



НАРОДНА БАНКА СРБИЈЕ

REPORT ON DINARISATION OF THE SERBIAN FINANCIAL SYSTEM

Third quarter 2020

December 2020

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).

Dinarisation strategy

The dinarisation strategy 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

e.p. – end of period

lhs – left-hand scale

mn – million

bn – billion

pp – percentage point

SDR – Special Drawing Rights

Q – quarter

Other generally accepted abbreviations are not cited.

Contents

I. Dinarisation of the Serbian financial system	1
Dinarisation of receivables	1
Corporate and household receivables	1
New corporate and household loans	3
Deposit dinarisation	5
Corporate and household deposits	5
New corporate and household deposits	6
Dinar and FX savings	6
Is it more profitable to save in dinars or foreign currency?	8
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	11
Table A Indicators of dinarisation of receivables, loans and deposits	12
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
List of charts and tables	17

I. Dinarisation of the Serbian financial system

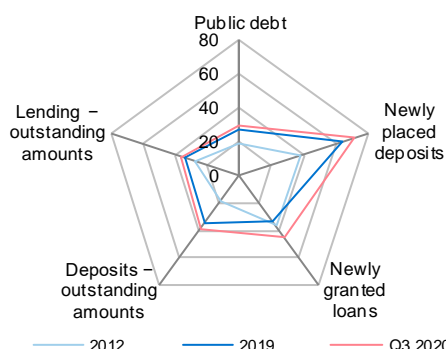
Judging by the majority of indicators observed, the degree of dinarisation of the Serbian financial system increased in Q3 2020. Most of these indicators posted record high levels.

Dinarisation of corporate and household receivables edged up. In terms of new business, the dinarisation of corporate and household loans decreased slightly from Q2 but remained relatively high.

The share of dinar deposits in total corporate and household deposits went up both in terms of outstanding and new business. The increase continues to be driven by a dynamic rise in dinar savings which is posting record high levels month after month.

The dinarisation of the Serbian public debt also remains on the upward path, contributing to greater resilience (lower exposure) of government finance to FX risk.

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.

Dinarisation of receivables

Dinarisation of corporate and household receivables continued up in Q3 2020 to its highest levels so far, driven by favourable borrowing conditions, anti-crisis measures of the National Bank of Serbia and Serbian Government, and bank investments in dinar corporate bonds. Dinarisation of new corporate and household loans, though somewhat lower than in Q2, continues to be high.

Corporate and household receivables

Despite the negative effects of the crisis caused by the coronavirus pandemic on the domestic economy, corporate and household receivables continued up. This increase is a result of favourable borrowing conditions in the market under the impact of the past NBS monetary policy relaxation as well as implementation of anti-crisis measures of the NBS and Serbian government. In Q3 these receivables went up by RSD 88.9 bn in nominal terms. Though this rise is more moderate compared to Q2, it is more dynamic compared to Q3 2019.

The increase in corporate and household receivables in Q3 is **almost entirely a result of the rise in the dinar component (by RSD 85.0 bn), which reflected on the rise in their dinarisation.** The share of dinar receivables in total corporate and household receivables reached 36.6% in Q3, which is **the highest value of this indicator on record.** Excluding the exchange rate effect, this indicator equalled 36.3% at end-Q3, up by 2.0 pp compared to end-Q2,

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

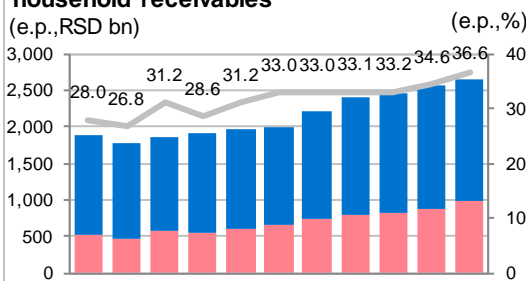
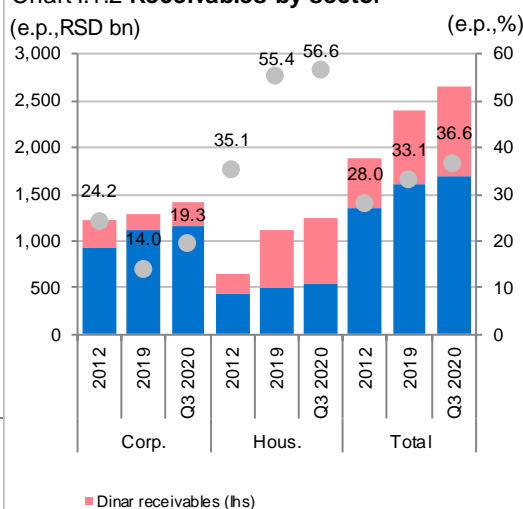


Chart I.1.2 Receivables by sector



and up by 3.3 pp compared to the same quarter last year.¹

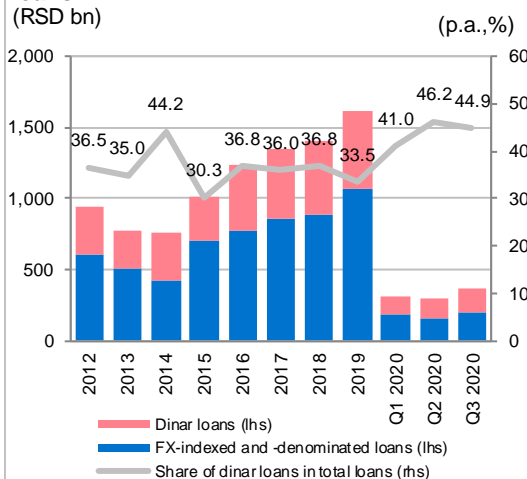
Similarly as in the past quarter, household receivables continued to record dynamic growth (by RSD 52.2 bn). This is still driven by the **increase in dinar receivables** (by RSD 38.6 bn), largely on account of the rise in cash loans as the most dominant household loan category. In addition to favourable borrowing conditions, the rising stock of these loans is a result of NBS measures aimed at ensuring easier access to smaller dinar loans (up to RSD 90,000) with shorter maturities (up to two years) for pensioners and employed people who do not receive their pensions and wages through an account with a particular bank. Furthermore, a new moratorium on loan repayment (August and September) was introduced in Q3 in line with NBS measures. Also, the NBS adopted a set of regulations which facilitate refinancing or extension of repayment term for certain loan categories (except for housing loans and current account overdrafts) for natural persons, whereby the burden of loan repayment was eased. In addition to the said measures, the rise in household receivables, as in the past quarter, was also driven by the loans to entrepreneurs and farmers under the Guarantee Scheme, the bulk of which were disbursed in dinars.

