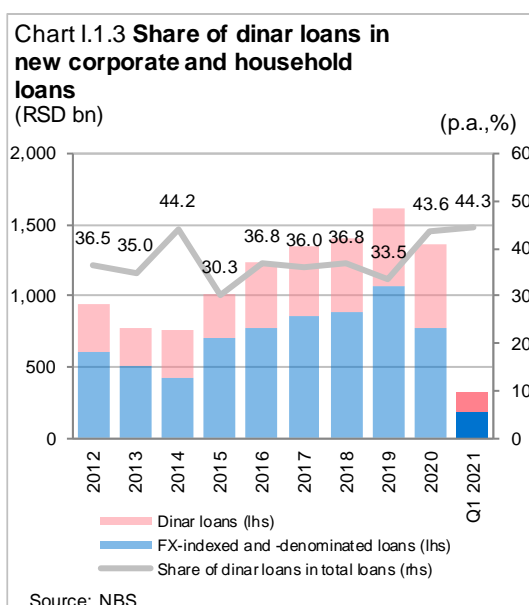
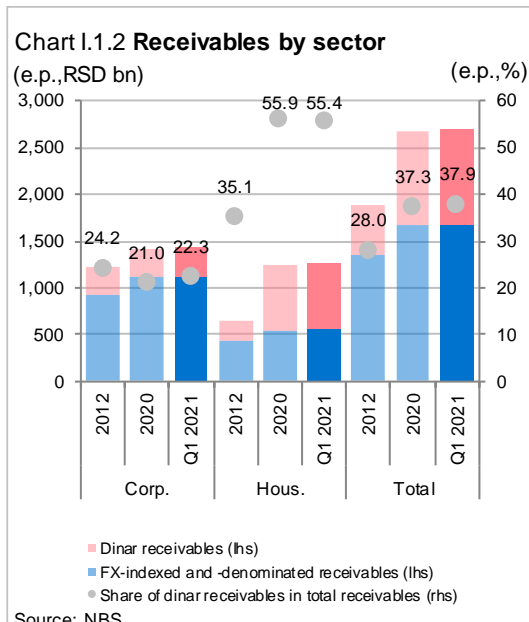
**Dinarisation of household receivables recorded a decline** for the second quarter in a row. At end-Q1, this indicator measured 55.4%, down by 0.5 pp from the end of the previous quarter, or up by 0.3 pp compared to Q1 2020.

Reduced dinarisation of household receivables reflects continued growth in housing loans approved by banks, as a rule, with an FX clause and under extremely favourable conditions.

In Q1, the rise in FX-indexed household receivables exceeded by several times the rise in dinar receivables, which remain dominated by cash loans, as the most disbursed type of household loans (44%).

#### *New corporate and household loans*

In Q1 2021, banks approved new corporate and household loans in the amount of RSD 330.3 bn, down by RSD 59.4 bn q-o-q, which is a usual decrease for the beginning of the year.



As for the composition of these loans, **dinar loans accounted for 44.3%, up by 1.8 pp q-o-q**, or by 0.7 pp compared to the last year's average (43.6%). **In addition to the effect of NBS monetary policy easing on interest rates, conducive to the rise in the dinarisation of loans are Government and NBS measures relating to the Guarantee Scheme, as well as other measures supporting dinar lending.**

The bulk of bank loans (RSD 204.1 bn) were extended to **corporates**. The amount approved was lower than in the previous quarter, but this is typical for the beginning of the year.

**In Q1 the degree of dinarisation of new corporate lending measured 30.3%, up by 1.8 pp from the previous quarter**, or down by 1.2 pp compared to the last year's average. The rise in the dinarisation of new corporate loans is a result of lower approval of FX-indexed and FX loans compared to dinar loans.

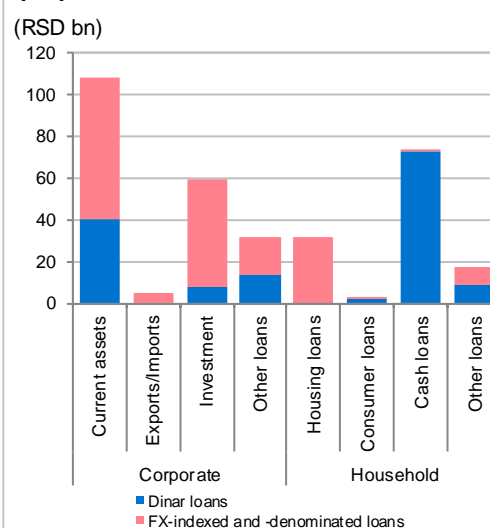
In terms of loan purpose, a reduction in lending was recorded for all individual categories except for loans for export and import financing. **Over a half of the total amount of new loans refers to working capital loans** characterised by a higher degree of dinarisation (37.6%) compared to loans for other purposes. Similar as in the previous quarter, **these loans were largely used by micro enterprises and SMEs covered by the Guarantee Scheme.**

In Q1, the amount of new investment loans went down by almost a third q-o-q, accounting for 29% of the total amount of corporate lending. As in the previous period, these loans were largely approved in foreign currency (87.0%), primarily to micro enterprises and SMEs.

**Interest rates on new dinar corporate loans declined significantly in Q1, so they were at the same level as or lower than interest rates on FX-indexed and FX loans.** In Q1, the weighted average interest rates on new dinar loans declined by 0.5 pp, to 2.8% (the lowest level since 2010 when comparable data became available). The sharpest decrease was recorded for the interest rates on working capital loans (by 0.6 pp, to 2.8%), and other non-categorised loans (by 0.4 pp, to 2.6%), while only the interest rates on dinar investment loans remained unchanged (3.2%).

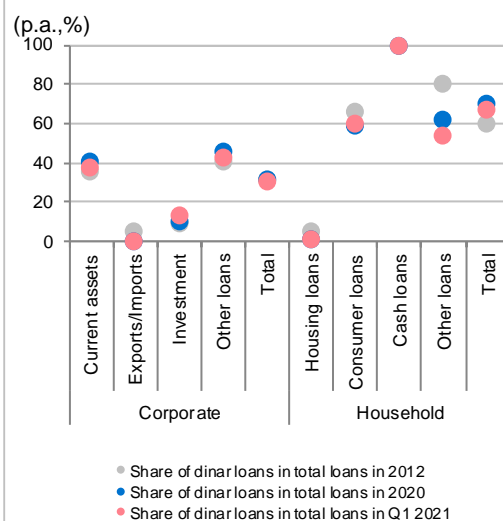
**Though to a lesser degree than the rates on dinar loans, interest rates on FX-indexed and FX corporate loans also went down** in this period (by 0.3 pp on average), amounting to 2.5%. The reduction was the most pronounced (by 0.3 pp each) in the most dominant loan categories – investment loans (to 3.0%) and working capital loans (to 2.2%).

Chart I.1.4 New corporate and household loans in Q1 2021 - by purpose



Source: NBS.

Chart I.1.5 Dinarisation of new corporate and household loans - by purpose



Source: NBS.



**The volume of new household loans** measured RSD 126.2 bn in Q1, down by RSD 5.3 bn q-o-q. The amount of dinar household loans fell by RSD 7.3 bn, while the amount of FX-indexed loans increased slightly, by RSD 2.1 bn. Still, **dinar loans preserved their dominance, accounting for two thirds of new household loans (66.9%)**. Their share went down by 1.8 pp q-o-q and was also lower than the last year's average (69.8%).

