National Bank of Serbia

REPORT ON DINARISATION OF THE SERBIAN FINANCIAL SYSTEM

First Quarter 2024

August 2024

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 further 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. Bearing in mind that in the period after the conclusion of the Memorandum in 2012 macroeconomic stability had been ensured and financial stability strengthened further, in December 2018 the NBS and the Serbian Government signed the new Memorandum on the Strategy of Dinarisation, confirming their commitment to additionally support dinarisation and contribute to financial stability. In the new Memorandum on the Dinarisation Strategy these institutions reflected on the results of the measures and activities undertaken thus 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 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 further 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 FX risk hedging instruments.

ABBREVIATIONS

bn – billion
lhs – left-hand scale
mn – million
NPL – non-performing loan
pp – percentage point
q – quarter
rhs – right-hand scale
SDR – special drawing rights
y – year

Other generally accepted abbreviations are not cited.

Contents

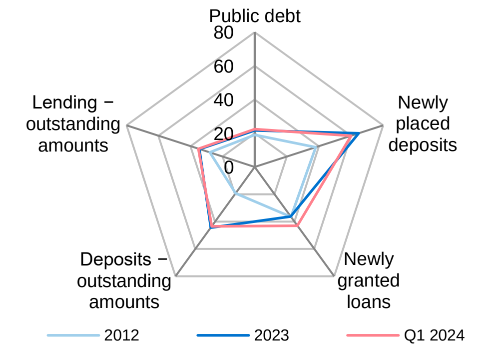
I. Dinarisation of the Serbian financial system

In Q1 2024, the dinarisation of total corporate and household receivables increased in terms of both outstanding and new business.

The share of dinar in total household and corporate deposits climbed to a record-high level in Q4 2023, but declined in Q1 2024 due in part to seasonal factors. Dinarisation of new deposits made during this period went up.

The dinarisation of Serbia's public debt increased from end-Q4 2023 as its dinar component rose more dynamically than the FX one.

Chart I.1 **Dinarisation indicators***
(%)



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

Sources: NBS, Ministry of Finance.

1. Dinarisation of receivables

Loans dinarisation improved in Q1 2024 according to most of the observed indicators, with the dinarisation of new corporate loans the only to decline. Higher dinarisation is also supported by the shrinking difference in the level of interest rates on dinar and FX loans in both the corporate and the household sector.

Corporate and household receivables

At end-Q1 2024, the share of dinar in <u>total corporate and household</u> receivables stood at 35.2%, having increased by 0.7 pp q-o-q (0.8 pp y-o-y).

Excluding the exchange rate effect, the dinarisation of receivables also rose by 0.7 pp (both in Q1 and y-o-y), to 35.1% at end-Q1.[1]

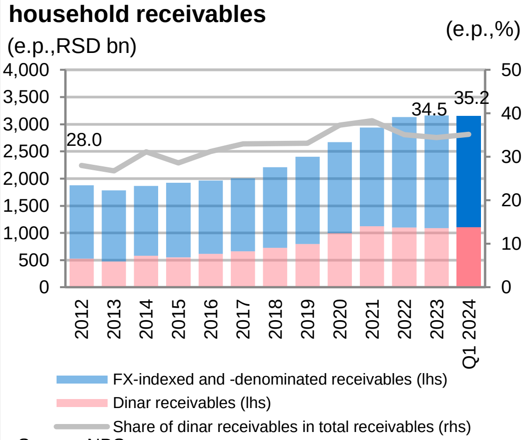
Dinarisation of corporate and household receivables increased in Q1 **mainly because of higher dinar receivables** (by RSD 18.7 bn) in the household, and to a smaller extent, the corporate sector. **FX-indexed and FX** corporate and household **receivables** decreased in the same period (by a total of RSD 31.4 bn), mostly reflecting lower loan approvals usual for the start of the year and the repayment of previously approved loans to some companies.

<u>The dinarisation of corporate receivables</u> gained 0.5 pp in Q1 2024 to 17.8% at end-March 2024. This indicator increased for the second quarter in a row after being on a steady downward path for close to two years due to the maturing of guarantee scheme loans which were mostly in dinars.

Higher dinarisation of corporate receivables in Q1 was propped up by:

– **a notable decrease in the stock of FX-indexed and FX corporate receivables** (by RSD 34.8 bn)

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



Source: NBS.

[1] Calculated at the exchange rate of the dinar against the euro, USD, Swiss franc, pound sterling and Japanese yen as at 31 October 2022, taking into account the currency composition of loan receivables.

– due mainly to the repayment of investment loans and liquidity and working capital loans by medium and large-sized enterprises, financed partly from FX inflows in respect of FDIs. Companies in transport and, to a smaller degree, in construction and agriculture, reduced their borrowing the most.

– **the stock of dinar corporate receivables went up** (by RSD 1.5 bn), reflecting mostly the approval of short-term liquidity and working capital loans, primarily to large and medium-sized enterprises in transport and construction.

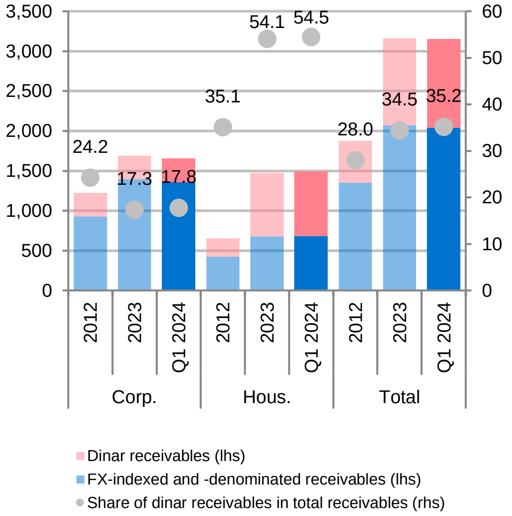
The dinarisation of household receivables also increased in Q1 2024. At end-March 2024, this indicator was 54.5%, up by 0.4 pp from three months ago. The increase was more pronounced in y-o-y terms (1.7 pp).

