

REPORT ON DINARISATION OF THE SERBIAN FINANCIAL SYSTEM

Q2 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 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 further 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 scalee.p. – end of periodlhs – left-hand scale

 \mathbf{mn} — million

 $\mathbf{bn} - \mathbf{billion}$

 $\boldsymbol{pp}-percentage\ point$

SDR — Special Drawing Rights

 \mathbf{Q} — quarter

Other generally accepted abbreviations are not cited.

Contents

١.	Dir	narisation of the Serbian financial system	1
	1.	Dinarisation of receivables Corporate and household receivables New corporate and household loans	1
	2.	Deposit dinarisation	4
		Corporate and household deposits New corporate and household deposits Dinar and FX savings Is it more profitable to save in dinars or in foreign currency?	5 6
	3.	Dinarisation of public debt	9
Π.	FX	Chedging instruments	. 11
	1.	NBS FX swap auctions	. 11
	2.	FX hedging instruments	. 12
	Та	ble A Indicators of dinarisation of receivables, loans and deposits	. 13
	Та	ble B Currency structure of household savings and public debt	. 14
	Lis	st of charts and tables	. 17

I. Dinarisation of the Serbian financial system

Both outstanding and new business in Q2 recorded an increase in the degree of dinarisation of corporate and household receivables. Dinarisation of corporate and household receivables recorded the maximum value under comparable statistics.

The share of dinar deposits in total corporate and household deposits also increased in outstanding business, with the continued propulsive growth of dinar savings. In terms of new business, deposit dinarisation declined.

After a successful issue of eurobonds by Serbia in the international financial market, the degree of public debt dinarisation declined slightly.

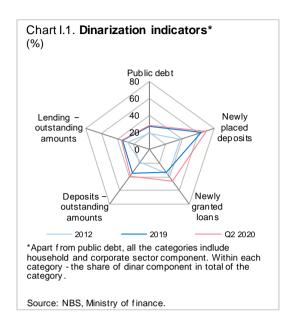
1. Dinarisation of receivables

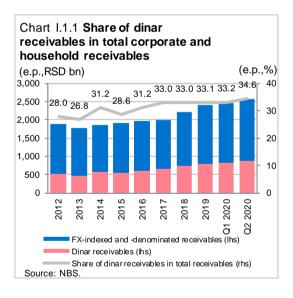
Dinarisation of corporate and household receivables continued up in Q2 2020, driven by increased dinar loans under the Guarantee Scheme provided by Republic of Serbia. Dinarisation of new corporate and household loans also edged up.

Corporate and household receivables

Corporate and household receivables continued up in Q2 2020, owing to the continued monetary policy easing, initiated disbursement of loans under the Guarantee Scheme¹ and the moratorium on loan repayment², amid low interest rates. At end-June 2020, total corporate and household receivables reached RSD 2,574.0 bn, up by RSD 100.2 bn from end-Q1. Observing the currency composition, the stock of dinar receivables increased twice more than FX-indexed and FX receivables (RSD 68.5 bn vs RSD 31.6 bn), which drove up their share in total receivables (by 1.4 pp), to 34.6%. This is the maximum value of this indicator under comparable statistics. Excluding the exchange rate effect, this indicator measured 34.3% at end-Q2, up by 1.4 pp from end-Q1.3

Household receivables (RSD 53.8 bn) recorded the somewhat higher rise compared to corporate receivables (RSD 46.4 bn). Both sectors posted increase largely on account of dinar receivables, whose share in total receivables went up, to 55.8% for household, and 16.4% for corporate receivables in Q2.





1

¹ In accordance with the Decree establishing the Guarantee Scheme as an economic support measure to mitigate the consequences of the COVID-19 disease caused by virus SARS-CoV-2 (RS Official Gazette, No 57/2020).

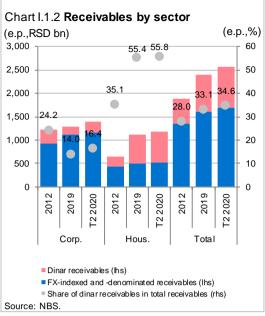
² In accordance with the Decision on Temporary Measures for Safeguarding Stability of the Financial System (RS Official Gazette, No 33/2020).

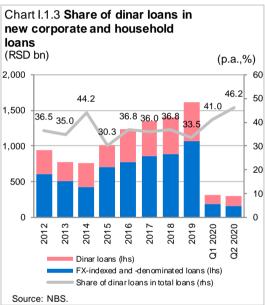
³ Calculated at the exchange rate of the dinar against the euro, US dollar, Swiss franc, pound sterling and Japanese yen as at 30 September 2014, taking into account the currency structure of loan receivables.

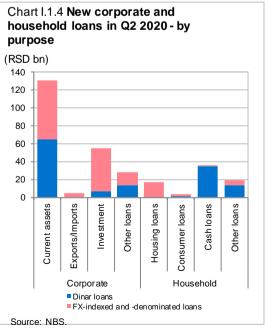
In Q2, the rise in household loans was mainly driven by cash loans disbursed in dinars, as a rule. In addition to monetary policy relaxation, the increase in these loans was also driven by the moratorium on repayment of loans since end-March which lasted for three months. Dinar loans belonging to the "other" category also went significantly up which was particularly pronounced in May and June after banks started approving loans to entrepreneurs and agricultural estates under the Guarantee Scheme. Amid low interest rates in the international market, the said factors also drove FX-indexed household loans up. As so far, the rise in housing loans was dominant.