The rise in FX-indexed household receivables was significantly less pronounced compared to those in dinars (RSD 13.6 bn) and was driven by housing loans. Higher housing loans resulted from NBS measures which eased the burden of loan repayment (moratorium and extension of loan repayment term by maximum five years), measures aimed at providing easier access to housing loans, such as lowering of the minimum down payment for first-time home buyers (from 20% to 10%), as well as the relaxation of requirements in terms of the degree of the completion of works in certain cases for the approval of these loans.

As the rise in dinar receivables was more dynamic compared to FX-indexed receivables, according to outstanding amounts, the degree of dinarisation of household receivables increased to 56.6% in Q3, which is a record high level of this indicator. Compared to Q2, this indicator rose by 0.8 pp and the increase is even more pronounced if compared to the same period last year (by 1.2 pp).

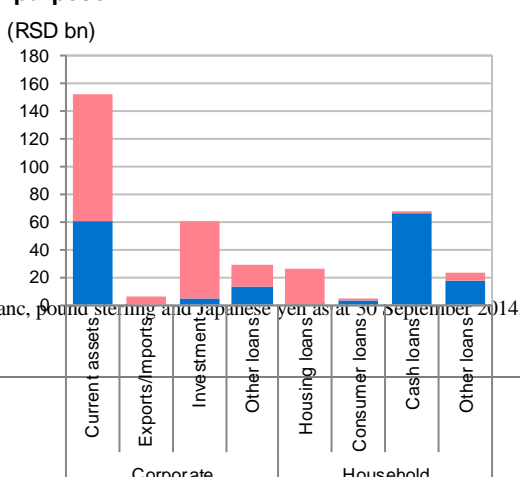
Corporate receivables continued increasing in Q3 (by RSD 36.8 bn), driven by intense rise in dinar receivables (by RSD 46.4 bn). In addition to NBS monetary policy easing whereby favourable terms of dinar borrowing were provided, the growth was also largely aided by the Guarantee Scheme loans. These loans were granted for liquidity and working capital and were dominantly approved in dinars at relatively

Chart I.1.3 Share of dinar loans in new corporate and household loans
(RSD bn)



Source: NBS.

Chart I.1.4 New corporate and household loans in Q3 2020 - by purpose
(RSD bn)



¹ 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.

favourable conditions. NBS decision to pay interest to banks approving such loans on allocated required reserves at a rate higher than the standard also provided an incentive for granting the said loans.

In addition to increasing corporate loans, in Q3 banks used a portion of their available funds to purchase dinar corporate bonds issued in the local capital market in September by some domestic companies. Bank receivables from corporates increased on these grounds by RSD 21.8 bn in Q3.

Unlike dinar corporate receivables, FX-indexed receivables decreased in Q3. Such trends can be partly associated with increased loan repayment in July after the expiry of the moratorium which had been in force during the previous three months.

Consistent with the trends described, according to outstanding business, the degree of dinarisation of receivables continued up for the third consecutive quarter, reaching 19.3% at end-Q3. Compared to the previous quarter, this indicator was 2.9 pp higher, and compared to the same period last year it went up by 5.2 pp.

New corporate and household loans

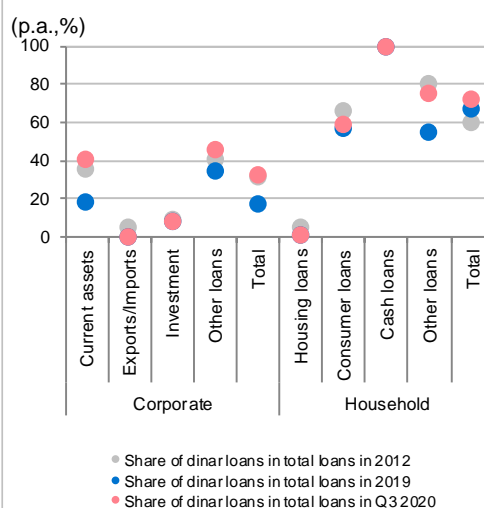
In Q3 banks approved new corporate and household loans worth RSD 368.5 bn, which is more than a quarter higher than in Q2. Looking at the structure of these loans, 44.9% were approved in dinars, which, though lower than in Q2 (by 1.3 pp), is still relatively high.² This is a result of favourable terms of dinar borrowing, implementation of the measures of the NBS and the Serbian Government under the Guarantee Scheme and other measures that work in favour of dinar lending.

Sector-wise, of the total amount of new corporate and household loans, **around two thirds** (RSD 248.4 bn) **were approved to corporates**. The bulk of these loans (61.5%) were intended for financing liquidity and working capital, of which over 70% went to micro, small and medium-sized enterprises under by the Guarantee Scheme. At the same time, 39.9% of these loans were granted in dinars and so dinar lending remained dominant in this loan category compared with loans for other purposes.

Investment loans made up around a quarter of the total amount of approved corporate loans. These loans are still largely granted in foreign currency (92.1%), dominantly to micro, small and medium-sized companies.