This increase reflects:

– **a more substantial rise in dinar receivables** (by RSD 17.2 bn) – these were mostly cash loans and borrowing under transaction accounts, and, to a smaller extent, also liquidity and working capital loans approved to entrepreneurs and agricultural producers;[2]

– **a relatively modest increase in** FX household **receivables** (by RSD 3.4 bn) – the increase mostly refers to housing loans which slowed gradually from Q1 2022 (in y-o-y terms) as real estate prices and the cost of borrowing went up. The slowdown was halted in early 2024, supported by the NBS measure to cap interest rates on these loans.

Chart I.1.2 **Receivables by sector**



Source: NBS.

New corporate and household loans

Indicators of dinarisation of new loans

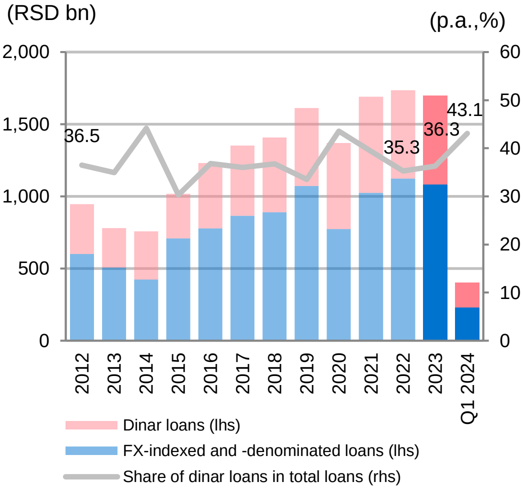
The degree of dinarisation of total new corporate and household loans in Q1 2024 stood at 43.1%, up by as much as 5.2 pp from a quarter earlier. The increase was even more pronounced in y-o-y terms (6.7 pp). This indicator rose substantially in Q1 primarily due to a lower amount of new corporate loans, usual for the start of the year. FX loans decreased in particular in Q1 2024.

By sector, the degree of dinarisation of new loans increased in the household and decreased in the corporate sector.

In the household sector, this indicator gained 2.4 pp to 79.9%. In the composition of loans, in Q1:

– **the amount of new dinar** loans reached a **record-high quarterly level** (RSD 126.1 bn). **This is** 12.4%, i.e. RSD 13.9 bn higher than in Q4 2023

Chart I.1.3 **Share of dinar loans in new corporate and household loans**



Source: NBS.

[2] By sector classification, registered agricultural producers and entrepreneurs belong to the household sector.

and refers primarily (87%) to **cash loans,** which are still as a rule approved in dinars;

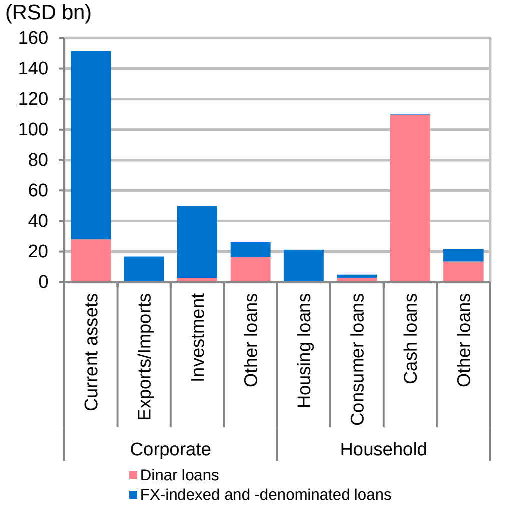
– **a somewhat lower amount of FX-indexed household loans was approved** (by 3.1%, i.e. RSD 1.0 bn), reflecting lower demand for **housing loans** which, despite this decrease, continue to account for the bulk (around two-thirds) of total FX-indexed loans to households.

The dinarisation of new corporate loans decreased relative to Q4 2023 (by 1.9 pp to 19.3%), reflecting:

– **a more notable q-o-q decrease in new dinar corporate loans** (by 35.7% or RSD 26.2 bn). The decrease referred to loans of all purposes and was the greatest for liquidity and working capital loans (by RSD 18.5 bn or almost 40%);

– **a relatively more moderate q-o-q decline in new FX and FX-indexed corporate loans** (by 27.4%, i.e. RSD 74.5 bn). New loans of all purposes went down, except import financing loans, while around two-thirds of the total decrease (i.e. RSD 50.0 bn) refers to liquidity and working capital loans which are dominant in the composition of new loans (62.6%). Also, new investment loans, which make up around one-fifth of total new loans and are most often approved in a foreign currency (around 95%), decreased by more than a third (by 36.5%, i.e. RSD 27.2 bn).

Chart I.1.4 **New corporate and household loans in Q1 2024 - by purpose**



Source: NBS.

Interest rates on new loans

Interest rate on dinar corporate and household loans were somewhat higher on average in Q1 than in a quarter earlier (by 0.3 pp) and measured 11.3%. Y-o-y they declined (by 0.3 pp).

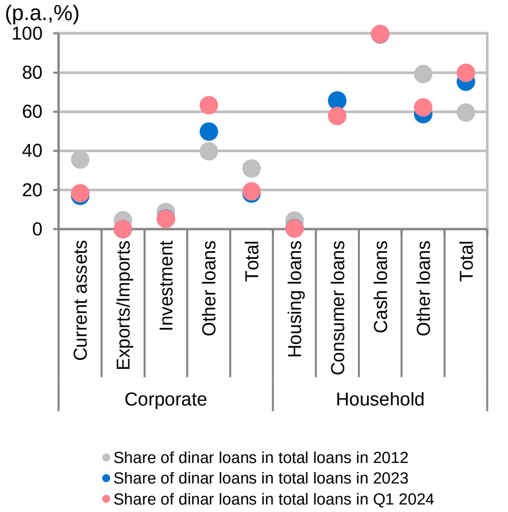
Interest rates on FX-indexed and FX loans stood at 7.0%, their highest level since Q2 2013. They did not change q-o-q, partly due to the effects of the NBS's decision to cap rates on housing loans. Y-o-y, interest rates on FX loans went up (by 0.9 pp), reflecting gradual policy rate hikes by the ECB in 2023.