As for corporate loans, dinar loans recorded twice more dynamic nominal growth compared to FXindexed and FX loans (RSD 30.9 bn vs RSD 15.5 bn). Higher need for liquid assets in the previous period was the reason for more liquidity loans and working capital loans. Compared to loans for other purposes, these loans are granted in dinars to a larger extent. In Q2, they accounted for around RSD 32.7 bn or 72% of the total increment in corporate loans and they are the second most dominant corporate loan category (with a 41% share), after investment loans. The bulk of loans for this purpose (EUR 558.5 mn) was approved to micro, small and medium-sized enterprises under the Guarantee Scheme in May and June and more than half of these loans (56.4%) were granted in dinars. The stock of investment loans, dominantly approved with an FX clause, also went up. Loans for this purpose are still the most prevalent loan category with a 44% share in total corporate

The rise in receivables is expected in the coming period, too, encouraged by many NBS and Serbian Government measures aimed at lending growth. Hence, the rise in the stock of receivables will be driven by the July moratorium on loan repayment, continued disbursement of loans under the Guarantee Scheme for micro, small and medium-sized enterprises, as well as for certain household groups (entrepreneurs and agricultural estates).4 Positive effects might be more pronounced in case of dinar loans as these loans should be even more favourable than so far, since from July the NBS calculates and pays interest on allocated required reserves in dinars at a "preferential interest rate" which is higher than the "regular" rate (by 0.50 pp per annum) if, under the Guarantee Scheme, banks granted loans to clients at an interest rate which is at least 0.5 pp lower than the maximum rate stipulated by the Decree on the Guarantee Scheme.⁵ Enabling banks to approve loans up to RSD 90,000 under predefined terms, to natural persons whose salaries or pensions are not paid







⁴ By end-June EUR 638.4 mn worth of loans were approved under the Guarantee Scheme, out of the total of EUR 2 bn which banks can approve on these grounds until the end of January 2021.

⁵ Pursuant to the Decision on Interest Rates Applied by the National Bank of Serbia in the Implementation of Monetary Policy.

through an account with those banks will also boost dinar household loans.

As for measures targeting housing loans, positive effects are expected on account of lowering of the minimum downpayment for the purchase of the first flat (to 10%), as well as temporary relaxation of conditions for the approval of housing loans in terms of the degree of the completion of works. Enabling of deferral of repayment of housing loans for up to five years will also aid lending growth.

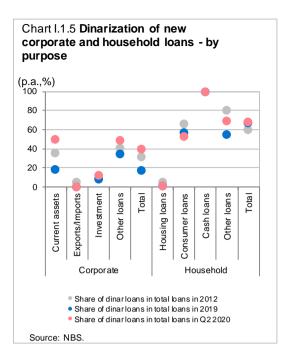
New corporate and household loans

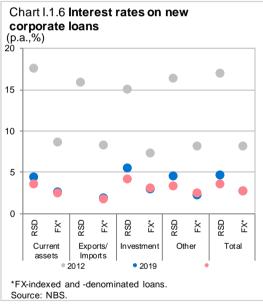
In Q2, banks approved new corporate and household loans in the amount of RSD 293.3 bn, down by RSD 25.0 bn from the previous quarter. When observing individual months, April saw the approval of an extremely modest amount of new loans under the impact of containment measures. With the relaxation of these measures came the gradual rise in lending and the amount of new corporate and household loans reached RSD 152.0 bn in June, which is more than half of the amount of loans granted in Q2.

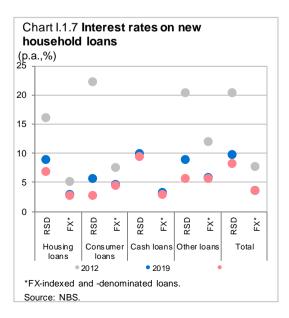
In terms of the composition of new corporate and household loans, 46.2% were approved in dinars, considerably more (by 5.2 pp) than in the previous quarter. Loans were largely granted to corporates (RSD 218.3 bn). The bulk of this amount was intended for working capital where the currency composition changed significantly in favour of dinar loans which were approved to micro, small and medium-sized enterprises on favourable terms under the Guarantee Scheme. The increase in dinar lending on the said grounds significantly boosted dinarisation of total new corporate loans. In Q2, this indicator stood at 39.0%, up by 11.7 pp, compared to Q1, and up by 26.3 pp compared to Q2 2019. Loans for all other purposes recorded a decrease, save for exportand import-loans which recorded modest growth.

In Q2, the volume of new household loans was significantly reduced in the face of the pandemic. Hence, in April only RSD 10.2 bn was disbursed – which is the lowest amount since January 2011, but in May and June this amount gradually increased. In Q2, loans worth RSD 75.0 bn were disbursed, down by more then a quarter from Q1. The decrease was particularly pronounced for dinar loans (by RSD 21.3 bn), especially cash loans (by RSD 30.0 bn) as the most prevalent category among new loans (with 47%). In addition, dinar loans continue to dominate the composition of household loans (67.3%) though their share is lower than in Q1 (by 2.1 pp).