In terms of purpose, **dinar cash loans** with maturities longer than five years **were less approved**, which reflected the most on the reduction in household loans. In addition, cash loans continue to be the prevalent household loan category (58%), particularly among dinar loans (87%). In Q1, the interest rate on dinar cash loans was unchanged, on average, compared to the previous quarter (9.1%) this being at the same time the lowest rate on record.

**Housing loans recorded a more significant increase.** They are almost entirely approved with an FX clause and account for over three quarters of the total amount of FX-indexed loans. The interest rates on these loans went down by 0.1 pp, to 2.6%, reflecting a slight decrease in EURIBOR. In addition to record low interest rates, what also contributed to the increase in housing loans were the rise in disposable income, positive real estate market developments, increased number of issued construction permits, higher production of construction materials and the solid supply of apartments in the market.

## 2. Deposit dinarisation

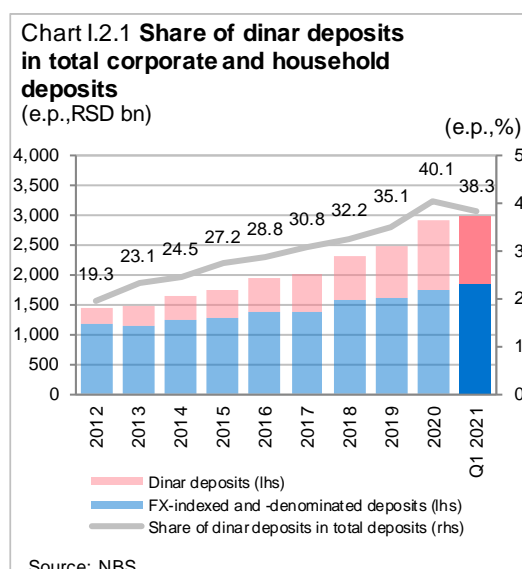
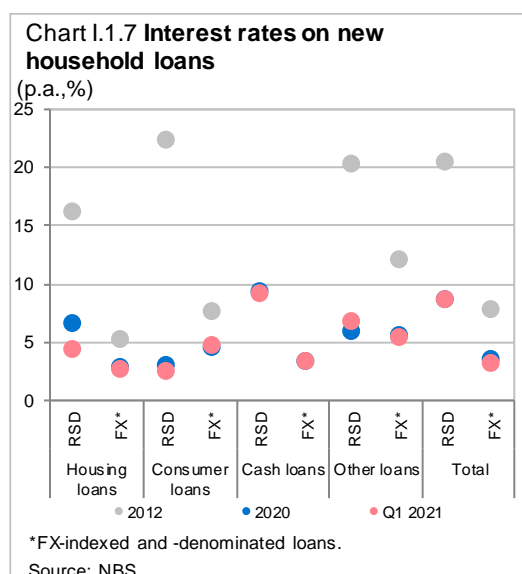
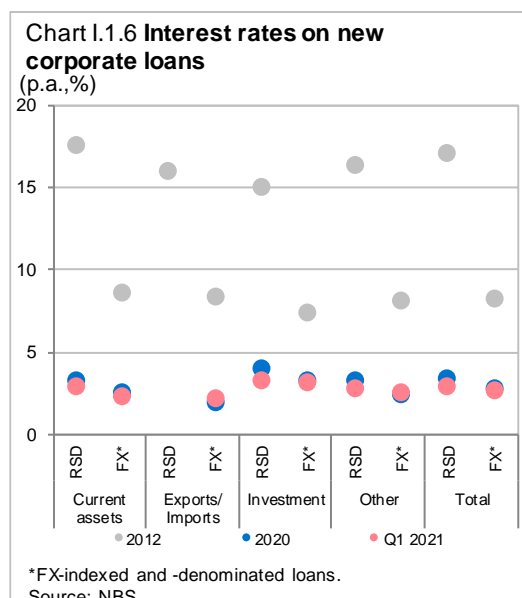
*The degree of dinarisation of outstanding and new corporate and household deposits recorded a drop, due to lower dinar deposits typical for the beginning of the year.*

### Corporate and household deposits

In Q1, outstanding corporate and household deposits increased by RSD 52.9 bn, reaching RSD 2,977.1 bn in March. As for the deposit composition, FX deposits went up by RSD 86.2 bn, while dinar deposits went down by RSD 33.3 bn, as usual for the beginning of the year. Reflecting the said trends, the **dinarisation of overall deposits declined by 1.8 pp q-o-q, to 38.3% at end-March**, staying nevertheless 2.7 pp higher than in March 2020.

**Total household deposits went up** by RSD 41.4 bn. The rise in household deposits was driven by **FX deposits** (RSD 36.8 bn increase) with maturities of up to one year.

**Dinar household deposits also went up** (by RSD 4.6 bn) on account of dinar savings. However, their rise in Q1 was less dynamic than the rise in FX deposits and hence their share in total household



deposits declined, for the first time since Q1 2017. At end-March, this indicator reached 26.5%, down by 0.3 pp from the end of the previous quarter. Nevertheless, this indicator is still considerably higher compared to Q1 2020 (by 4.0 pp).

**Corporate deposits increased** by RSD 11.5 bn in Q1, **owing to the rise in FX deposits** (by RSD 49.4 bn) on account of exports, FDIs and corporates borrowing abroad. The increase refers almost entirely to transaction deposits of corporates operating in transport, catering and telecommunications. As usual for the beginning of the year and as a result of the reduced state aid and the expired moratorium on loans, **dinar corporate deposits recorded a significant decrease in this period** (RSD 37.9 bn). The decrease was recorded for both transaction and termed deposits, mainly of corporates operating in trade, manufacturing and construction.

The said developments **pushed the degree of dinarisation of corporate deposits down**. At end-Q1, this indicator measured 57.4%, down by 3.9 pp q-o-q. Compared to Q1 2020, this reduction was more modest (1.3 pp).

#### New corporate and household deposits

In Q1 2021, corporates and households deposited RSD 310.2 bn worth of new deposits with banks, which is RSD 89.2 bn less than in the previous quarter. **Lower deposit placement is usual for the beginning of the year and in contrast to the developments in Q4**, marked by the Savings Week, i.e. Savings Month. The decrease in new deposits in Q1 is partly a reflection of the q-o-q decline in dinar deposits (by RSD 63.4 bn). The amount of new FX deposits declined to a lesser extent (by RSD 25.8 bn) and they accounted for 34.8% of new deposits. This share was higher by 1.3 pp compared to Q4 2020 and by 4.9 pp compared to the last year's average.

The decrease in new deposits in Q1 referred primarily to corporate (by RSD 59.8 bn), which can be attributed to lower dinar deposits (by RSD 62.4 bn) with up to one-year maturities.

Unlike dinar deposits, FX deposits were termed somewhat more in Q1 than in Q4 2020 (higher by RSD 2.6 bn) and accounted for around three quarters of total new corporate deposits (24.8%). Compared to the previous quarter, this share went up by 5.8 pp and by 10.3 pp at the level of the year.