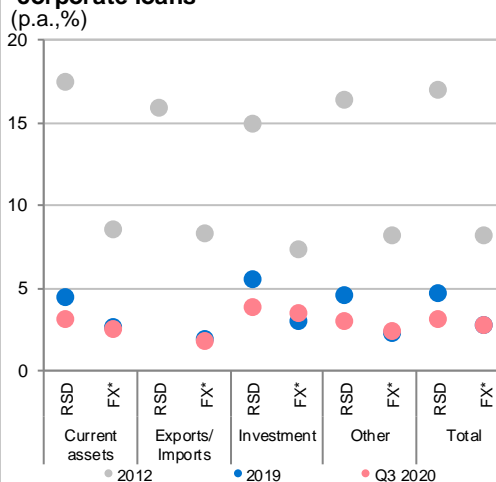
The degree of dinarisation of new corporate loans equalled 31.8% in Q3, down by 7.2 pp from Q2, due to stepped up approval of loans with a currency

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



Source: NBS.

Chart I.1.6 Interest rates on new corporate loans



*FX-indexed and -denominated loans
Source: NBS.

График I.1.7. Каматне стопе на новоодобрене кредите становништву



² In the past four quarters this indicator measured 42.2% on average, and 33.5% in

clause. Nevertheless, compared with the previous period this indicator is still relatively high – in the past year it stood at 29.1% and in 2019 at 16.9%.

The weighted average interest rate on new dinar corporate loans went down in Q3 by 0.4 pp, to 3.1%, the lowest level so far. Thus, these interest rates came even closer to the interest rates on FX loans (2.7%). The decline in interest rates was particularly pronounced in the case of working capital loans under the impact of the Guarantee Scheme loans and a stimulating remuneration rate on allocated required reserves for banks approving such loans at favourable conditions.

The volume of new household loans increased considerably in Q3 compared to Q2 after the lockdown was lifted and social distance measures alleviated. Hence, the amount of loans disbursed in Q3 equalled RSD 120.1 bn, 60% more than in Q2. The increase was particularly pronounced in case of dinar loans (by 71.2%), i.e. cash loans (by RSD 31.2 bn) still almost entirely approved in dinars (99.4%) and making up over three quarters of total dinar household loans. A significant amount of dinar loans was approved for other uncategorised purposes, largely loans to entrepreneurs under the Guarantee Scheme.

The amount of new FX-indexed household loans went up in Q3 (by RSD 9.1 bn). Housing loans account for virtually the entire increase as a result of favourable borrowing conditions, as well as NBS decision to lower the minimum down payment for first-time home buyers from 20% to 10% and ease the requirement for the approval of housing loans regarding the minimum degree of completion of works.

Under the impact of such trends, the share of dinar loans in total new household loans went up (by 4.6 pp to 71.9%) and was higher than the average level in the past four quarters (70.0%) and in 2019 (66.9%).

The weighted average interest rate on new dinar loans to households equalled 8.3%, slightly higher (by 0.1 pp) than the minimum recorded in Q2. Such an increase was driven primarily by the stronger approval of cash loans at interest rates which, though the lowest so far³ (9.2%), remained higher than the average.

Interest rates on FX-indexed household loans declined on average (by 0.3 pp) and were at their lowest level so far (3.3%), because of more housing loans at interest rates lower than the average (2.8%). In addition, interest rates on cash loans and loans for

³ Since Q1 2015, when the data became available.

other uncategorised FX loans also declined slightly (to 2.9% and 5.5% respectively).

Deposit dinarisation

The degree of dinarisation of corporate and household deposits continued increasing in Q3 2020, reaching the highest levels on record, under the impact of the extensive package of state aid to corporates and households aimed at mitigating the negative effects of the coronavirus pandemic. The rising deposit dinarisation remained under the favourable influence of uninterrupted growth in dinar savings which posted new records.

Corporate and household deposits

Corporate and household deposits rose by RSD 97.3 bn in Q3, reaching RSD 2,823.9 bn at end-September. The deposit growth in Q3 also resulted from the implementation of NBS and Serbian Government measures aimed at mitigating the negative effects of the coronavirus spread, but the effect of these measures was less felt than in Q2 due to the lower amount of direct transfers. Dinar deposits recorded more dynamic growth than FX deposits (RSD 55.5 bn vs. RSD 41.8 bn), which had a positive impact on the dinarisation of deposits in general – in Q3 this indicator went up by 0.6 pp, to 39.2%, its highest level on record.

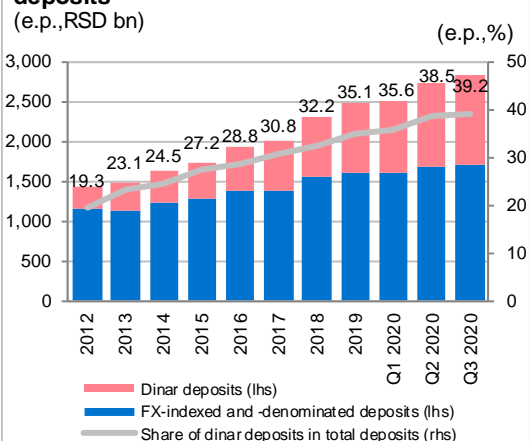
As for dinar deposits, the increase was more pronounced in the **corporate** sector (by 29.6 bn) and primarily relates to the deposits with maturities of up to one year of the companies operating in trade, catering and communication. The increase was partly offset by the decrease in dinar transaction account balances of corporates (again mainly from the above areas of business).

The same period saw significant growth (RSD 21.6 bn) in FX corporate deposits owing to the inflow of foreign currency on account of exports, FDI and foreign corporate borrowing, as well as the impact of measures aimed at mitigating the consequences of the pandemic. This brought the degree of dinarisation of corporate deposits slightly down (by 0.1 pp), to 60.2%. From the beginning of the year this indicator went up by 1.9 pp, and by 3.3 pp from Q3 2019.

Household deposits also recorded growth in Q3 (by RSD 46.2 bn), with somewhat more intense rise in dinar deposits (by RSD 25.9 bn) compared to FX deposits (by RSD 20.2 bn). The degree of dinarisation of household deposits therefore kept increasing, reaching 25.7% in Q3 which is its highest level so far. Compared to Q2, this indicator went up by 0.8 pp and by 5.1 pp in the previous year.