In Q2 the amount of new FX-indexed household loans dropped (by RSD 7.1 bn) but the decrease referred to housing loans mostly. As for other loan categories, consumer loans increased slightly (by RSD 0.8 bn) as did other non-categorised loans (by







RSD 3.5 bn), including loans for working capital and liquidity approved to entrepreneurs and agricultural estates under the Guarantee Scheme.

As a result of past NBS monetary policy easing, interest rates on new dinar corporate and household loans continued decreasing. In Q2 they went down by 1.3 pp on average, to 5.3% which is their lowest level so far. Interest rates on all types of household loans dipped, particularly on other non-categorised loans (from 7.6% to 5.6%). Interest rate on dominant, cash loans decreased to 9.4% on average (by 0.1 pp), the lowest level so far.⁶

Interest rates on dinar corporate loans went up on average, from the lowest level thus far (3.3% in Q1) to 3.5%. Interest rates on loans for all purposes, except for the prevalent category, working capital loans, declined; the latter were approved at somewhat higher rates in April. However, with the onset of the Guarantee Scheme, a gradual decline in interest rates on these loans ensued in May and June.

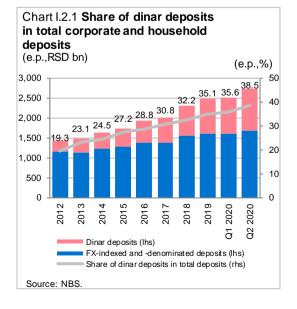
Interest rates on FX-indexed and FX corporate and household loans also dropped (by 0.1 pp) measuring 2.8% on average. This is a result of more favourable interest rates on FX-indexed household loans (they declined by 0.2 pp on average, to 2.6%), which was characteristic for all loan categories, including interest rates on housing loans which touched record low levels in Q2 (2.7% on average). Interest rates on FX-indexed and FX corporate loans remained unchanged from Q1 (2.7%) on average, with interest rates on loans for working capital and financing of import and export declining, interest rates on investment loans remaining the same, and interest rates on other non-categorised loans slightly increasing on average.

2. Deposit dinarisation

The degree of dinarisation of corporate and household deposits rose in Q2 2020, to a large extent as a result of higher government payments in dinars under the government aid package for corporates and households aimed at mitigating the negative economic effects caused by the coronavirus. The rising deposit dinarisation has remained under the favourable influence of uninterrupted growth of dinar savings.

Corporate and household deposits

At end-Q2 2020 corporate and household deposits with banks amounted to RSD 2,726.5 bn, of which 38.5% related to dinar deposits. The stock of total deposits increased by RSD 216.1 bn in Q2, with considerably more dynamic growth in dinar deposits (by RSD 156.8 bn) relative to FX deposits (by RSD 59.3 bn), to a large extent as a result of government measures aimed at mitigating the negative effects of



⁶ Data are available as of Q1 2015.

the coronavirus spread — deferral of taxes and contributions and direct transfers such as payment of minimum wages for workers employed by private companies and one-off payments to adult citizens. NBS measures such as the moratorium on the repayment of bank loans for corporates and households also contributed to the rise in deposits.

The increase in dinar corporate deposits was particularly pronounced (by RSD 97.6 bn), primarily relating to the funds in transaction accounts of corporates in trade, industry, as well as transport, catering, and ICT. Corporate FX deposits increased to a much lesser extent than dinar deposits (by RSD 38.6 bn), and their rise was particularly pronounced for demand deposits with maturity of up to one year in corporates operating in industry.

Under the impact of the said trends, the degree of dinarisation of corporate deposits continued to increase in Q2, for the fifth consecutive quarter (by 1.7 pp), reaching record 60.3% at end-June.⁷ Compared to the same quarter last year, this indicator increased more significantly (by 5.3 pp).

Household deposits also posted dynamic increase in Q2 (by RSD 80.0 bn), driven primarily by transaction dinar deposits and less by dinar savings which reached the record amount in Q2 (RSD 85.5 bn, including savings of non-residents).

In the same period, FX household deposits recorded considerably more modest growth. The increase was recorded mainly by deposits with maturities shorter than one year, within which demand deposits rose in particular.

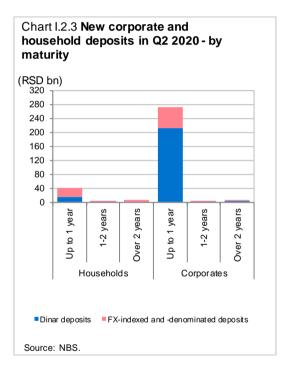
More dynamic growth in dinar deposits relative to FX deposits further boosted dinarisation of household deposits. At end-Q2 this indicator reached 24.9% which is the highest level so far. Compared to Q1, this indicator increased by 2.5 pp, and by 4.9 pp in the past year.

New corporate and household deposits

In Q2 2020, corporates and households deposited RSD 330.8 bn with banks, somewhat more than in Q1 (RSD 7.0 bn). The increase was driven by higher FX-indexed and FX deposits than in Q1 (by RSD 9.8 bn). In the same period, the amount of new dinar deposits declined by RSD 2.8 bn, reducing somewhat their share in total new deposits (by 2.4 pp to 70.2%) compared to a quarter earlier.