New household deposits also recorded a decrease in Q1 (by RSD 29.4 bn), almost entirely as a result of lower FX deposits (by RSD 28.4 bn). The amount of new dinar deposits decreased slightly compared to the previous quarter (by RSD 1.0 bn), which boosted

Chart I.2.2 Deposits by sector

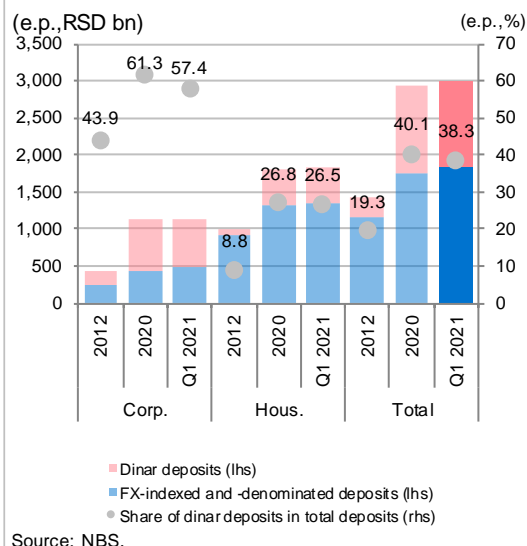


Chart I.2.3 New corporate and household deposits in Q1 2021 - by maturity

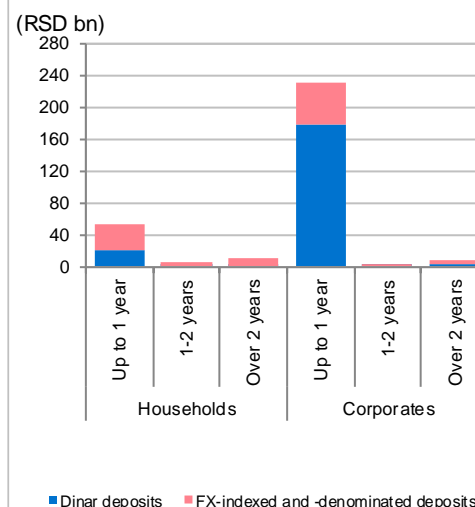
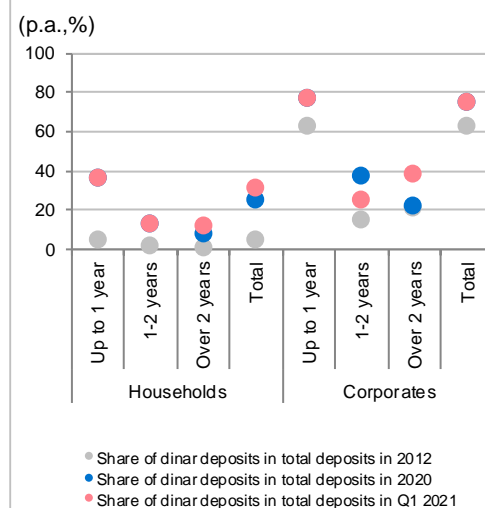


Chart I.2.4 Dinarisation of new corporate and household deposits - by maturity



their share in total new deposits (by 8.1 pp to 30.7%).

The weighted average rate on termed dinar household deposits equalled 2.1% in Q1 2021, down by 0.2 pp from the previous quarter. In terms of maturity composition, the lowest interest rates were recorded for deposits with up to one-year maturities (2.0%) which were additionally trimmed (by 0.2 pp) in Q1. Interest rates were cut more in case of longer maturities, but they are still relatively high – trending at the level of up to 3.3% on deposits termed for longer than two years.

On average, banks offered lower interest rates on FX household deposits (by 0.2 pp) in Q1 than in Q4 2020 (0.9%). The rate decrease (0.1 pp each) was recorded for deposits of all maturities. The interest rates on FX deposits ranged between 0.9% – on deposits with up to one-year maturities and 1.3% – on deposits with maturities between one and two years.

### Dinar and FX savings

**Household savings<sup>2</sup> deposited with banks in the Republic in Serbia continued up in Q1, month after month, with dinar savings posting more vibrant growth compared to FX savings.** The uninterrupted dynamic growth of dinar savings testifies to household confidence in the domestic currency, as well as the preserved stability of the banking system and price stability. The rise in dinar savings has also been underpinned by the relatively higher interest rates on dinar compared to FX savings, a relatively stable RSD/EUR exchange rate and the incentivising tax treatment of income from dinar savings.

**In Q1 2021 dinar savings gained RSD 3.5 bn, rising to RSD 96.5 bn, their new maximum.** The rise in savings resulted from the increase in short-term deposits (by RSD 4.3 bn), of which those termed 6-12 months recorded the sharpest increase (by RSD 3.4 bn). The savings termed for over one year decreased in Q1 (by RSD 0.8 bn), despite the rise in savings termed for longer than two years (by RSD 0.7 bn), on which banks offer relatively the highest interest rates (3.3%).

In the composition of dinar savings, deposits with maturities up to one year still make up the dominant share (81.3% of total savings). Over one half of these are 6-12 month deposits (55%), and one third sight deposits (33%). Interest rates on savings up to one year average 2.0%, which is lower than for longer termed savings (3.0% on average).

Chart I.2.5 Interest rates on new term deposits of households

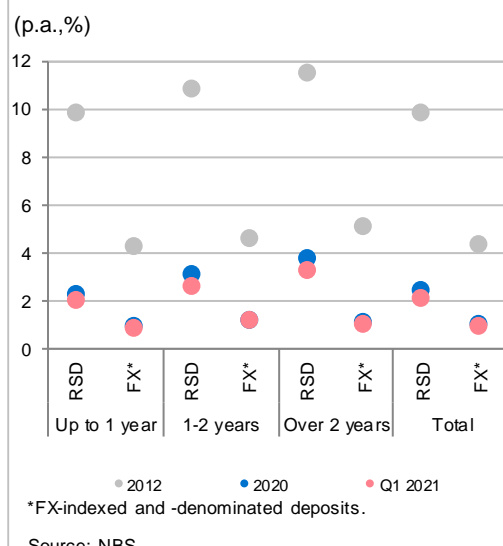
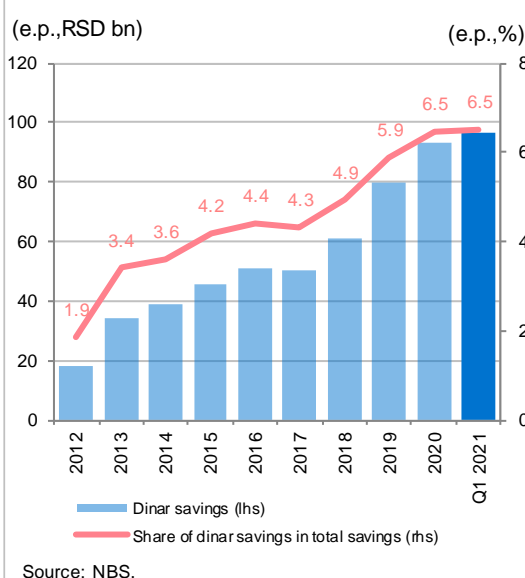


Chart I.2.6 Dinar savings



<sup>2</sup> Both dinar and FX savings include savings of residents and non-residents.