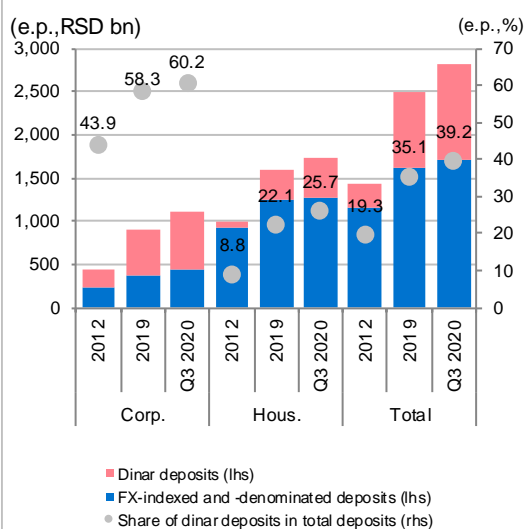
As for the structure of dinar deposits, the growth largely pertains to transaction deposits (RSD 22.2 bn), but also to dinar savings (RSD 3.8 bn), which

Chart I.2.1 Share of dinar deposits in total corporate and household deposits



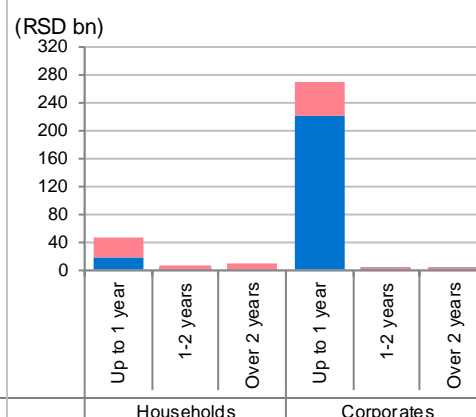
Source: NBS.

Chart I.2.2 Deposits by sector



Source: NBS.

Chart I.2.3 New corporate and household deposits in Q3 2020 - by maturity



increased month after month, reaching a record high level at end-Q3 (RSD 89.3 bn).⁴

FX household deposits also recorded growth in the same period. This growth was accompanied with a certain change of the maturity structure in favour of deposits with maturities shorter than a year.

New corporate and household deposits

In Q3 2020, corporates and households deposited RSD 336.0 bn worth of new deposits with banks, which is slightly more than in Q2 (by RSD 5.2 bn). This increase resulted from higher dinar deposits (by RSD 9.7 bn) than in Q2. In the same period, the amount of new FX deposits was reduced by RSD 4.5 bn, which contributed to a rise in the dinarisation of new deposits (by 1.8 pp, to 72.0%) compared to the previous quarter.

Corporate deposits went down by RSD 4.2 bn in Q3, as a result of lower FX deposits (by RSD 10.5 bn), mainly with up to one-year maturity. This decrease was partly offset by higher dinar deposits (by RSD 6.3 bn). Therefore, their share in total new deposits went up by 3.4 pp, to 81.2%.

In case of households, the amount of new deposits in Q3 was RSD 9.4 bn higher than in the previous quarter. The increase was registered in both FX (by RSD 6.0 bn) and dinar accounts (by RSD 3.4 bn), for deposits of all maturities. In this period, the degree of dinarisation of new deposits went up by 1.2 pp, to 30.2%, which is the highest value of this indicator since Q4 2010 when its monitoring started.

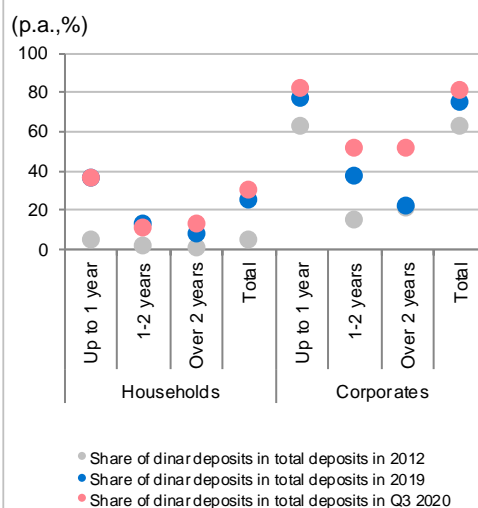
In Q3, the weighted average interest rate on term dinar household deposits remained the same as in Q2 (2.4%). As for the maturity structure of dinar deposits, the interest rates moved from 2.3% on deposits with up-to-one-year maturities to 3.5% for deposits with maturities longer than two years.

In Q3, banks offered rates on FX household deposits similar as in Q2 (1.0%) with interest rates on deposits with maturities shorter than a year declining (by 0.1 pp, to 0.9%) and rates on deposits with one-to-two-year maturities slightly rising (by 0.1 pp to 1.3%). Interest rates on deposits with maturities longer than two years remained the same (1.1%).

Dinar and FX savings

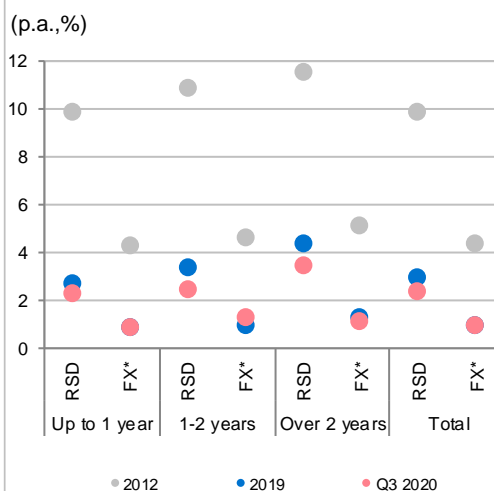
Despite the negative effects of the coronavirus on the economy, household savings deposited with banks in Serbia in Q3 continued to rise month after month. Also, dinar savings continued to post a more dynamic rise than FX savings, owing to the relatively higher interest rates on dinar than on FX savings, as well as

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



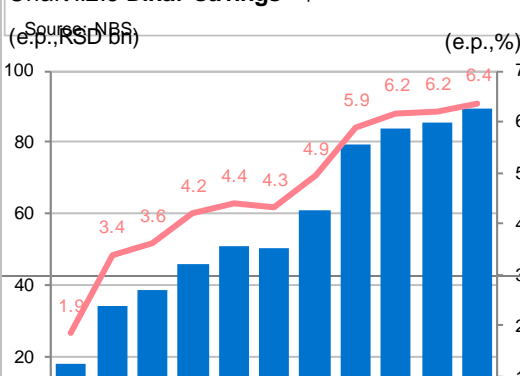
Source: NBS.