In terms of the composition of total new deposits, corporate deposits rose by RSD 27.6 bn in Q2, almost entirely as a result of higher FX deposits (by RSD

Chart I.2.2 Deposits by sector (e.p.,RSD bn) (e.p.,%) 70 60.3 58.3 60 2.500 43.9 50 2,000 40 1,500 30 1.000 20 500 10 0 0 2019 2012 2019 2012 2020 201 7 7 $\overline{2}$ Corp Hous Total Dinar deposits (Ihs) FX-indexed and -denominated deposits (lhs) Share of dinar deposits in total deposits (rhs) Source: NBS



5

⁷ Data are available as of July 2008.

25.7 bn). As new dinar deposits rose to a much lesser extent (by 1.9 bn), their share in total new deposits declined by 7.7 pp, to 77.8%.

The rise in new dinar and FX corporate deposits came with a certain change of deposit maturity in favour of deposits with maturities of up to one year as the most dominant deposit category.

As for household deposits, the amount of new deposits in Q2 was lower by RSD 20.6 bn q-o-q. New FX deposits of all maturities were lower (by RSD 15.9 bn). Dinar deposits contracted to a lesser extent (by RSD 4.8 bn), in case of all maturities, which led to an increase in the degree of dinarisation of new household deposits by 1.7 pp, to 29.0%.

In Q2, interest rates on term dinar household deposits were lower on average than in the previous quarter (by 0.4 pp), equalling 2.4%. In terms of the maturity structure of dinar deposits, interest rates are set within the range of 2.3% - for deposits with the maturity up to one year, to 4.0% for deposits termed for longer than two years.

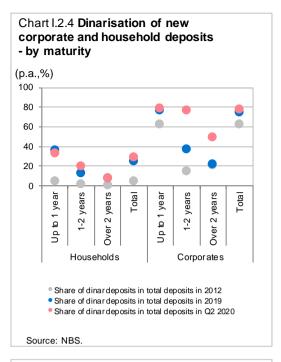
In Q2, rates on FX household deposits offered by banks were on average similar to those in Q1 (1.0%). Interest rates on deposits termed for periods shorter than two years went up and rates on deposits with longer maturities remained the same.

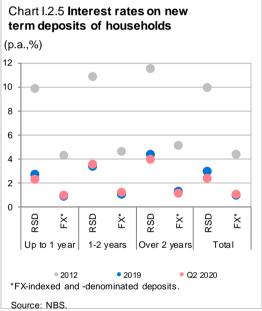
Dinar and FX savings

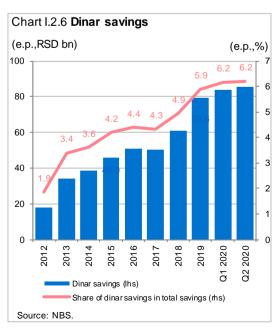
Household savings deposited in banks in Serbia in Q2 continued up despite the adverse impact of the coronavirus on the economy, reflecting confidence in the dinar and preservation of financial and macroeconomic stability. Dinar savings continue to post more dynamic growth than FX savings, encouraged by relatively higher interest rates on dinar than on FX savings and the stimulating tax treatment of income from dinar savings.

In Q2, dinar household savings deposited with banks in the Republic of Serbia continued growing from month to month, posting record high levels. At end-June dinar savings (residents' and non-residents') stood at RSD 85.5 bn, up by RSD 1.8 bn (2.2%) from end-March and by RSD 5.9 bn (7.4%) from the end-2019. Compared to Q2 2019, the dinar savings went up by RSD 16.2 bn (23.4%).

In the maturity composition of dinar savings, savings with maturity of up to one year rose by RSD 4.8 bn, while the savings with longer maturities declined by RSD 2.5 bn. In terms of individual maturity, savings termed from six to twelve months and demand savings increased the most (by RSD 2.7 bn and RSD 2.4 bn, respectively). These account for the bulk of dinar savings (with 38.6% and 26.3%, respectively). Savings termed for longer than a year accounted for





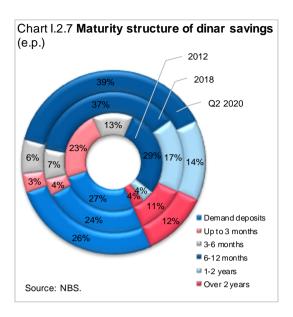


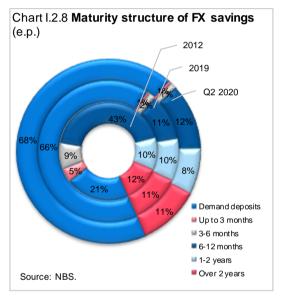
somewhat more than a quarter (25.6%) of total savings. On average, banks offer a 3.7% interest rate on savings with these maturities, while interest rates on savings with shorter maturities equalled 2.3%.

At end-Q2, FX savings reached EUR 10,988.0 mm, rising by EUR 168.2 mm (1.6%) from end-March, and by EUR 183.7 mm (1.8%) from the end of last year. In y-o-y terms, this growth is higher (EUR 596.7 mm or 5.7%).