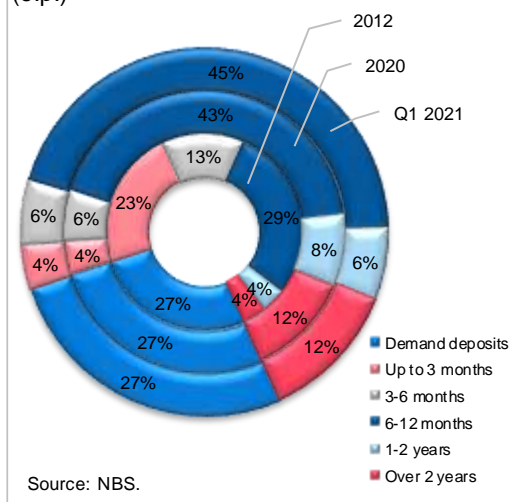
**At end-Q1 FX savings amounted to EUR 11,777.7 mn, up by EUR 341.9 mn (3.0%) from the end of the previous quarter.**

The composition of FX savings, similarly as that of dinar savings, shows a higher share of savings up to one year (by EUR 465.5 mn), thanks to the rise in FX sight deposits (by EUR 377.9 mn) and savings termed for six to twelve months (by EUR 93.8 mn). Sight deposits still predominate in the composition of FX savings (70.4%). FX savings termed for longer than one year contracted in Q1 by EUR 123.6 mn.

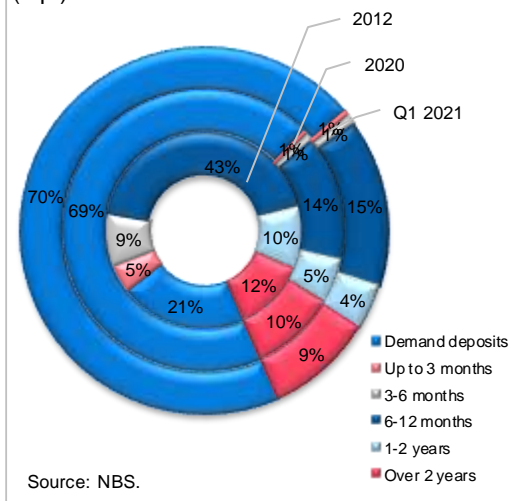
The weighted average interest rate on FX savings in Q1 equalled 0.9%, down by 0.2 pp from the quarter before. Interest rates dropped evenly (by 0.1 pp each) in all maturity categories, remaining the lowest for deposits termed up to one year (0.9% on average) and the highest for deposits termed from one to two years (1.3%).

The share of dinar in total savings continued up. At end-Q1 it equalled 6.5%, unchanged from the quarter before and 0.3 pp higher than at end-Q1 2020.

**Chart I.2.7 Maturity structure of dinar savings (e.p.)**



**Chart I.2.8 Maturity structure of FX savings (e.p.)**



## Is it more profitable to save in dinars or foreign currency?

Household savings (of both residents and non-residents) extended their uninterrupted growth into 2021. The NBS promotes savings in the domestic currency as part of the strategy of dinarisation of the Serbian financial system, given that greater use of dinars means greater financial stability, especially in conditions of pandemic-induced crisis.

In March 2021 dinar savings peaked at RSD 96 bn, rising by almost five times over the past nine years (by around RSD 76 bn). In the same period, FX savings increased from EUR 7.7 bn to EUR 11.8 bn.

Table I.2.1. Profitability of savings placed on deposit for a year

Type of savings	Date of deposit placement	Initial deposit	EURRSD exchange rate*	Interest rate (% p.a.)**	Maturity date	EURRSD exchange rate	Deposit at the end of term**	Amount of deposit at the end of term	
								in RSD	in EUR***
Savings in RSD	Mar 2020	100,000	117.5625	2.53	Mar 2021	117.5766	102,530	102,530	872
Savings in EUR	Mar 2020	851	117.5625	1	Mar 2021	117.5766	858	100,862	858
Difference in favour of savings in RSD - deposit placed for a year								1,668	14
Difference in favour of savings in RSD - deposit placed for a 3M period								334	3
Difference in favour of savings in RSD - deposit placed for a 2Y period								5,589	48
Difference in favour of savings in RSD - deposit placed for a 9Y period, annual rollover								41,223	351

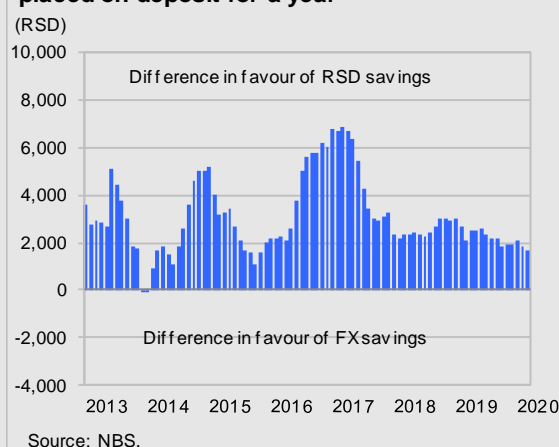
\*monthly average exchange rate of the dinar against the euro.

\*\*weighted average interest rate on RSD and EUR savings placed on deposit for a year - new business.

\*\*\*for savings in euros, after tax on interest income.

According to the analysis of savings profitability, it is more profitable to save in dinars, both in the short and long term. Savings profitability observed from March 2012 until March 2021 showed that in case of savings termed for one year (without rollover) dinar savings were more profitable in as many as 98% of annual subperiods observed (Chart I.2.9). A person who deposited RSD 100,000 in March 2020 at the interest rate of 2.53%, received around RSD 1,700 more in March 2021 than a person who deposited the equivalent amount of euros in the same period, at the rate offered at the time (1.00%) (Table I.2.1). As for savings termed for three months, dinar savings were more lucrative than savings in euros in 87% of the observed quarterly subperiods, while for deposits with two-year maturity, dinar savings were more lucrative than savings in euros in all of the observed two-year subperiods.

Chart I.2.9. Profitability of savings placed on deposit for a year



The same conclusions are valid for long-term dinar savings (dinar savings termed for one year and rolled over in the period of nine years). A person who deposited RSD 100,000 nine years ago, would earn over RSD 41,200 (around EUR 350) more in March 2021 than a depositor saving in euros (the equivalent of RSD 100,000) in the same period.

Greater profitability of savings in the domestic currency can be attributed to the low and stable inflation, relative stability of the RSD/EUR exchange rate, relatively higher interest rates on dinar than on euro savings, a more favourable tax treatment of dinar savings, as well as timely enacted monetary and fiscal policy measures mitigating the negative effects of the pandemic.

The NBS will remain committed to the dinarisation process in the period ahead, including through analysis of savings profitability and emphasizing of the profitability of savings in the domestic currency.

### 3. Dinarisation of public debt

*The degree of dinarisation of public debt remains at the historical maximum.*

At end-Q1 public debt<sup>3</sup> stood at RSD 3,309.0 bn, up by RSD 173.2 bn from end-2020. Despite the nominal rise in public debt, in Q1 its share in GDP declined by 0.7 pp to 55.7%, as a result of vibrant economic growth.

**The rise in public debt was in larger part driven by the increase in its FX component (by RSD 121.1 bn), on account of government borrowing in euros in the international capital market** – namely the issuance of the 12-year eurobond (the longest maturity so far), organised in February, for the third time since the outbreak of the coronavirus pandemic. Eurobonds worth nominally EUR 1 bn were sold in the auction, with the demand outstripping the supply by several times, which signals a positive investor sentiment regarding Serbia's macroeconomic outlook.