By sector, interest rates on dinar corporate loans went down by 0.2 pp and on FX loans – up by 0.1 pp. Interest rates on dinar loans remain higher than those on FX loans (8.2% compared to 7.1%, respectively), but this difference is gradually shrinking – it was 1.1 pp in Q1, which is less than in a quarter earlier (1.4 pp) and in Q1 2023 (2.3 pp).

By loan purpose:

– **within dinar corporate loans,** interest rates decreased on liquidity and working capital loans (by 0.2 pp to 8.1%) and on other non-categorised

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



Source: NBS.

loans (by 0.1 pp to 8.3%). The weighted average interest rate on investment loans remained the same (9.3%);

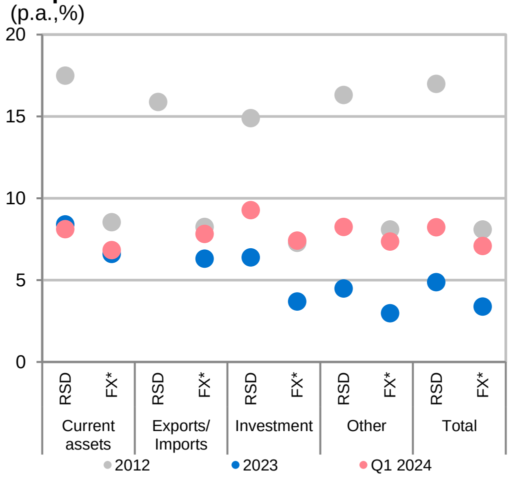
– **interest rates on all categories of FX loans went up, except for working capital loans.** Rates increased the most on import-export loans (by 2.8 pp to 7.8%), and more moderately on investment (by 0.1 pp to 7.4%) and other non-categorised loans (by 0.3 pp to 7.4%). The rate on liquidity and working capital loans, as the most dominant corporate loan category, decreased marginally from a quarter earlier (by 0.1 pp to 6.8%).

Interest rates on household loans declined in Q1 2024 for FX loans and even more for dinar loans, signalling higher loans dinarisation:

– **The weighted average interest rate on dinar loans dipped** by 0.2 pp to 12.5%. Like in Q4 2023, the rates on cash loans decreased the most (by 0.5 pp to 12.9%) as a result of promotional activities by some banks. The rates on other non-categorised loans also dropped slightly (by 0.1 pp to 10.5%). Rates on housing loans went up (by 3.2 pp to 15.3%), as did the rates on consumer loans (by 0.1 pp to 3.2%).

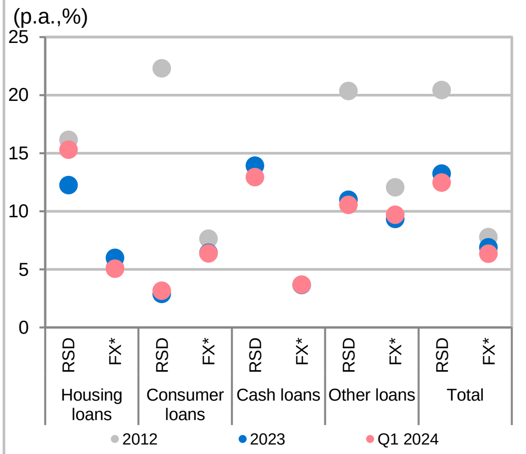
– **Interest rates on FX household loans decreased marginally** (by 0.1 pp on average, to 6.3%), thanks **to a sharper decline in interest rates on consumer loans (by 0.2 pp to 6.4%) and other non-categorised loans (by 0.3 pp to 9.7%), while interest rates on housing loans** stayed the same (5.1%), helped by the **NBS's measures capping interest rates on these loans.** Only rates on cash loans increased (by 0.4 pp to 3.7%).

Chart I.1.6 **Interest rates on new corporate loans**



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

Chart I.1.7 **Interest rates on new household loans**



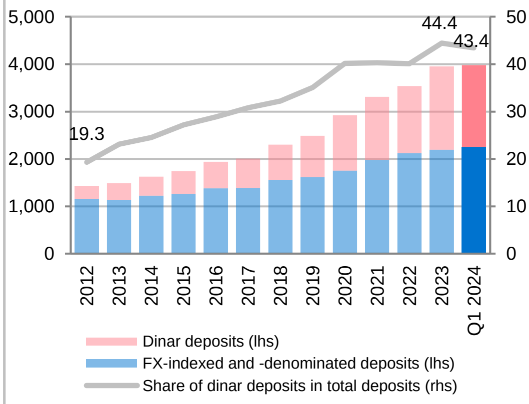
*FX-indexed and -denominated loans.
Source: NBS.

2. Deposit dinarisation

The degree of dinarisation of corporate and household deposits in terms of outstanding business decreased in Q1 2024 relative to a quarter earlier, when it had hit its highest level on record. Observed by new deposits, this indicator went up.

Interest rates on dinar and FX savings dropped in Q1. Banks continue to offer higher rates on dinar than on FX savings, making dinar savings more profitable.

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



Source: NBS.

Household and corporate deposits

The share of dinar in total corporate and household deposits in Q1 2024 contracted by 0.1 pp to 43.4%, from the record-high level of 44.4% at end-2023. Y-o-y, this indicator increased by 3.0 pp.

Excluding the exchange rate effect, at end-Q1 2024 this indicator stood at 43.3%, down by 1.0 pp from end-Q4 2023 and up by 3.1 pp from end-Q1 2023.[3]

The slide in the dinarisation of total corporate and household deposits in Q1 2024 was guided by lower dinar corporate deposits usual for the start of the year, after the seasonally conditioned growth late last year. **FX deposits,** both corporate and household, **increased in the same period,** reducing dinarisation.