Similar as with dinar savings, FX savings deposited for periods shorter than a year increased (by EUR 362.2 mn) owing to demand savings (up by EUR 246.9 mn) and savings with six to twelve month maturity (by EUR 135.1 mn). Demand savings are still the dominant form of FX savings (67%) despite lower interest rates offered by banks (1.0% on average). FX savings deposited for over one year for which banks offer relatively favourable interest rates (1.1% on average) decreased by EUR 193.9 mn in Q2.

The share of dinar in total savings amounted to 6.2% at end-June, slightly higher than three months ago, or 0.9 pp higher than at end-Q2 2019.





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

In the conditions of low and stable inflation and relative exchange rate stability, and thanks to the timely pre-emptive measures taken by the NBS, in cooperation with the Government, to support the economic and financial system, households' confidence in the stability of the domestic currency and the security of the domestic financial system has been preserved. As a result, despite the uncertainty caused by the coronavirus pandemic, household savings increased.

Dinar savings increased almost five times in the past eight years (by RSD 67.9 bn), reaching a record high of RSD 85.5 bn in mid-2020. In the same period, FX savings also increased, though somewhat more moderately, from EUR 7.9 bn to EUR 11.0 bn.

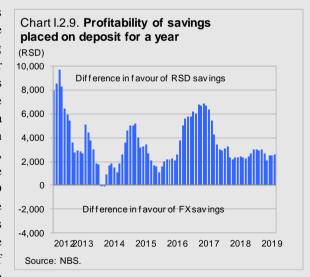
Table I.2.1. Profitability of savings placed on deposit for a year

Type of savings	Date of deposit	Initial	EURRSD exchange	Interest rate (%,	Maturity	EURRSD exchange	Deposit at the end of	102,830 100,210 2,620 396	
Type of Savings	placement	deposit	rate*	p.a.)**	date	rate	term**	in RSD	in EUR***
Savings in RSD	Jun 2019	100,000	117.9377	2.83	Jun 2020	117.5852	102,830	102,830	875
Savings in EUR	Jun 2019	848	117.9377	0.6	Jun 2020	117.5852	852	100,210	852
Difference in favour of savings in RSD - deposit placed for a year								2,620	22
Difference in favour of savings in RSD - deposit placed for a 3M period								396	3
Difference in favour of savings in RSD - deposit placed for a 2Y period								5,847	50
Difference in favour of savings in RSD - deposit placed for a 7Y period, annual rollover								27,855	237

^{*}monthly average exchange rate of the dinar against the euro-

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

The results of the latest analysis of profitability of savings in the June 2012 – June 2020 period confirm that it is more profitable to save in dinars than in euros, both in the long and in the short term. Analysis of savings termed for 1 year (without rollover) reveals that in the past eight years it was more profitable to save in dinars in as many as 98% of the observed annual subperiods (Chart I.2.9). Hence, a depositor who in June 2019 termed RSD 100,000 at an interest rate of 2.83% would, after one year (in June 2020), receive over RSD 2,600 more than the depositor who in the same period termed euros in the equivalent value of RSD 100,000 at an interest rate of 0.60% (Table I.2.1). In the case of savings termed for three months, dinar savings were more profitable than euro savings in over 86% of the observed quarterly subperiods, whereas in the case of savings termed for two years, dinar savings were more



profitable than euro savings in all observed two-year subperiods.

The analysis also showed that if savings were termed for a year with deposit rollover in the period of eight year, a person who saved in dinars and deposited RSD 100,000, would receive almost RSD 39,500 (around EUR 340) at the end of the observed period (June 2020) than a person who deposited an equivalent value in euros in the same period.

Higher profitability of dinar savings is the result of the achieved and maintained monetary stability (low and stable inflation and a relatively stable RSD/EUR exchange rate), i.e. of a stable macroeconomic environment, higher interest rates on dinar than on euro savings, more favourable tax treatment of savings in the domestic currency, and all timely measures taken during the pandemic to preserve households' confidence in the national currency.

The promotion of savings in dinars is part of the NBS strategy of dinarisation of the financial system. The NBS will, therefore, continue to promote dinar savings, underscoring their greater profitability relative to euro savings.

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

3. Dinarisation of public debt

In Q2 2020, the degree of dinarisation of public debt decreased somewhat relative to Q1, which is in a large extent influenced by an increase in the FX component of public debt after the issue of 7-year eurobonds worth EUR 2 bn in the international financial market. The dinar component increased less than the FX component due to the securities issued in the domestic financial market.

At end-Q2, public debt equalled RSD 3,154.2 bn, up by RSD 297.9 bn from end-Q1.

The rise in public debt was mostly due to an increase in its FX component (by RSD 222.7 bn), including primarily higher euro debt (by EUR 1,979.0 mn) in respect of eurobonds issued by Serbia in the international capital market in the conditions of the global economic crisis caused by the coronavirus pandemic. Eurobonds with 7-year maturity, worth EUR 2 bn, were issued at the coupon rate of 3.125%. The investors' interest for these securities was outstanding, and the investors' demand at the auction was several times higher than the planned and realised issue amount, and the interest rate decreased during the auction.