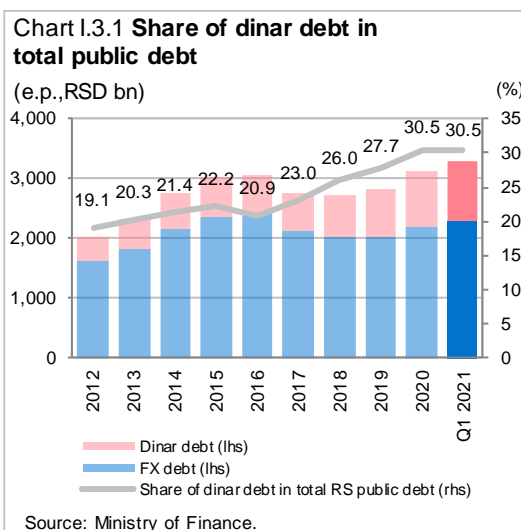
Changes in the composition of public debt in Q1 also stemmed from the successful implementation of the second swap transaction in February, whereby the obligations under the agreement on rescheduling the debt between the Republic of Serbia and Kuwait Investment Authority were converted from US dollars to euros, at a considerably lower interest rate. This hedging transaction resulted in reduced dollar liabilities (by USD 263.0 mn), while euro liabilities went up (by EUR 209.3 mn). Hence, the euro share in total public debt increased (by 1.1 pp to 50.7%) and the dollar share decreased (by 0.9 pp to 12.3%).

The dinar part of public debt also rose in Q1 (by EUR 52.1 mn), as a result of borrowing in dinars through issuance of government bonds in the domestic capital market. The degree of dinarisation of public debt thus remained unchanged in Q1 (30.5%) compared to a quarter earlier. This is the highest level of public debt dinarisation since its monitoring began.

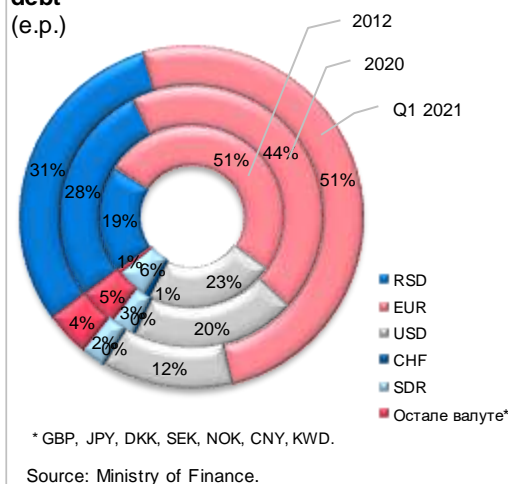
#### Primary market of government securities

On account of securities issued in the domestic government securities market, public debt rose by RSD 20.8 bn in Q1, reaching RSD 1,279.6 bn at end-March.<sup>4</sup>

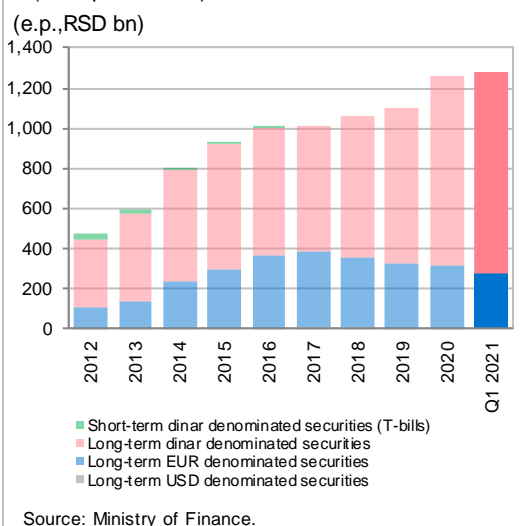
In the dinar segment of the market, securities worth RSD 61.5 bn were sold, more than half of which were 12-year benchmark bonds (RSD 32.8 bn), followed by ten-year bonds (RSD 10 bn), five-year



**Chart I.3.2 Currency structure of RS public debt**  
(e.p.)



**Chart I.3.3 Maturity and currency structure of government securities issued in the domestic fin. market**  
(end-quarter data)



<sup>3</sup>Public debt of central government.

<sup>4</sup>Including savings bonds.

bonds (RSD 9.5 bn) and two-year bonds (RSD 9.1 bn). Given that the seven-year security matured in this period (in the amount of RSD 9.6 bn), the debt balance rose by RSD 51.9 bn in net amount, to RSD 999.8 bn at end-Q1, accounting for 78.1% of the total portfolio of government securities. This share edged up by 2.8 pp q-o-q and by 7.1 pp y-o-y.

Given that the needed FX liquidity was collected through issuance of the eurobond in the international financial market, the government did not incur additional FX debt in the domestic capital market, but settled the liabilities arising from the maturing of earlier issued FX securities. This reduced the FX debt balance on account of securities maturing in two, three and five years (amounting to EUR 145.2 mn, EUR 99.6 mn and EUR 75.0 mn, respectively). Given that in the same period the government sold FX securities with maturities of twenty and twelve years (amounting to EUR 30.4 mn and EUR 24.9 mn, respectively), public debt arising from FX securities in the domestic market decreased by EUR 264.6 mn in net amount, to EUR 2,379.6 mn at end-March.

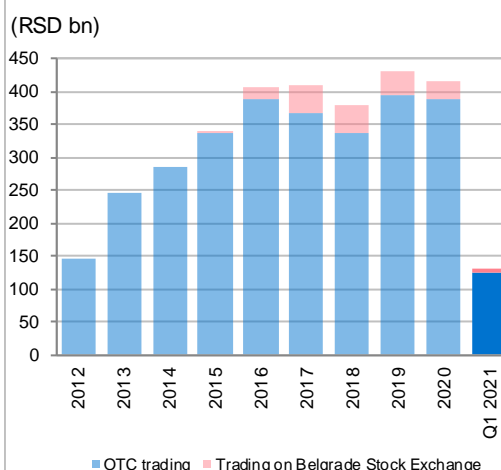
### Secondary market of dinar government securities

The turnover in dinar government securities in the secondary market increased mildly (by 4%), to RSD 129.5 bn.

The secondary trading in dinar securities was largely boosted by higher trading in seven-year bonds, which accounted for over a half of the total trading volume. Trading in five-year securities also expanded, though to a lesser degree. Securities of other maturities were traded in lower amounts compared to the previous quarter and the greatest contraction was recorded for twelve- and ten-year securities in the primary trading.

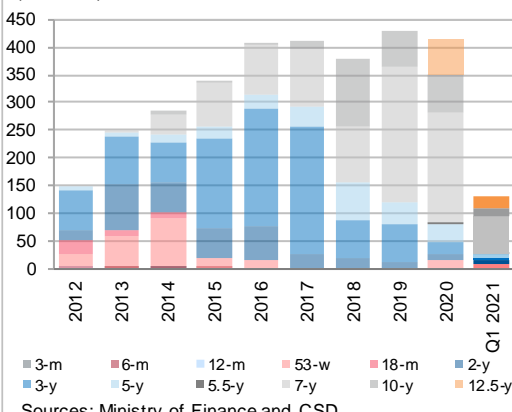
In Q1, secondary trading in dinar government securities in the Belgrade Stock Exchange declined by RSD 1.1 bn (18%) to RSD 4.9 bn. The share of trading in this market in the total volume of secondary trading in dinar government securities contracted to 3.8%.

Chart I.3.4 Secondary trading in dinar government securities



Sources: Ministry of Finance, CSD and BSE.

Chart I.3.5 Secondary trading in dinar government securities, by maturity of securities



Sources: Ministry of Finance and CSD.

## II. FX hedging instruments

In Q1, the NBS continued to organise regular three-month and two-week FX swap auctions in order to encourage the development of the interbank swap market. With a view to supporting the domestic financial system and the domestic economy amid the accelerated spread of the coronavirus, the NBS organised additional three-month swap auctions of purchase of foreign currency (euros) for dinars in the period from 16 November 2020 until 8 March 2021.