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



Source: NBS.

Chart I.2.6 Dinar savings



⁴ The savings of both residents and non-residents were included.

the stimulative tax treatment of income from dinar savings.

At end-September, dinar savings (resident and non-resident) stood at RSD 89.3 bn, which is its highest level on record. Quarter-wise, dinar savings in Q3 rose by RSD 3.8 bn (4.5%), which is double the growth from the previous quarter. Growth is even higher when compared to end-2019 (RSD 9.7 bn or 12.2%) or to Q3 2019 (RSD 15.2 bn or 20.5%).

As for the maturity structure of dinar savings, Q3 saw an increase in savings maturing in up to one year (by RSD 4.1 bn), which accounts for more than three-quarters of total dinar savings, the increase being particularly pronounced with savings maturing in 6–12 months (RSD 2.5 bn).

Savings deposits with the maturity of more than one year contracted in the same period (by RSD 0.8 bn), due to decreased savings with the maturity of one to two years (by RSD 1.2 bn). Banks offered interest rates on deposits of these maturities at 3.7% on average, while interest rates on deposits with shorter maturities averaged 2.3%.

FX savings (resident and non-resident) equalled EUR 11,155.7 mn at end-Q3, up by EUR 167.7 mn (1.5%) from end-June, and by EUR 351.5 mn (3.3%) from end-2019. Taking a look at the past year, this growth is even higher (EUR 544.2 mn or 5.1%).

Similar to dinar savings, growth is entirely attributable to a rise in savings deposited for more than one year (by EUR 318.0 mn), notably demand deposits (by EUR 181.4 mn) and savings termed for 6–12 months (by EUR 145.0 mn). Savings deposited for up to one year still remain a dominant type of FX savings (83%), despite banks calculating lower interest rates on such savings (0.9% on average), and their share increased further during Q3 (by 1.6 pp). FX savings deposited for longer than one year, for which banks offer relatively favourable interest rates (1.2% on average), contracted in Q3 by EUR 150.2 mn.

The share of dinar savings in total savings at end-September equalled 6.4%, which is 0.2 pp higher than three months ago, and 0.8 pp higher than at end-Q3 2019.

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

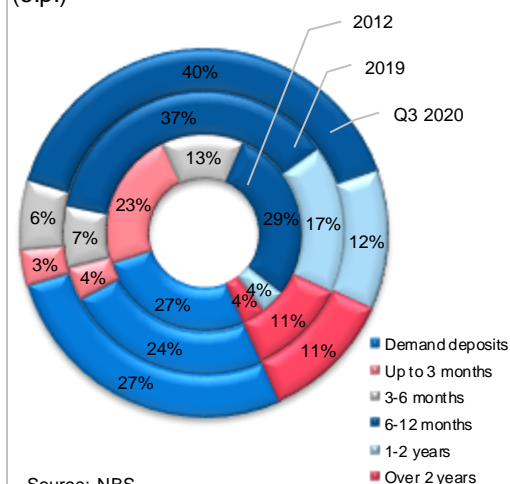
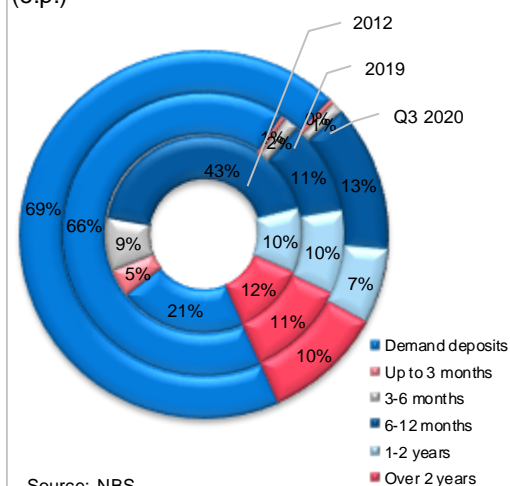


Chart I.2.8 Maturity structure of FX savings (e.p.)



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

Dinar and FX savings posted constant growth despite the economic crisis and the uncertainty caused by the coronavirus pandemic. This shows that citizens still have confidence in the domestic financial system, which is a result of a stable macroeconomic environment, as well as the timely adoption of a set of measures for overcoming the consequences of the pandemic.

Over the past eight years, dinar savings increased almost five times (growth of RSD 71.2 bn), reaching a record high RSD 89.3 bn in September 2020. In the same period, FX savings increased from EUR 7.9 bn to EUR 11.2 bn.

Higher profitability of dinar savings is the result of several years of financial and monetary stability (low and stable inflation and the relatively stable EUR/RSD exchange rate), higher interest rates on dinar than on FX savings, a more favourable tax treatment of savings in the local currency, and all measures for overcoming the crisis caused by the pandemic that were adopted on time, which helped preserve citizens' confidence in the local currency.