The dinar component of public debt also went up (by RSD 75.2 bn), which was almost entirely due to government borrowing in the domestic capital market through the sale of long-term securities (RSD 75.1 bn).

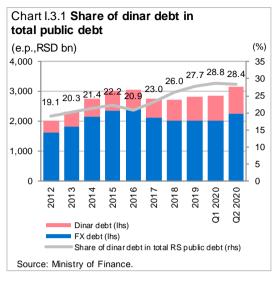
When it comes to other currencies, a part of debt to the IMF was repaid (worth SDR 8.0 mn), while dollar public debt increased marginally (by USD 33.1 mn).

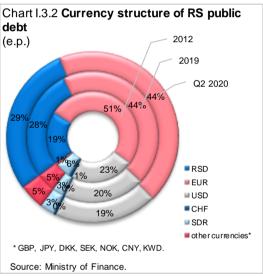
As a result of the above developments and the exchange rate changes (weakening of the euro against the dollar), the share of euro-denominated public debt in total public debt increased (by 3.2 pp to 47.2%), while a decrease was recorded in the share of dinar (by 0.4 pp to 28.4%) and dollar debt (by 2.1 pp to 17.3%).

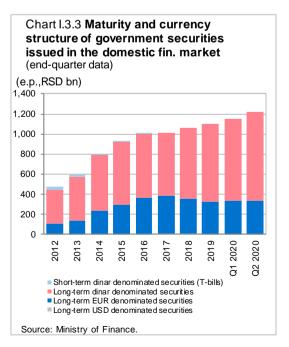
Primary market of government securities

Based on the securities issued in the domestic market, at end-Q2 public debt equalled RSD 1,221.2 bn, up by RSD 74.3 bn from end-Q1.8

In the conditions of global risk aversion and diminished foreign investors' interest in domestic dinar securities, the government refinanced the maturing of previously issued securities in this market and managed to borrow additionally. As a result, public debt increased on this account by RSD 75.1 bn relative to Q1. By individual maturity, the entire increase in the stock of dinar government securities







-

⁸ Including savings bonds.

refers to securities with maturities longer than one year – there was an increase in the stock of 2Y securities (by RSD 39.1 bn), 53W securities (by RSD 35.0 bn), 5.5Y securities (by RSD 25.8 bn) and, to a smaller extent, also 12.5Y securities (by RSD 4.4 bn). In the same period, the stock of 3Y securities decreased (by 25.7 bn), as did the stock of 7Y securities (by RSD 3.5 bn).

In respect of FX government securities issued in the domestic market, there was no major borrowing in Q2 as the government met its requirements for FX liquidity from the issue of eurobonds in the international financial market. Thus, public debt in respect of FX securities issued in the domestic market contracted by EUR 7.2 mn relative to Q1, while the maturing of 3Y securities was refinanced by fresh borrowing under 2Y securities.

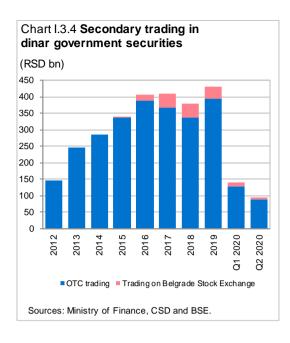
These movements increased the share of dinar securities in the currency composition of the portfolio of government securities (from 71.0% in Q1 to 72.8% in Q2 2020).

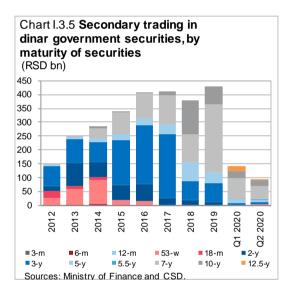
Secondary market of dinar government securities

The turnover of dinar government securities in the secondary market in Q2 decreased by RSD 44.7 bn from a quarter before, to RSD 95.6 bn.

Lower volume of secondary trading in dinar securities mainly resulted from reduced trading in securities with the initial maturity of 7 years (in the amount of RSD 27.2 bn), which accounts for a half of total trading in this market. Trading in 10Y, 5Y and 3Y securities also contracted. On the other hand, the largest positive contribution to secondary trading came from 53W securities issued in Q2.

Secondary trading in dinar government securities in the Belgrade Stock Exchange in Q2 came at RSD 6.4 bn, which is almost by a half less (by RSD 6.5 bn) than in the previous quarter. Accordingly, the share of trading in this market in the total volume of secondary trading in these securities decreased as well (7%).





II. FX hedging instruments

In Q2, 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. The NBS continued to apply a changed practice regarding regular FX swap auctions which it adopted in late March to support the domestic financial system and the domestic economy in the conditions of the spread of the coronavirus. Thus, from 31 March until end-May 2020, the NBS organized regular swap auctions at the fixed swap points method, instead of the variable multiple swap points method applied before, which means that the volumes of swap purchase and sale no longer had to be identical. By organising auctions of swap purchase and swap sale of foreign currency (euros) in exchange for dinars at the fixed method, the NBS enabled banks to obtain the needed dinar and FX liquidity at favourable interest rates.

In the same period, residents concluded forward FX purchases with banks worth EUR 38.3 mn, up by EUR 5.5 mn from the guarter before, and forward FX sales worth EUR 10.3 mn, down by EUR 6.4 mn q-o-q.