In Q1 2021, residents concluded forward FX purchases with banks worth EUR 59.8 mn, up by EUR 22.4 mn from the quarter before, and forward FX sales worth EUR 15.8 mn, down by EUR 3.2 mn q-o-q.

### 1. NBS FX swap auctions

In Q1 2021, the NBS organised 24 regular three-month FX swap actions, in which it swap sold and bought EUR 23.0 mn. Total bank demand at regular three-month swap FX sale auctions amounted to EUR 23 mn, while the total demand at three-month swap FX purchase auctions reached EUR 261 mn. The weighted average accepted swap points at three-month swap auctions of sale of foreign currency in Q1 2021 amounted to 839, i.e. they moved in the range from 594 to 1030, while weighted average accepted swap points at swap auctions of purchase of foreign currency amounted to 1091, i.e. they moved from 772 to 1460.

The NBS also organised 24 regular two-week swap auctions. The total demand of banks at two-week swap auctions of sale of foreign currency came at EUR 25 mn, while the total demand at two-week swap auctions of purchase equalled EUR 225 mn. At the two-week swap auctions held in Q1, the NBS swap sold and bought EUR 20 mn each. The weighted average accepted swap points at two-week swap auctions of sale of foreign currency in Q1 2021 amounted to 146, i.e. ranged from 114 to 205, while the weighted average accepted swap points at swap auctions of purchase amounted to 154, i.e. they moved from 120 to 206.

In mid-March 2021, after analysing monetary trends and liquidity movements in the banking system, the NBS ceased to organise additional three-month FX swap auctions of purchase of foreign currency, assessing that this measure fulfilled its goal and is no longer necessary. By organising these auctions since mid-November 2020, in an environment of retightened containment measures, the NBS intended to act proactively and preventatively in the economic sphere, enabling banks to tap an additional source of cheap dinar liquidity. Total bank demand in additional swap auctions organised in 2021,

Period	Swap FX sale	Total amount offered by banks on swap FX sale auctions	Swap FX purchase	Total amount offered by banks on swap FX purchase auctions
2012	171.0	497.0	188.0	903.1
2013	124.0	1,214.0	124.0	189.0
2014	180.0	649.5	180.0	689.5
2015	550.5	1,519.5	550.5	905.0
2016	440.0	1,293.9	440.0	805.0
2017	546.5	1,145.2	546.5	1,020.0
2018	324.0	1,286.0	324.0	1,342.0
2019	513.5	2,096.5	513.5	1,265.0
2020	800.5	1,531.0	956.0	1,836.5
2021	43.0	48.0	208.0	684.0
Q1	43.0	48.0	208.0	684.0

Source: NBS.

Month	Swap FX sale				Swap FX purchase			
	3M		2W		3M		2W	
	Realization	Offered by banks	Realization	Offered by banks	Realization	Offered by banks	Realization	Offered by banks
January	8.0	8.0	5.0	10.0	36.0	88.0	5.0	60.0
February	5.0	5.0	10.0	10.0	91.0	157.0	10.0	115.0
March	10.0	10.0	5.0	5.0	61.0	214.0	5.0	50.0
Total in Q1	23.0	23.0	20.0	25.0	188.0	459.0	20.0	225.0
Total in 2021	23.0	23.0	20.0	25.0	188.0	459.0	20.0	225.0

Source: NBS.



concluding with 8 March, amounted to EUR 198 mn, and the realisation to EUR 165 bn, whereby the NBS supplied additional dinar liquidity to banks for a period of three months, amounting to RSD 19.4 bn.

## 2. FX hedging instruments

In Q1, the share of forward FX purchases by residents from banks in total FX purchases equalled 1.6% (vs. 0.9% in the previous quarter) and was the highest in January – 1.9%. In Q1 nine domestic companies used the possibility of FX hedging by concluding this type of transactions with banks, totalling EUR 59.8 mn (EUR 37.4 mn in the previous quarter). The weighted average maturity of forward FX purchases was 113 days, with the longest maturity of FX transactions recorded in January – 224 days. The average value of forward FX purchase contracts of residents equalled EUR 0.5 mn.

In terms of the currency structure of forward FX purchases, the euro accounted for 90% and the US dollar for 10%.

Q1 2021 saw forward FX sales by four residents, in the total amount of EUR 15.8 mn (compared to EUR 19 mn in the previous quarter), and the weighted average maturity of transactions was 148 days.

Period	Forward purchase by residents			Forward sale by residents		
	Amount in EUR mln	Weighted average maturity in days	% share in total purchase	Amount in EUR mln	Weighted average maturity in days	% share in total sale
2012	754.7	38	6.7	1.3	18	0.0
2013	533.8	24	5.0	1.4	39	0.0
2014	430.0	24	5.0	0.8	49	0.0
2015	531.0	16	4.8	1.5	77	0.0
2016	450.5	22	3.9	12.9	263	0.1
2017	388.8	37	3.0	17.1	349	0.2
2018	212.7	55	1.5	49.9	450	0.4
2019	108.9	72	0.7	63.4	349	0.4
2020	178.7	118	1.2	69.4	217	0.5
2021	59.8	113	1.6	15.8	148	0.4
Q1	59.8	113	1.6	15.8	148	0.4

Source: NBS.

Month	Forward purchase by residents			Forward sale by residents		
	Amount in EUR mln	Weighted average maturity in days	% share in total purchase	Amount in EUR mln	Weighted average maturity in days	% share in total sale
January	21.3	224	1.9	4.1	148	0.4
February	15.2	40	1.3	8.2	124	0.7
March	23.3	59	1.6	3.5	205	0.3
<b>Total in Q1</b>	<b>59.8</b>	<b>113</b>	<b>1.6</b>	<b>15.8</b>	<b>148</b>	<b>0.4</b>
<b>Total in 2021</b>	<b>59.8</b>	<b>113</b>	<b>1.6</b>	<b>15.8</b>	<b>148</b>	<b>0.4</b>

Source: NBS.

Chart II.2.1. Currency structure of FX forward transactions between residents and banks in Q1 2021



Source: NBS.

**Table A Indicators of dinarisation of receivables, loans and deposits**  
(%)

Period	Share of dinar in total receivables, outstanding amounts, e.p.			Share of dinar in total loans, new business, p.a.*			Share of dinar in total deposits, outstanding amounts, e.p.			Share of dinar in total deposits, new business, p.a.*		
	Corporates	Households	Total	Corporates	Households	Total	Corporates	Households	Total	Corporates	Households	Total
2008	33.8	22.2	29.2				50.3	12.5	27.6			
2009	26.2	22.1	24.7				52.5	10.9	25.6			
2010	32.2	27.6	30.5	41.8	51.1	43.5	45.0	8.5	19.8	51.4	2.7	25.0
2011	27.3	32.6	29.2	33.3	44.0	35.9	44.9	10.1	21.5	51.3	3.8	32.8
2012	24.2	35.1	28.0	31.0	59.6	36.5	43.9	8.8	19.3	62.0	4.6	38.1
2013	20.0	37.9	26.8	24.6	63.6	35.0	52.4	11.5	23.1	65.2	8.2	44.1
2014	25.0	41.0	31.2	33.2	71.7	44.2	53.6	12.3	24.5	67.6	12.3	46.5
2015	19.4	42.8	28.6	16.8	67.8	30.3	55.6	13.9	27.2	69.1	16.0	52.8
2016	19.4	47.0	31.2	21.5	74.1	36.8	54.0	15.8	28.8	69.3	20.1	56.6
2017	17.5	51.8	33.0	19.3	71.0	36.0	56.5	16.9	30.8	75.6	22.7	64.3
2018	15.4	53.6	33.0	18.3	73.1	36.8	53.1	19.2	32.2	81.1	20.3	66.7
2019	14.0	55.4	33.1	16.9	66.9	33.5	58.3	22.1	35.1	74.9	25.0	63.9
2020	21.0	55.9	37.3	31.5	69.8	43.6	61.3	26.8	40.1	81.3	26.6	70.1
T1 2021	22.3	55.4	37.9	30.3	66.9	44.3	57.4	26.5	38.3	75.2	30.7	65.2

\* Indicators are calculated based on data on the amount of new loans and deposits during the period.  
For the year 2010, indicators relate to the period September-December.