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

Type of savings	Date of deposit placement	Initial deposit	EUR/RSD exchange rate*	Interest rate (% p.a.)**	Maturity date	EUR/RSD exchange rate	Deposit at the end of term**	Amount of deposit at the end of term	
								in RSD	in EUR***
Savings in RSD	Sept 2019	100,000	117.5958	2.65	Sept 2020	117.5830	102,650	102,650	873
Savings in EUR	Sept 2019	850	117.5958	0.57	Sept 2020	117.5830	854	100,474	854
Difference in favour of savings in RSD - deposit placed for a year								2,176	19
Difference in favour of savings in RSD - deposit placed for a 3M period								372	3
Difference in favour of savings in RSD - deposit placed for a 2Y period								6,118	52
Difference in favour of savings in RSD - deposit placed for a 8Y period, annual rollover								37,724	321

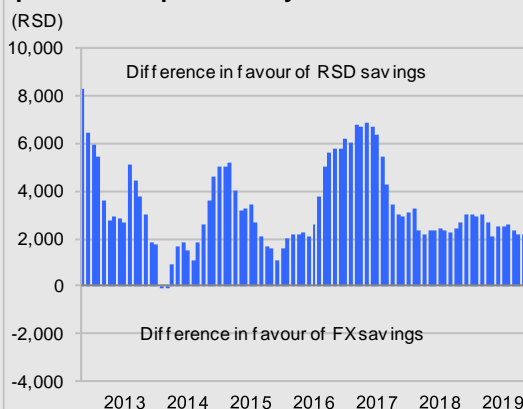
*monthly average exchange rate of the dinar against the euro.

**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.

The latest analysis of the profitability of savings once again confirmed that it is more profitable to save in dinars than in euros, both in the long and the short term. The analysis was done for the period September 2012 – September 2020 and it showed that in case of savings termed for one year (without rollover), saving in dinars is more profitable in as many as 98% of the observed annual subperiods (Chart I.2.9). Hence, a depositor who in September 2019 termed RSD 100,000 at an interest rate of 2.65% would, after one year (in September 2020), receive around RSD 2,200 more than the depositor who in the same period termed euros in the equivalent value of RSD 100,000 at an interest rate of 0.57% (Table I.2.1). In case of savings termed for three months, dinar savings were more profitable than euro savings in 86% of the observed quarterly subperiods, as well as in case of savings termed for two years, in all observed two-year subperiods.

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



The conclusion in favour of dinar savings is the same even in case of savings termed for one year and rolled-over for a period of eight years. In this case, a depositor who deposited RSD 100,000 eight years ago would receive almost RSD 38,000 (around EUR 320) more in September 2020 than a depositor who in the same period termed euros in the equivalent value of RSD 100,000.

Going forward, the NBS will continue to contribute to the dinarisation of the Serbian financial system, in cooperation with the Serbian Government, by *inter alia* promoting dinar savings and indicating its higher profitability.

Dinarisation of public debt

Q3 saw a decrease in public debt, with the debt in dinars increasing and the FX part of the debt decreasing. Therefore, the degree of dinarisation of public debt continued to rise, reaching a record high level at the end of the quarter.

At end-Q3 public debt equalled RSD 3,128.2 bn, down by RSD 26.0 bn from the end of the previous quarter. Its share in GDP also decreased, by 0.6 pp during Q3, to 56.7%.

The decrease in public debt was achieved due to the repayment of a portion of the FX debt (by RSD 49.0 bn), notably the debt in euros (by EUR 124.8 mn), mostly on account of the matured bonds issued in euros in the domestic financial market, as well as on account of the repayment of the debt to foreign creditors. A portion of public debt in dollars and Swiss francs also contracted, though to a lower degree (USD 30.0 mn and CHF 12.9 mn, respectively), while a portion of the debt to the IMF was also repaid (in the amount of SDR 15.8 mn).

Unlike the FX portion of public debt, dinar public debt increased in Q3 (by RSD 23.0 bn), which is almost entirely the result of the higher amount of debt on account of long-term securities issued in the domestic market (RSD 22.9 bn at nominal value).

As a result of the above developments, the share of dinar debt in total public debt increased (by 1.0 pp) to 29.4%, which is a record high level of this indicator. On the other hand, the share of the debt in euros remained unchanged (47.2%), while the share of the dollar debt in total public debt decreased (by 0.7 pp, to 16.6%), partly reflecting the effect of currency changes (the dollar weakening vis-à-vis the euro).

Primary market of government securities

Based on the securities issued in the domestic market, at end-Q3 public debt equalled RSD 1,238.3 bn, up by RSD 17.1 bn from end-Q2.⁵

In the currency structure of the portfolio of government securities, the stock of dinar securities increased by RSD 22.9 bn in Q3 and equalled RSD 912.4 bn at end-Q3, making up 73.7% of the total portfolio of government securities. Relative to end-Q2, this share rose by 0.9 pp.

By individual maturity, there was an increase in the nominal stock of debt on account of dinar government 5.5Y securities (by RSD 13.2 bn) and 2Y securities (by RSD 9.0 bn), and to a lesser degree of 12.5Y securities (by RSD 1.5 bn). In the same period, the stock of 7Y securities matured, hence a portion of the

Chart I.3.1 Share of dinar debt in total public debt

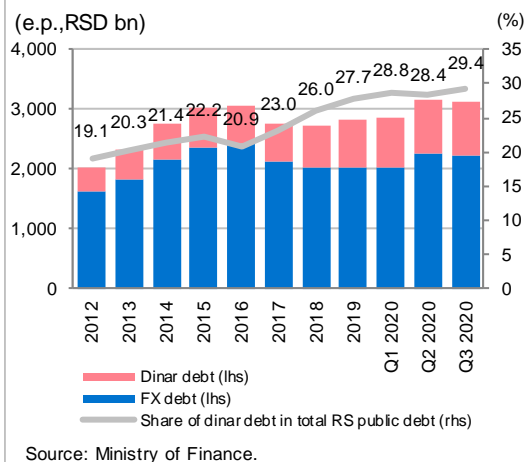


Chart I.3.2 Currency structure of RS public debt

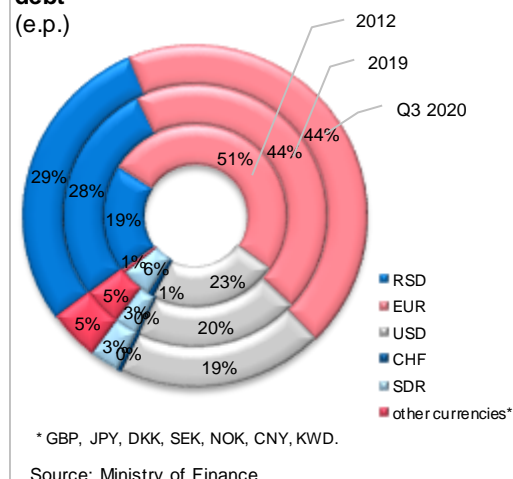


Chart I.3.3 Maturity and currency structure of government securities issued in the domestic fin. market