1. NBS FX swap auctions

In Q2, in the conditions of the spread of the coronavirus, the NBS continued to hold regular swap auctions, not only in order to encourage the development of the interbank swap market but also to provide additional support to the domestic financial system by ensuring additional dinar and FX liquidity at favourable terms. Thus, from 31 March until end-May 2020, the NBS organised regular swap auctions at the fixed swap points method, instead of the variable multiple swap points method as before. The volumes of swap FX purchase and sale no longer had to be identical. By organising auctions of swap purchase and sale of FX (euros) in exchange for dinars at the fixed method, the NBS enabled banks to obtain the needed dinar and FX liquidity at favourable interest rates. This means that the role of the NBS at FX swap auctions was not only that of an intermediary, but it also to provide sufficient dinar and FX liquidity to banks, at favourable interest rates, in order to prevent any disruptions in the domestic money and financial market.

In Q2, the NBS organised 26 regular three-month FX swap actions (of which 16 at the fixed method), in which it swap sold EUR 180 mn and swap bought EUR 169 mn. Total bank demand at regular three-month swap FX sale auctions amounted to EUR 440 mn, while total demand at three-month swap FX purchase auctions reached EUR 210.5 mn. The weighted average accepted swap points at three-month FX swap sale auctions in Q2 2020 amounted to 1,617, i.e. they ranged from 740 to 2,526, while the weighted average accepted swap points at FX swap purchase auctions amounted to 1,828, i.e. they moved from 1,102 to 2,526.

The NBS also organised 22 regular two-week FX swap auctions (of which 14 at the fixed method). The

Table I	1.1.1. NB S	S swap transact	tions, qua	rterly 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

Maria	s	wap FX sal	e		Swap FX purchase					
Month -	3M		2W			3M		2W		
	Reali- zation	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		
Total in 2020	301.0	702.0	284.5	526.0	386.0	497.5	148.0	295.0		

total demand of banks at two-week FX swap sale auctions came at EUR 326 mn, while the total demand at two-week FX swap purchase auctions equalled EUR 62 mn. At the two-week swap auctions held in Q2, the NBS sold and bought EUR 193.5 mn and EUR 57 mn, respectively.

The weighted average accepted swap points at two-week FX swap sale auctions in Q2 2020 amounted to 283, i.e. they ranged between 137 and 388, while the weighted average accepted swap points at FX swap purchase auctions amounted to 269, i.e. ranged between 138 and 388.

2. FX hedging instruments

In Q2, the share of forward FX purchases by residents from banks in total FX purchases equalled 1.1% (vs. 0.9% in the previous quarter) and was the highest in June -1.3%. In Q2, 16 domestic enterprises hedged against the FX risk by entering into this type of transactions with banks. The weighted average maturity of forward FX purchases was 40 days, while the longest maturity of a forward FX transaction was recorded in May -219 days. The average value of forward FX purchase contracts of residents equalled EUR 0.3 mn.

In terms of the currency structure of forward FX purchases, the euro accounted for 84% and the US dollar for 16%.

Q2 saw forward FX sales by three residents, in the total amount of EUR 10.3 mn (compared to 16.7 mn in the quarter before), and the weighted average transaction maturity of 379 days.

	Forward	purchase by	residents	Forw	esidents	
Period	Amount in EUR mln	Weighted av erage maturity in day s	% 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	71.2	61	1.0	27.0	386	0.4
Q1	32.8	86	0.9	16.7	387	0.5
Q2	38.4	40	1.1	10.3	379	0.4

	Forward	purchase by	residents	Forw	ard sale by r	esidents
Month	Amount in EUR mln	Weighted av erage maturity in day s	% 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	8.1	330	0.8
May	9.6	46	0.8	2.0	570	0.2
June	18.5	29	1.3	0.2	68	0.0
Total in Q2	38.4	40	1.1	10.3	379	0.4

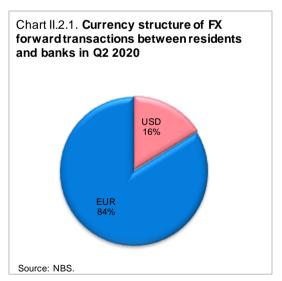


Table A Indicators of dinarisation of receivables, loans and deposits (in %)

Period	Share of dinar in total receiv ables, 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.*		
renou	Corporates Households Total		Total	Corporates	Corporates Households		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	78.1	29.0	70.4

^{*} 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

		House	hold savings		Public debt (central government)					
Period*	Dinar sav ings (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	1,377,416.6	6.2	896.5	2,257.7	3,154.2	28.4		