Source: NBS.

**Table B Currency structure of household savings and public debt**

Period*	Household savings				Public debt (central government)			
	Dinar savings (RSD mn)	FX savings (EUR mn)	Total savings (RSD mn)	Share of dinar savings in total savings (%)	Public debt in RSD (RSD bn)	Public debt in foreign currency (RSD bn)	Total public debt (RSD bn)	Share of RSD public debt in total public debt (%)
2008	10,575.0	4,679.1	425,145.0	2.5	19.9	758.1	778.0	2.6
2009	12,400.0	5,904.5	578,577.0	2.1	120.6	823.8	944.4	12.8
2010	13,848.7	7,105.8	763,495.8	1.8	187.1	1,095.4	1,282.5	14.6
2011	19,664.1	7,611.2	816,110.9	2.4	248.9	1,298.6	1,547.5	16.1
2012	17,882.9	8,272.3	958,597.0	1.9	385.4	1,629.3	2,014.8	19.1
2013	34,015.4	8,418.5	999,125.2	3.4	469.1	1,840.0	2,309.0	20.3
2014	38,615.1	8,524.6	1,069,732.9	3.6	588.6	2,164.6	2,753.2	21.4
2015	45,968.2	8,628.6	1,095,435.6	4.2	668.9	2,349.7	3,018.6	22.2
2016	51,063.9	8,987.3	1,160,744.3	4.4	639.8	2,424.8	3,064.6	20.9
2017	50,152.0	9,373.2	1,160,614.5	4.3	632.5	2,117.2	2,749.7	23.0
2018	61,079.9	9,955.1	1,237,720.8	4.9	708.4	2,011.8	2,720.2	26.0
2019	79,573.6	10,804.3	1,350,075.9	5.9	781.3	2,034.4	2,815.6	27.7
2020	93,057.4	11,435.8	1,437,685.6	6.5	958.0	2,177.8	3,135.8	30.5
Q1 2021	96,545.9	11,777.7	1,481,372.1	6.5	1,010.1	2,298.9	3,309.0	30.5

\* Indicators show data at end-period.

Sources: NBS, Ministry of Finance.

**Table C Overview of measures and activities contributing to dinarisation of the Serbian financial system**

Period of adoption of measure/implementation of activity	Description of measure/activity	Expected effects
June 2005	RR differentiation rate on dinar and FX sources of bank financing.	Stimulating banks to use dinar sources of financing more
May 2011	LTV limit for FX-indexed mortgage loans of 80%, with no such limit prescribed for dinar loans. In December 2017 this limit was loosened to 90% in cases when the loan is approved as a measure of government support to certain categories of natural persons.	Ensuring preferential treatment of dinar lending to households
	Prescribed minimum mandatory downpayment/deposit for FX and FX-indexed loans to natural persons (except mortgage loans) of 30%.	Ensuring preferential treatment of dinar lending to households
Since May 2011	Limiting the ratio of net open FX position to capital at 20%, as of 2011 (increased from 10%, with a view to encouraging credit activity).	Limiting the amount of FX and FX-indexed loans relative to FX sources of funding
June 2011	First-degree liquid receivables include also 90% of fair value of dinar RS securities with minimum maturity of 3 months. This does not apply to FX securities.	Capital market development, incentivising banks to rely more on dinar sources of financing
December 2011	Prescribed requirement for banks to inform clients in writing, prior to signing an agreement, of the risks they assume if they opt for an FX-denominated or FX-indexed service. Also, the offered agreement must contain the information on the currency in which the service is agreed.	Promoting hedging against FX risk for financial service consumers
	Prescribed requirement for advertising of credit and deposit services and leasing operations: when the advertising message contains numerical data, the currency in which the service is denominated must be stated in a representative example.	
	Prescribed requirement for banks and lessors to offer financial services in dinars, unless the consumer requires otherwise.	
April 2012	The NBS and the Republic of Serbia Government signed the Memorandum on the Strategy of Dinarisation of the Serbian Financial System.	Defining objectives, measures and activities that the NBS and the Republic of Serbia will implement in order to strengthen confidence in the national currency and its use in the financial system.
May 2012	Societe Generale Banka Srbija a.d. Beograd issued the first dinar bond in the domestic market, without a currency clause, with three year maturity.	Capital market development
September 2012	By the adoption of the Law Amending the Law on Personal Income Tax, the tax on interest on FX savings was increased from 10% to 15%.	Given that interest income on dinar savings is exempted from the personal income tax, this measure is an incentive to households to give preference to saving in domestic currency over FX saving
April 2013	The NBS included dinar securities without an FX-clause issued by IFOs with the top credit rating in the portfolio of securities used by the NBS in open market operations and on the list of eligible collateral in approval of NBS's daily liquidity facilities and short-term loans against the pledge of securities.	Capital market development, through incentive to banks to hold in their portfolios dinar securities issued by the IFOs for the purpose of loan financing
November 2013	The NBS adopted the Decision on Terms and Conditions of Performing Foreign Credit Transactions in Dinars, which provides for more favourable conditions under which international financial institutions and development banks or financial institutions founded by a foreign state (IFO) may approve dinar loans to domestic banks, legal persons and entrepreneurs, as well as conditions and manner in which domestic banks may approve dinar loans to non-residents.	Increasing credit activity of domestic banks in dinars
May 2014	The Republic of Serbia Government adopted the programme for subsidising dinar loans to corporates.	Increasing loan dinarisation - of a temporary nature
October 2014	A first-time issue of a 10-year dinar bond by the government.	Financial market development and building a yield curve for longer maturities – enabling banks to price long-term dinar loans
November 2015	Long-term government securities admitted to the prime listing of the Belgrade Stock Exchange.	Boosting liquidity and developing secondary market of government securities
January 2016	RR rate on the portion of FX base comprised of dinar liabilities indexed to an FX-clause was increased to 100% from 50% which had been applied since June 2012.	Disincentive for use of FX-indexed dinar deposits
February 2016	A first-time larger-size issue of benchmark dinar bond by the government, with a view to reopening the issue and selling the bond several times a year.	Boosting liquidity and developing secondary market of dinar government securities
October 2016	Domestic banks started to offer non-FX indexed housing loans in dinars, at relatively favourable terms (rates below 5%) and with a long repayment term (up to 30 years).	Rise in long-term household lending in dinars
December 2016	The domestic financial market saw the first issuance of a dinar bond by an international financial institution – EBRD. The nominal size of the issue was RSD 2.5 bn.	Financial market development
	The first trading in EBRD-issued dinar bonds in the Belgrade Stock Exchange (in the amount of RSD 60 mn).	Secondary financial market development
June 2017	A part of EBRD proceeds from the issue of dinar bonds in the domestic market was onlent to corporates through domestic banks. The loans were mainly used for financing of agriculture and refinancing.	Increasing the dinarisation of corporate loans
	The NBS set the systemic risk buffer rate at 3% of total FX and FX-indexed receivables of a bank approved to corporates and households in the Republic of Serbia, for banks whose share of FX and FX-indexed in total corporate and household receivables exceeds 10%.	Limiting the risk of euroisation, one of the key structural non-cyclical systemic risks to the stability of the financial system of the Republic of Serbia.
December 2017	The Government issued a new type of bond in the domestic financial market – saving bond.	Development of the financial market by promoting alternative form of savings and facilitating access to the government securities market for the general public
Since April 2018 (the last change), as well as before	Differentiated RR remuneration rate: 1.25% on dinar RR, no remuneration on FX RR.	Stimulating banks to rely more on dinar sources of funding
June 2018	The Law on Financial Collateral was adopted.	Achievement and improvement of the legal certainty and efficiency relating to the performance of obligations in the financial market (regulating financial collateral arrangements as well as procedures for enforcement of the collateral), as preconditions for further development of the financial market.
December 2018	The NBS and the Republic of Serbia Government signed the new Memorandum on the Strategy of Dinarisation of the Serbian Financial System.	Reviewed the results of measures and activities taken so far and, starting from them, agreed on additional measures and activities aimed at further increase in dinarisation and curbing of the FX risk in the system
	Amendments to the Law on Public Debt introduced the institute of primary dealer and envisaged the possibility of using financial derivatives for the purposes of public debt management.	Increasing liquidity and developing the domestic financial market.
December 2019	Amendments to the Decision on Capital Adequacy of Banks envisage lower capital requirements for banks to cover risks arising from dinar receivables to micro enterprises, small and medium-sized enterprises, entrepreneurs and farmers. Also, capital reduction is envisaged for banks whose share of new FX and FX-indexed loans approved to corporates, entrepreneurs and farmers for specific purposes has exceeded the defined level.	Incentivising banks to increase dinar lending.
	Amendments to the Law on Public Debt enable foreign legal persons (e.g. Euroclear) to clear and settle transactions related to the purchase and sale of government securities in the domestic capital market.	Facilitating foreign investor access to the domestic market of government securities, increasing efficiency and broadening the financial investor base on that market.
February 2020	Amendments to the Law on the Capital Market harmonise the provisions of that Law with the Law on Public Debt, in terms of the possibility for foreign legal persons (e.g. Euroclear) to clear and settle transactions related to the purchase and sale of financial instruments in the domestic capital market.	Facilitating foreign investor access to the domestic capital market, increasing efficiency of the domestic financial market and broadening the financial investor base.
	On 18 February 2020, Serbia issued its first 12Y government bond, at a coupon rate of 4.50%. Thus, the yield curve of longer maturities was extended, enabling banks to form the price of long-term dinar loans.	Development of the financial market.
May 2020	The NBS introduced bonds issued by the domestic companies with a certain credit rating (determined by the Business Registers Agency) in the portfolio of securities traded in the NBS open market, and in the list of acceptable collateral when approving NBS loans for daily liquidity and short-term loans based on the securities pledge.	Capital market development, through incentive to banks to hold in their portfolios dinar corporate bonds.
July 2020	Amendments to the decision on interest rates, which the NBS applies in its monetary policy conduct, envisage that banks which approve dinar loans to clients under the guarantee scheme at rates at least 50 bp lower than the maximum (one-month BELBOR + 2.5 pp) are entitled to the remuneration rate for dinar reserve requirements from the NBS (which currently stands at 10 bp) increased by 50 bp, on the amount equal to the amount of those loans approved under more favourable terms, and which do not exceed the amount of calculated dinar reserve requirements.	Encouraging dinar lending.