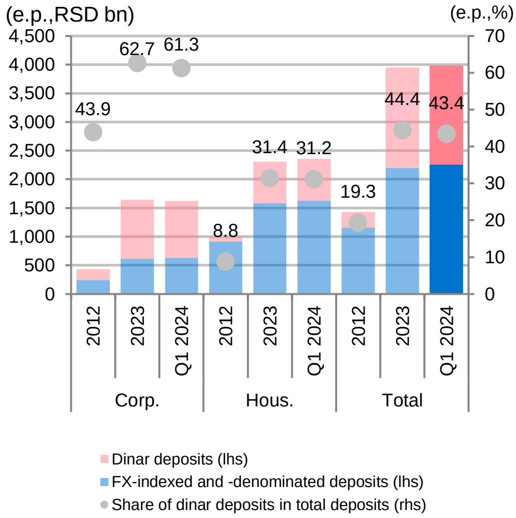
By sector, deposit dinarisation decreased in the corporate sector (by 1.4 pp to 61.3%) and less in the household sector (by 0.2 pp to 31.2%). Y-o-y, this indicator increased notably in both sectors (by 2.8 pp and 3.6 pp, respectively).

The dinarisation of corporate deposits went down in Q1 as the result of:

– **lower dinar deposits** (by RSD 36.6 bn) **in January and February, after the seasonally conditioned increase in late 2023.** The decline was sharper for companies in mining, manufacturing, energy, construction, and less in agriculture, which was partly offset by higher dinar deposits of companies in other sectors;
– **higher FX and FX-indexed corporate deposits** (by RSD 15.0 bn), with growth recorded by companies in all sectors except transport and communication, and construction.

Dinar household **deposits continued up** (by RSD 9.3 bn), **but the growth in FX deposits was much more dynamic** (by RSD 41.3 bn, or EUR 356.5 mn), reducing dinarisation.

Chart I.2.2 **Deposits by sector**



Source: NBS.

[3] Calculated at the dinar exchange rate against the euro, US dollar, Swiss franc, pound sterling and the Japanese yen as at 31 October 2022, taking into account the currency structure of deposits.

The rise in dinar household deposits resulted entirely from higher savings and time deposits maturing in under a year (by RSD 13.0 bn). Transaction deposits, which make up 80.0% of dinar household deposits, dropped in Q1 2024 (by RSD 3.7 bn) as usual for the season, after rising robustly in late 2023.

FX household deposits continued steadily up. Deposits maturing in under a year grew in Q1 (by EUR 449.7 mn), while deposits maturing in over a year declined (by EUR 93.2 mn) from February, partly reflecting the effect of the leap year 2024.

Dinar and FX savings

Household savings went further up in Q1 2024. Being more profitable, dinar savings continue to rise more quickly than FX savings.

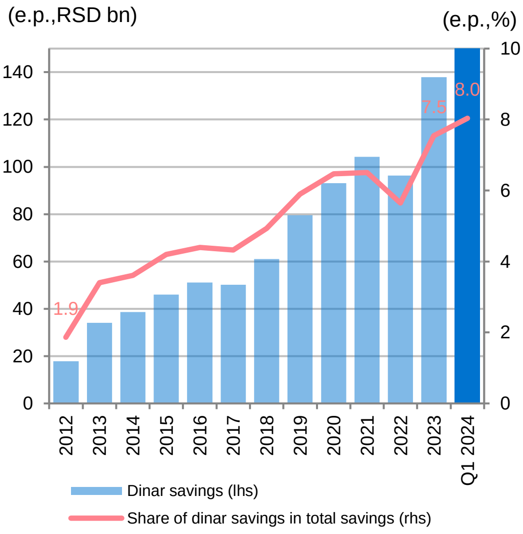
Dynamic growth in dinar savings[4] extended into Q1 2024 – by RSD 13.8 bn to RSD 151.7 bn at end-March, the highest level on record.

Savings deposits maturing in under a year expanded, reflecting a rise in savings maturing between six and 12 months (by RSD 9.7 bn) as the most dominant category of dinar savings (46.5%). Within this segment, there was a moderate increase in demand savings (by RSD 2.9 bn) and savings maturing in under three months (by RSD 1.8 bn), while savings maturing between three and six months remained broadly unchanged from Q4 2023. **Due to the effects of the leap year 2024, savings maturing in over a year** continued up in January, but **declined** from February, ending the first quarter at a level slightly below (by RSD 0.6 bn) that recorded at end-Q4 2023.

FX savings continued steadily up – to EUR 14,813.6 mn at end-Q1, up by EUR 397.5 mn from end-Q4 2023. The increase in FX savings in Q1 was guided by higher FX deposits maturing in under a year (by EUR 468.5 mn), with savings maturing between six and 12 months posting notable growth (by EUR 371.7 mn). Demand savings and savings maturing in under three months also rose somewhat (by EUR 72.6 mn and EUR 58.0 mn, respectively).

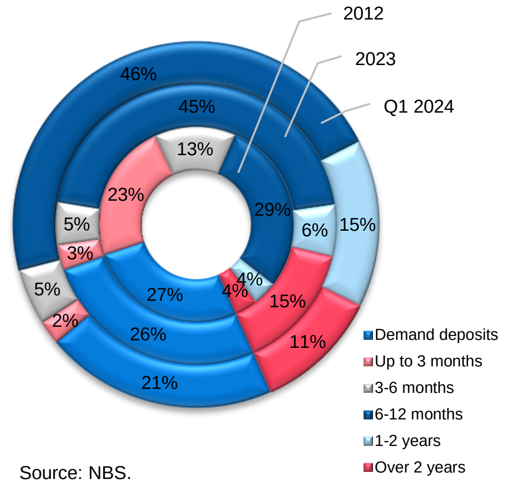
Savings maturing in over a year declined in Q1 (by a total of EUR 71.0 mn). Starting from February, the decrease was recorded for all maturities (1–2 years, 2–5 years and over five years). Similarly as in the case of dinar savings, such movements partly reflect the effects of the leap year.