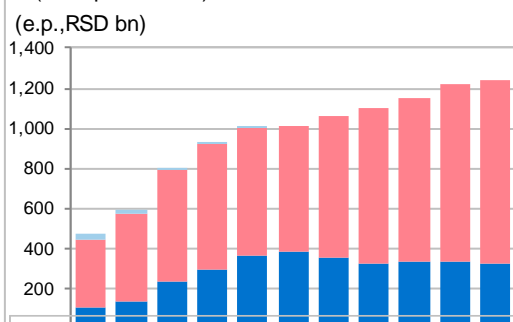
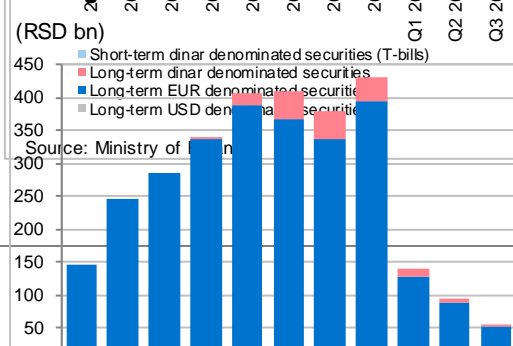


Chart I.3.4 Secondary trading in dinar government securities



⁵ Including savings bonds.

dinar debt was repaid on that account (by RSD 0.7 bn).

In respect of FX government securities issued in the domestic market, there was no major borrowing in Q3 as the government satisfied its needs for FX liquidity in May by issuing eurobonds in the international financial market. Therefore, in Q3, the government practically did not increase its euro debt in the domestic capital market, but only serviced its liabilities under previously issued 3Y securities. Hence, public debt was reduced by EUR 51.3 mn on this account.

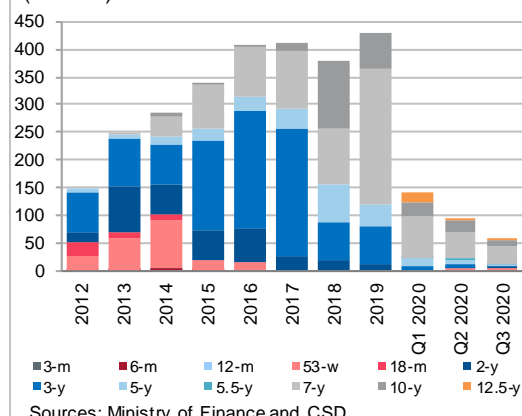
Secondary market of dinar government securities

The turnover of dinar government securities in the secondary market continued to decrease for the third consecutive quarter. During Q3 it equalled RSD 55.9 bn, down by RSD 39.7 bn from the previous quarter.

The lower volume of secondary trading in dinar securities resulted from reduced trading in all securities with the initial maturity of more than two years, the most pronounced being that of 7Y securities (in the amount of RSD 14.8 bn), which account for 59% of the entire trading in this market. In addition to these securities, there was a significant decrease in trading in 10Y securities (by RSD 11.5 bn). On the other hand, as in the previous quarter, the biggest positive contribution to secondary trading was that of 53W securities issued in April this year.

Secondary trading in dinar government securities in the Belgrade Stock Exchange was practically halved in Q3 relative to Q2 (down by 47%) and came at RSD 3.4 bn. Accordingly, the share of trading in this market in the total volume of secondary trading in these securities decreased as well (equalling 6.1%).

Chart I.3.5 Secondary trading in dinar government securities, by maturity of securities
(RSD bn)



II. FX hedging instruments

In Q3, the NBS continued to organise regular three-month and two-week swap auctions of foreign currency in order to encourage the development of the interbank swap market.

In the same period, residents concluded forward FX purchases with banks worth EUR 69.4 mn, up by EUR 31.1 mn from the quarter before, and forward FX sales worth EUR 23.8 mn, which is also an increase from the prior quarter, by EUR 13.5 mn.

1. NBS FX swap auctions

During Q3, the NBS held 26 regular three-month swap auctions of foreign currency, where it swap sold and bought EUR 73 mn each. Total bank demand at regular three-month swap FX sale auctions amounted to EUR 108 mn, while total demand at three-month swap FX purchase auctions equalled EUR 159 mn. The weighted average accepted swap points at three-month FX swap sale auctions in Q3 2020 averaged 744, i.e. ranged from 725 to 802, while the weighted average accepted swap points at FX swap purchase auctions on average amounted to 770, i.e. ranged from 750 to 815.

The NBS also organised 26 regular two-week FX swap auctions. The total demand of banks at two-week FX swap sale auctions came at EUR 73 mn, while the total demand at two-week FX swap purchase auctions equalled EUR 89 mn. At two-week swap auctions in Q3, the NBS swap sold and bought EUR 20 mn each.

The weighted average accepted swap points at two-week FX swap sale auctions in Q3 2020 on average equalled 128, i.e. they ranged between 118 and 137, while the weighted average accepted swap points at FX swap purchase auctions on average amounted to 130, i.e. ranged between 120 and 140.

Table II.1.1. NBS swap transactions, quarterly data

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	585.5	1,228.0	534.0	792.5
Q1	212.0	462.0	308.0	520.0
Q2	373.5	766.0	226.0	272.5
Q3	93.0	181.0	93.0	248.0

Source: NBS.