## Methodological notes

- Dinarisation indicators, for each category, represent the share of dinar component in the total amount of that category.
- Receivables include dinar and FX loans (including FX-indexed ones), advances, securities, corporate shares and receivables from interest and fees. Dinar receivables are receivables extended in dinars without an FX-clause. An FX-clause is a currency clause as defined by the Law on Foreign Exchange Operations and any other clause stipulating hedge against the risk of dinar exchange rate volatility.
- The corporate sector (enterprises) comprises public enterprises and companies. Public enterprises are enterprises founded by the state, performing activities in the general (public) interest. Companies also include bank clients in the area of health and education not financed from the budget (private clinics, hospitals, schools and other institutions charging fees for their services based on production costs).
- The household sector comprises domestic natural persons, foreign natural persons – residents, private households with employed persons, registered farmers and entrepreneurs, and non-profit institutions serving households (NPISH).
- Receivables are expressed by the gross principle, i.e. not reduced by allowances for impairment. When excluding the exchange rate effects, the exchange rate of the dinar against the euro, the US dollar, Swiss franc, UK pound sterling and Japanese yen is taken into account.
- The new loans category does not include refinancing loans at interest rates significantly below the market rates, nor revolving loans, current account overdrafts and credit card loans
- The new deposits category includes term deposits and notice deposits while it does not include overnight deposits.
- Deposits include dinar and FX (including FX-indexed) deposits.
- Household savings include savings of residents and savings of non-residents.
- Public debt of the Republic of Serbia refers to the debt of the central level of government.

## Index of charts and tables

### Charts

I.1.	Dinarisation indicators	1
I.1.1	Share of dinar receivables in total corporate and household receivables	1
I.1.2	Receivables by sector	2
I.1.3	Share of dinar loans in new corporate and household loans	2
I.1.4	New corporate and household loans in Q1 2021, by purpose	3
I.1.5	Dinarisation of new corporate and household loans, by purpose	3
I.1.6	Interest rates on new corporate loans	4
I.1.7	Interest rates on new household loans	4
I.2.1	Share of dinar deposits in total corporate and household deposits	4
I.2.2	Deposits by sector	5
I.2.3	New corporate and household deposits in Q1 2021, by maturity	5
I.2.4	Dinarisation of new corporate and household deposits, by maturity	5
I.2.5	Interest rates on new term deposits of households	6
I.2.6	Dinar savings	6
I.2.7	Maturity structure of dinar savings	7
I.2.8	Maturity structure of FX savings	7
I.2.9	Profitability of savings termed for a year	8
I.3.1	Share of dinar debt in total public debt	9
I.3.2	Currency structure of RS public debt	9
I.3.3	Maturity and currency structure of government securities issued in the domestic financial market	9
I.3.4	Secondary trading in dinar government securities	10
I.3.5	Secondary trading in dinar government securities, by maturity of securities	10
II.2.1	Currency structure of FX forward transactions between residents and banks in Q1 2021	12

### Tables

I.2.1	Profitability of savings termed for a year	8
II.1.1	NBS swap transactions, quarterly data	11
II.1.2	NBS swap transactions in 2021, monthly data	11
II.2.1	FX forward transactions between residents and banks, quarterly data	12
II.2.2	FX forward transactions between residents and banks in 2021, monthly data	12
Table A	Indicators of dinarisation of receivables, loans and deposits	13
Table B	Currency structure of household savings and public debt	14
Table C	Overview of measures and activities contributing to dinarisation of the Serbian financial system	15