Chart I.2.3 **Dinar savings**



Source: NBS.

Chart I.2.4 **Maturity structure of dinar savings** (e.p.)



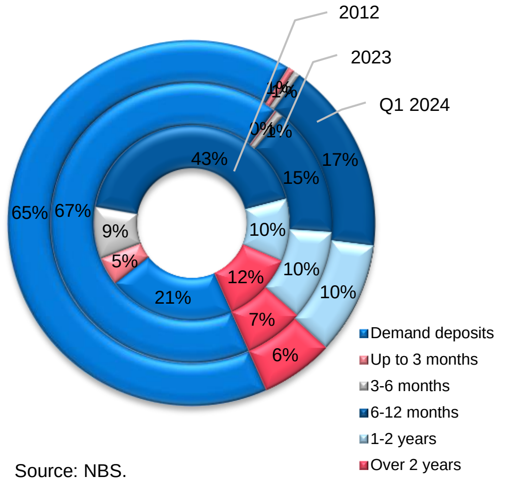
Source: NBS.

[4] Dinar and FX savings include both residents' and non-residents' savings. Currency-indexed deposits are included in dinar savings.

Despite the above effect, **it can be concluded that the structure of both dinar and FX savings improved from 2022 onwards, reflecting households' confidence in banking sector stability.** Namely, the share of time savings in total dinar savings at end-Q1 2024 measured 79.5%, unchanged from a quarter earlier, and up by 5.9 pp from end-2022. This indicator for FX savings measured 34.5%, having risen both q-o-q (by 1.3 pp) and y-o-y (by 7.9 pp).

A comparison of the dynamics of dinar and FX savings reveals much more vibrant growth in dinar than in FX savings in Q1 (by 10.0% and 2.8%, respectively). The share of dinar in total savings therefore continued up. At end-Q1, this share was a record 8.0%, up by 0.5 pp from end-Q4 2023 (by 2.0 pp y-o-y).

Chart I.2.5 **Maturity structure of FX savings** (e.p.)



Source: NBS.

New corporate and household deposits

Indicators of dinarisation of new deposits

In q-o-q terms, Q1 2024 saw decreased depositing of almost all categories of funds – dinar, FX and FX-indexed, both corporate and household, partly under the impact of seasonal factors. The decrease was more pronounced for FX and FX-indexed funds, which reflected positively on dinarisation.

The degree of dinarisation of total new corporate and household deposits, after the decrease in the previous quarter, rose by 7.2 pp to 60.1% in Q1 2024. Y-o-y, this indicator posted a decrease by 4.6 pp.

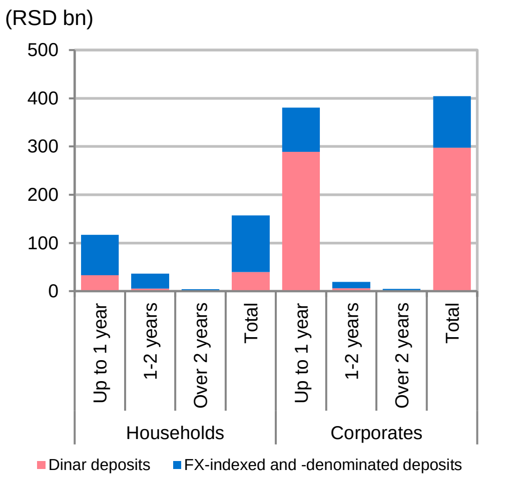
Higher dinarisation of new deposits was more pronounced in the household sector (by 4.5 pp to 25.3%), which is associated with:

– **a significant decrease in the amount of FX time deposits** (by RSD 76.5 bn) **compared to the previous quarter.** The decrease in FX deposits is common in Q1 as they are dominant in the structure of deposits, and a higher amount of time deposits was made in the prior quarter (due to the largest amount traditionally deposited on and around the Savings Day);

– **a decrease in new time dinar deposits** (by RSD 11.2 bn) compared to the previous quarter, also customary at the start of the year as in the case of FX deposits, though more moderate in comparison.

Y-o-y, this indicator rose by 3.5 pp.

Chart I.2.6 **New corporate and household deposits in Q1 2024 - by maturity**



Source: NBS.

The degree of dinarisation of new corporate deposits also rose in Q1 2024, by 2.5 pp to 73.6%, as a result of:

– **a more pronounced decrease in new FX deposits** of corporates compared to the previous quarter (by RSD 18.3 bn);

– **an almost halved amount of new dinar corporate deposits** compared to the previous quarter (by RSD 9.8 bn).

Y-o-y, this indicator decreased by 3.0 pp.

Interest rates on new deposits

In Q1 2024, interest rates on time dinar and FX deposits of corporates and households declined on average in q-o-q terms. The decrease was somewhat more pronounced for interest rates on dinar deposits (by 0.5 pp to 5.2%) than on FX deposits (by 0.3 pp to 3.2%).

As for household deposits, interest rates on both dinar and FX savings decreased:

– **interest rates on dinar household deposits were 0.7 pp lower, averaging 4.9%. The decrease was recorded for deposits of all maturities**, though it was more pronounced for deposits maturing in under one year and over two years (by 0.8 pp each, to 4.8% and 4.5%, respectively), and more moderate for one-to-two-year deposits (by 0.2 pp to 5.3%);

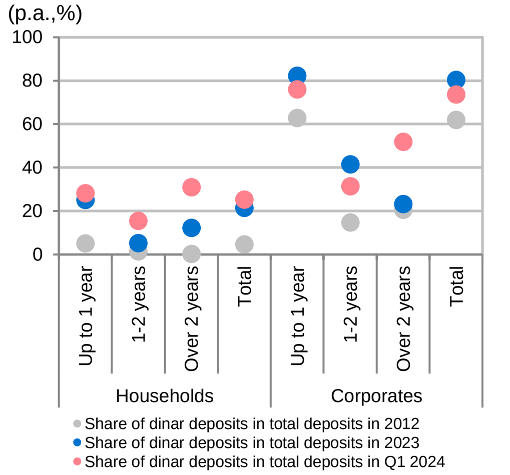
– **FX and FX-indexed household deposits were termed at an average rate of 3.2%, which is lower than in the previous quarter (by 0.5 pp). Interest rates edged down for deposits of all maturities** – a lower decline was recorded for savings termed up to one year (by 0.4 pp to 3.3%) and for one-to-two-year maturities (by 0.6 pp to 3.3%), while the most pronounced decrease was recorded for over-two-year deposits (by 1.4 pp to 2.2%).