^{*} 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

Description of measure/activity TV 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. Prescribed minimum mandatory downpayment/deposit for FX and FX-indexed loans to natural persons except mortgage loans) of 30% imiting the ratio of net open FX position to capital at 20%, as of 2011 (increased from 10%, with a view to encouraging credit activity)	Expected effects Ensuring preferential treatment of dinar lending to households Ensuring preferential treatment of dinar lending to households
TV 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. Prescribed minimum mandatory downpayment/deposit for FX and FX-indexed loans to natural persons except mortgage loans) of 30% imiting the ratio of net open FX position to capital at 20%, as of 2011 (increased from 10%, with a view to encouraging credit activity)	Ensuring preferential treatment of dinar lending to households
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. **Rescribed minimum mandatory downpayment/deposit for FX and FX-indexed loans to natural persons except mortgage loans) of 30%	
Prescribed minimum mandatory downpayment/deposit for FX and FX-indexed loans to natural persons except mortgage loans) of 30% imiting the ratio of net open FX position to capital at 20%, as of 2011 (increased from 10%, with a view to encouraging credit activity)	Ensuring preferential treatment of dinar lending to households
imiting 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
	Capital market development, incentivising banks to rely more on dinar sources of
months. This does not apply to FX securities. Prescribed requirement for banks to inform clients in writing, prior to signing an agreement, of the risks they	financing
assume if they opt for an FX-denominated or FX-indexed service. Also, the offered agreement must contain he information on the currency in which the service is agreed "rescribed 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 requirements.	Promoting hedging against FX risk for financial service consumers
The NBS and the Republic of Serbia Government signed the Memorandum on the Strategy of Dinarisation of	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
Societe Generale Banka Srbija a.d. Beograd issued the first dinar bond in the domestic market, without a	Capital market development
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
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 NBSs 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
inter less adopted the Decision on terms and conductors of renforming 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 formestic 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
The Republic of Serbia Government adopted the programme for subsidising dinar loans to corporates.	Increasing loan dinarisation - of a temporary nature
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
ong-term government securities admitted to the prime listing of the Belgrade Stock Exchange.	Boosting liquidity and developing secondary market of government securities
100% from 50% w hich had been applied since June 2012	Disincentive for use of FX-indexed dinar deposits
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
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
EBRD. The nominal size of the issue was RSD 2.5 bn	Financial market development
	Secondary financial market development
hrough domestic banks. The loans were mainly used for financing of agriculture and refinancing	Increasing the dinarisation of corporate loans
corporates and households in the Republic of Serbia, for banks whose share of FX and FX-indexed in total	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.
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
Differentiated RR remuneration rate: 1.25% on dinar RR, no remuneration on FX RR	Stimulating banks to rely more on dinar sources of funding
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.
The NBS and the Republic of Serbia Government signed the new Memorandum on the Strategy of Dinarisation of the Serbian Financial System	Review ed 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 Rublic Debt introduced the institute of primary dealer and envisaged the possibility of using financial derivatives for the purposes of public debt management. Amendments to the Decision on Capital Adequacy of Banks envisage lower capital requirements for banks to	Increasing liquidity and developing the domestic financial market.
cover risks arising from dinar receivables to micro enterprises, small and medium-sized enterprises, antrepreneurs and farmers. Also, capital reduction is envisaged for banks whose share of new FX and FX- ndexed loans approved to corporates, enterpreneurs and farmers for specific purposes has exceeded the lefined level.	
Amendments to the Law on Public Debt enable foreign legal persons (e.g. Euroclear) to clear and settle ransactions related to the purchase and sale of government securities in the domestic capital market. Amendments to the Law on the Capital Market harmonise the provisions of that Law with the Law on Public	increasing efficiency and broadening the financial investor base on that market.
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.
Pursuant to the amendments to the Decision on Interest Rates Applied by the National Bank of Serbia in the implementation of Monetary Policy, the NBS pays to banks which approve dinar loans under the Guarantee Scheme at interest rates at least 50 bp low er than the maximum rate (1M BELIBOR + 2.5 pp) - a 50 bs higher remuneration rate (currently 10 bp) on dinar required reserves, notably on the amount equal to the amout of hose loans approved under more favourable terms which does not exceed the calculated dinar reserve	Encouraging dinar lending
Past Penhasia Swin Senn welden not a second of the content of the	escribed requirement for advertising of credit and deposit services and leasing operations: when the vertising message contains numerical data, the currency in which the service is denominated must be alted in a representative example escribed requirement for banks and lessors to offer financial services in dinars, unless the consumer riguires otherwise in RNS and the Republic of Serbia Government signed the Memorandum on the Strategy of Dinarisation of 8 Serbian Financial System Dicited Generale Banks Shipia ad. Beograd issued the first dinar bond in the domestic market, without a trency clause, with three year meturity the adoption of the Law Amending the Law on Personal Income Tax, the tax on interest on FX savings as increased from 10% to 15%. The RNS Included dinar securities without an FX-clause issued by IFOs with the top credit rating in the proficiol of securities used by the NRS in open market operations and on the list of eligible collateral in protroval of NRSs daily liquidity facilities and short-term bans against the pledge of securities The RNS Included dinar securities and the RNS in open market operations and on the list of eligible collateral in provisor of NRSs daily liquidity facilities and short-term bans against the pledge of securities The NRS included dinar securities and the RNS in open market operations and on The RNS Included dinar securities and the RNS in open market operations and one The RNS included dinar securities and The RNS included dinar securities and The RNS included dinar securities and The RNS included The RNS included dinar securities and The RNS included The RNS

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, and 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 Q2 2020, by purpose	2
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	3
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 Q2 2020, by maturity	5
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.2.6.	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 the securities	10
II.2.1.	Currency structure of FX forward transactions between residents and banks in Q2 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