Table II.1.2. NBS swap transactions in 2020, monthly data

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	30.0	55.0	3.0	56.0	30.0	35.0	3.0	42.0
February	10.0	83.0	49.0	86.0	10.0	47.0	49.0	112.0
March	81.0	124.0	39.0	58.0	177.0	205.0	39.0	79.0
Total in Q1	121.0	262.0	91.0	200.0	217.0	287.0	91.0	233.0
April	115.0	115.0	103.5	129.0	91.0	91.0	40.0	40.0
May	25.0	25.0	83.0	83.0	38.0	50.5	10.0	10.0
June	40.0	300.0	7.0	114.0	40.0	69.0	7.0	12.0
Total in Q2	180.0	440.0	193.5	326.0	169.0	210.5	57.0	62.0
July	43.0	52.0	10.0	35.0	43.0	70.0	10.0	40.0
August	15.0	36.0	0.0	20.0	15.0	34.0	0.0	19.0
September	15.0	20.0	10.0	18.0	15.0	55.0	10.0	30.0
Total in Q3	73.0	108.0	20.0	73.0	73.0	159.0	20.0	89.0
Total in 2020	374.0	810.0	304.5	599.0	459.0	656.5	168.0	384.0

Source: NBS.

2. FX hedging instruments

In Q3, the share of forward FX purchases by residents from banks in total FX purchases equalled 1.8% (vs.

Table II.2.1. FX forward transactions between residents and banks, quarterly data

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

1.1% in the previous quarter) and was the highest in August – 2.1%, which is also its highest monthly share since the start of 2020. In Q3, 11 domestic enterprises hedged against FX risk by entering into this type of transactions with banks. The weighted average maturity of forward FX purchases was 212 days, while the longest maturity of a forward FX transaction was recorded in August – 320 days. The average value of forward FX purchase contracts of residents equalled EUR 0.7 mn.

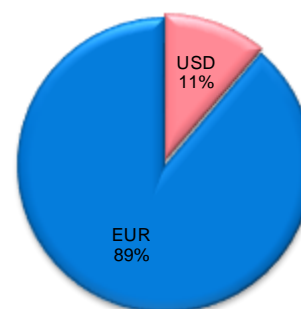
In terms of the currency structure of forward FX purchases, the euro accounted for 89% and the US dollar for 11%.

Q3 saw forward FX sales by five residents in the total amount of EUR 23.8 mn (compared to 10.3 mn in the quarter before), and the weighted average transaction maturity of 116 days.

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	1.1	81	0.1	2.7	564	0.2
February	12.1	66	1.0	10.7	279	1.0
March	19.6	99	1.5	3.3	598	0.3
Total in Q1	32.8	86	0.9	16.7	387	0.5
April	10.2	50	1.0	8.2	330	0.8
May	9.7	46	0.8	2.0	570	0.2
June	18.5	29	1.3	0.1	68	0.0
Total in Q2	38.4	40	1.1	10.3	379	0.4
July	17.7	134	1.3	4.3	62	0.4
August	25.5	320	2.1	9.4	54	1.0
September	26.2	158	1.9	10.1	196	0.9
Total in Q3	69.4	212	1.8	23.8	116	0.7

Source: NBS.

Chart II.2.1. Currency structure of FX forward transactions between residents and banks in Q3 2020



Source: NBS.

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

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	64.4
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
Q1 2020	14.7	55.1	33.2	27.3	69.4	41.0	58.6	22.4	35.6	85.5	27.3	72.6
Q2 2020	16.4	55.8	34.6	39.0	67.3	46.2	60.3	24.9	38.5	77.8	29.0	70.2
Q3 2020	19.3	56.6	36.6	31.8	71.9	44.9	60.2	25.7	39.2	81.2	30.2	72.0

* 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
Q1 2020	83,674.7	10,819.7	1,355,037.8	6.2	821.4	2,035.0	2,856.3	28.8
Q2 2020	85,495.7	10,988.0	1,377,416.7	6.2	896.5	2,257.7	3,154.2	28.4
Q3 2020	89,305.8	11,155.7	1,400,997.8	6.4	919.5	2,208.7	3,128.2	29.4

* 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
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 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	Promoting hedging against FX risk for financial service consumers
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 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%.	Increasing the dinarisation of corporate loans
December 2017	The Government issued a new type of bond in the domestic financial market – saving bond.	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.
Since April 2018 (the last change), as well as before	Differentiated RR remuneration rate: 1.25% on dinar RR, no remuneration on FX RR	Development of the financial market by promoting alternative form of savings and facilitating access to the government securities market for the general public
June 2018	The Law on Financial Collateral was adopted.	Stimulating banks to rely more on dinar sources of funding
		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. 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.	Facilitating foreign investor access to the domestic capital market, increasing efficiency of the domestic financial market and broadening the financial investor base.
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.	Development of the financial market. Encouraging dinar lending.

Methodological notes

- Dinarisation indicators, for each category, represent the share of the 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 disclosed 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 category of newly granted loans does not include loans for debt restructuring at interest rates significantly below market rates, revolving loans, credit card debt and current account overdrafts.
- The category of new deposits includes term deposits and deposits redeemable at notice, but 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.

List of charts and tables

Charts

I.1	Dinarisation indicators	1
I.1.1	Share of dinar lending in total corporate and household lending	1
I.1.2	Lending 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 Q3 2020, 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	3
I.1.7	Interest rates on new household loans	4
I.2.1	Share of dinar deposits in total corporate and household deposits	5
I.2.2	Deposits by sector	5
I.2.3	New corporate and household deposits in Q3 2020, by maturity	6
I.2.4	Dinarisation of new corporate and household deposits, by maturity	6
I.2.5	Interest rates on new term deposits of households	6
I.2.5	Interest rates on new term deposits of households	7
I.2.6	Dinar savings	7
I.2.7	Maturity structure of dinar savings	7
I.2.8	Maturity structure of FX savings	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 Q3 2020	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 2020, 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 2020, 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