Interest rates on time corporate deposits also declined for dinar and FX deposits:

– **Interest rates on dinar corporate deposits decreased by 0.4 pp on average q-o-q, to 5.3%. The decrease was recorded for deposits of all maturities,** but was more pronounced for longer terms: a moderate decrease was present for up-to-one-year deposits (by 0.5 pp to 5.3%), followed by one-to-two-year deposits (by 1.2 pp to 4.9%), while a bigger decrease was recorded for over-two-year deposits (by 3.8 pp to 0.3%).

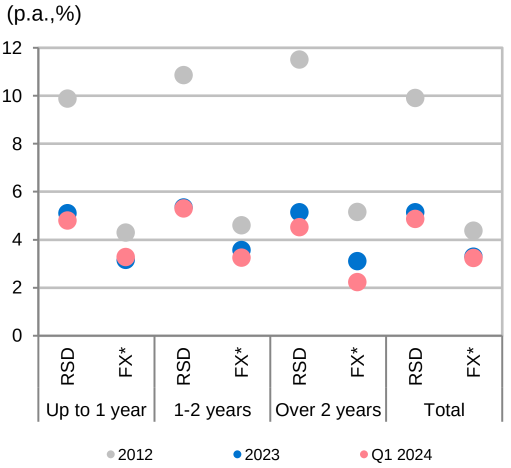
– **Interest rates on FX corporate deposits retreated slightly (by 0.1 pp to 3.1%),** reflecting the decrease in interest rates on up-to-one-year deposits (by 0.3 pp to 3.0%). Interest rates on deposits with longer maturities were unchanged, measuring 4.0% on one-to-two-year and 0.6% on over-two-year deposits.

Chart I.2.7 **Dinarisation of new corporate and household deposits - by maturity**



Source: NBS.

Chart I.2.8 **Interest rates on new term deposits of households**



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

Dinar savings are more profitable

Preserved macroeconomic and financial stability, coupled with the relative stability of the EUR/RSD exchange rate helped dinar and euro savings continue up in Q1 2024 as well.

In Q1 2024, dinar savings rose by RSD 13.7 bn (9.9%), reaching a new record at end-March (RSD 151.7 bn).

Since March 2012, dinar savings have risen more than seven times, while euro savings almost doubled – from EUR 7.7 bn to EUR 14.8 bn, also touching a new peak.

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

Type of savings	Date of deposit placement	Initial deposit	EURRSD exchange rate*	Interest rate (%, p.a.)**	Maturity date	EURRSD exchange rate	Amount of deposit at the end of term	
							in RSD	in EUR***
Savings in RSD	Mar 2023	100,000	117.3144	4.57	Mar 2024	117.1912	104,730	894
Savings in EUR	Mar 2023	852	117.3144	2.26	Mar 2024	117.1912	101.814	869
Difference in favour of savings in RSD - deposit placed for a year							2,916	25
Difference in favour of savings in RSD - deposit placed for a 3M period							478	4
Difference in favour of savings in RSD - deposit placed for a 2Y period							2,116	18
Difference in favour of savings in RSD - deposit placed for a 12Y period, annual rollover							47.917	409

*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.

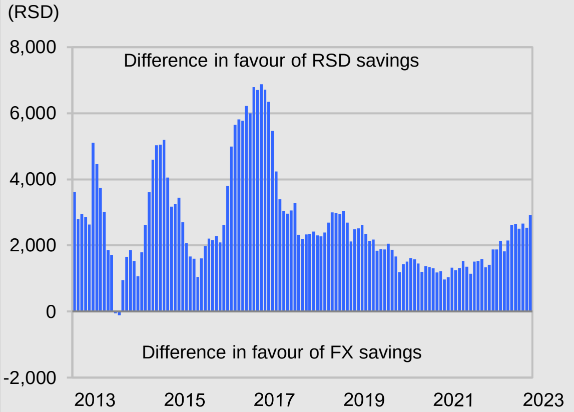
The analysis of savings profitability for the past 12 years, i.e. from March 2012 until March 2024, shows that dinar savings are more profitable both in the short and long term. Dinar savings termed for a year (without the roll-over) turned out more profitable than euro savings in as many as 99% of the observed annual subperiods (Chart I.2.9). Dinar savings termed for three months were more lucrative than in euros in the majority of the observed quarterly subperiods (89%). Local currency savings termed for two years were more profitable than euro savings in all of the observed biannual subperiods. A person who deposited RSD 100,000 for one year, at the interest rate of 4.73%, would receive in March 2024 over RSD 2,900 more than a depositor saving in euros the equivalent of RSD 100,000 in the same period, at the interest rate of 2.26% (Table I.2.1).

A person who deposited RSD 100,000 for one year and rolled it over in the period of 12 years, would earn at the end of maturity (March 2024) over RSD 48,000 (more than EUR 400) more than a depositor who saved in euros the equivalent of RSD 100,000 over the same period.

Greater profitability of dinar savings was underpinned by macroeconomic and financial stability, as well as the relatively higher interest rates on dinar compared to euro savings, non-taxation of interest on dinar savings, and monetary and fiscal policy measures.

As part of its Strategy of Dinarisation of the Financial System, the NBS will continue to promote dinar savings and underline its profitability.

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



Note: The time axis refers to the date of placement of deposits.

Source: NBS.

3. Dinarisation of public debt

The degree of public debt dinarisation rose to 22.4% in Q1, as the dinar share of public debt went up and the FX share declined.

The dinar component increased under the impact of the sale of eight-year dinar securities in the local market, while the fall in the FX component was facilitated by the maturing of two- and five-year FX securities that were also issued in the local market.

Public debt and its composition

Public debt[5] increased by RSD 21.0 bn in Q1 to RSD 4,257.2 bn (47.6% of estimated GDP).

The dinar component of public debt recorded an increase in Q1 (by RSD 36.5 bn), on account of the sale of eight-year dinar government bonds in the local market.

The FX component of public debt contracted in the same period (by RSD 15.5 bn). The fall was facilitated by the maturing two- and five-year bonds in the local market, though it was moderated by government borrowing with J.P. Morgan Chase Bank and Export–Import Bank of China for financing infrastructure projects.

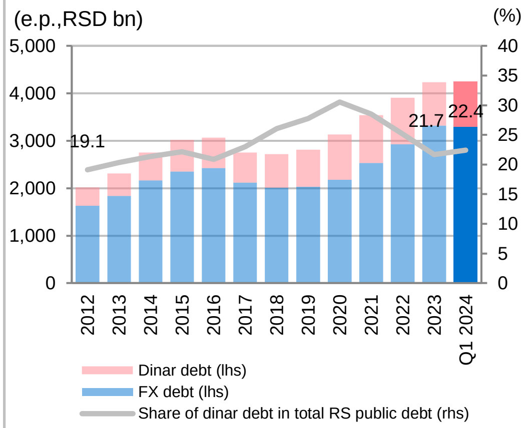
Under the impact of these movements, public debt dinarisation was higher than at end-2023. In Q1 2024, this indicator equalled 22.4%, up by 0.7 from end-Q4 2023, but still 0.5 pp lower y-o-y.

In the currency composition of public debt, more than a half (56.8%) is still euro debt, though this share contracted by 0.9 pp in Q1. The share of public debt in US dollars rose by 0.2 pp to 13.6%, while there is no more debt in Swiss francs. The share in SDR and other currencies remained almost unchanged (6.7% and 0.5%, respectively).

Primary market of government securities

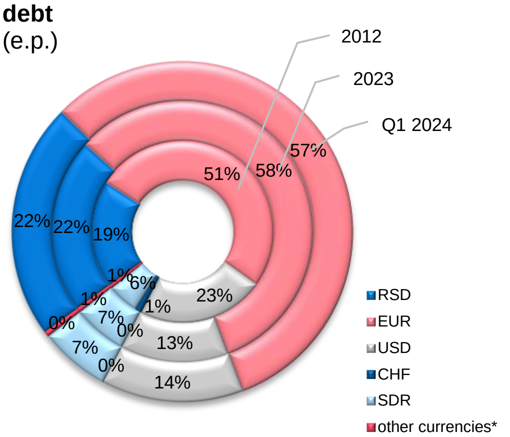
In the currency composition of the portfolio of government securities issued in the domestic financial market,[6] the share of dinar securities rose by 2.5 pp[7] in Q1, to 80.4%. Such movement is the result of the successful issuance of eight-year dinar securities in the local market in Q1, on which grounds RSD 107.5 bn worth of securities were sold at three primary auctions (in January, February and March). At the same time, two- and five-year securities matured (RSD 58.1 bn and RSD 14.3 bn, respectively), therefore at the level of Q1 the stock of

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



Source: Ministry of Finance.

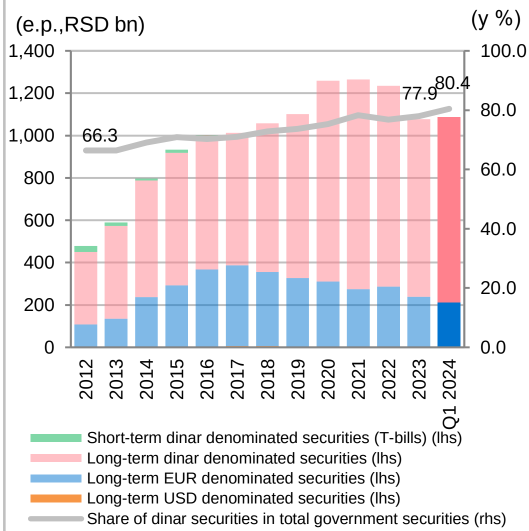
Chart I.3.2 **Currency structure of RS public debt**
(e.p.)



* GBP, JPY, DKK, SEK, NOK, CNY, KWD, AED.

Source: Ministry of Finance.

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



Source: Ministry of Finance.

[5] Central government public debt.
[6] Including savings bonds and restitution bonds.
[7] Y-o-y, this indicator rose by 1.1 pp.

dinar securities increased by RSD 35.2 bn to RSD 875.0 bn.

After stagnating for three quarters, the stock of public debt on account of FX government securities issued in the domestic financial market edged down slightly in Q1 – by EUR 0.2 bn to EUR 1.8 bn, thanks to the maturing of two-year (EUR 200.0 mn) and five-year bonds (EUR 151.4 mn). In contrast, three-year bonds were sold (EUR 99.8 mn in the nominal value), and the stock under restitution bonds in euros increased – with five-, ten- and twelve-year maturity (by EUR 1.9 mn, EUR 2.6 mn and EUR 31.8 mn, respectively).

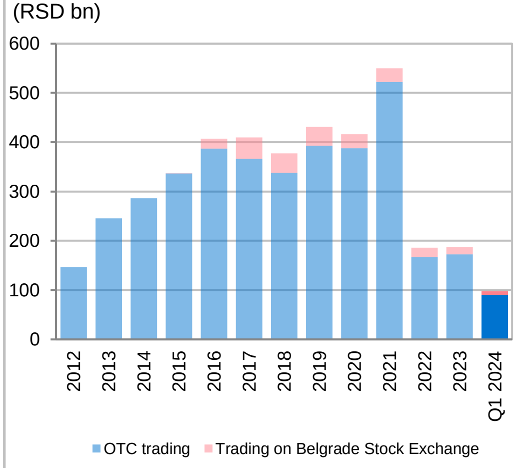
Secondary market of dinar government securities

Trading in the secondary market of dinar government securities amounted to RSD 97.4 bn in Q1, up by RSD 38.0 bn q-o-q.

Bonds with the original maturity of eight years were traded the most in the secondary market in Q1 2024 (up by RSD 40.8 bn from Q4 2023). An increase was also recorded for bonds with the original maturity of two and seven years (by RSD 0.7 bn each), and a decrease in the trading in securities with the original maturity of ten (by RSD 2.6 bn), five (by RSD 1.1 bn) and 12 years (by RSD 0.5 bn).

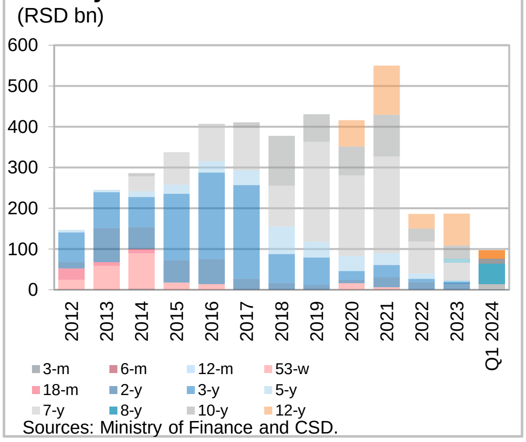
In Q1 2024, secondary trading in dinar government securities on the BSE increased by RSD 3.5 bn from Q4 2023, equalling RSD 6.5 bn or 6.6% of total trading in these securities.

Chart I.3.4 **Secondary trading in dinar government securities**



Sources: Ministry of Finance, CSD and BSE.

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



Sources: Ministry of Finance and CSD.

II. FX hedging instruments

In Q1 2024, the NBS proceeded with concluding bilateral foreign exchange swap purchase/sale transactions with banks that proved to be an efficient tool for helping banks manage dinar and FX liquidity.

In Q1 2024, residents concluded forward FX purchases with banks worth EUR 87.4 mn, up by EUR 26.1 mn q-o-q, and forward FX sales worth EUR 15.5 mn, up by EUR 4.4 mn q-o-q.

1. NBS FX swap auctions

In Q1 2024, the NBS continued to conclude bilateral FX swap purchase/sale auctions with banks which proved as an efficient tool for helping banks manage their dinar and FX liquidity, considering the flexibility regarding the moment of conclusion of transactions and their maturity.

During Q1, the NBS swap bought and sold EUR 519 mn each, which is EUR 215 mn more q-o-q.

Table II.1.1. **NBS swap transactions, quarterly data**
(EUR mln)

Period	Swap FX sale	Swap FX purchase
2012	171.0	188.0
2013	124.0	124.0
2014	180.0	180.0
2015	550.5	550.5
2016	440.0	440.0
2017	546.5	546.5
2018	324.0	324.0
2019	513.5	513.5
2020	800.5	956.0
2021	353.0	518.0
2022	680.6	993.6
2023	563.0	563.0
Q1 2024	519.0	519.0

Note: Until the end of 2021, the data refer to swap auctions, and from the beginning of 2022 the data refer to swap auctions and bilateral swap transactions. From 2023, the data refer only to bilateral swap transactions.

Source: NBS.

Table II.1.2. NBS bilateral swap transactions in 2024, monthly data
(EUR mln)

Month	Swap FX sale	Swap FX purchase
January	324.0	324.0
February	135.0	135.0
March	60.0	60.0
Q1	**519.0**	**519.0**

Source: NBS.

2. FX hedging instruments

In Q1, the share of forward FX purchases in total FX purchases by residents from banks equalled 1.3% (0.9% in the quarter before), having peaked in February – 2.4%. Nine domestic companies used the possibility of FX hedging by concluding this type of transactions with banks, totalling EUR 87.4 mn (EUR 61.3 mn in the quarter before). The weighted average maturity of forward FX purchases was 60 days, with the longest maturity of an individual forward FX transaction recorded in March – 121 days. The average value of forward FX purchase contracts of residents equalled EUR 1.1 mn.

Q1 saw forward FX sales by three residents in the total amount of EUR 15.5 mn (EUR 11.1 mn in the quarter before), and the weighted average maturity of transactions of 90 days. The longest maturity of an individual forward transaction was 182 days and one such transaction was recorded in each month in the quarter. The average value of forward FX sale contracts of residents equalled EUR 0.8 mn.

In terms of the currency structure of forward FX purchases between residents and banks, the euro accounted for 98% and the US dollar for 2%.

As for the currency structure of forward FX sales of residents to banks, the euro accounted for 85% and the US dollar for 15%.

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
2014	430.0	24	5.0	0.8	49	0.0
2015	531.0	16	4.8	1.5	77	0.0
2016	450.5	22	3.9	12.9	263	0.1
2017	388.8	37	3.0	17.1	349	0.2
2018	212.7	55	1.5	49.9	450	0.4
2019	108.9	72	0.7	63.4	349	0.4
2020	178.7	118	1.2	69.4	217	0.5
2021	146.8	116	0.8	40.6	246	0.2
2022	185.3	67	0.7	33.9	146	0.1
2023	285.7	51	1.2	42.2	98	0.2
Q1 2024	87.4	60	1.3	15.5	90	0.2

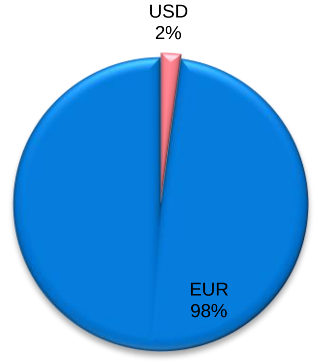
Source: NBS.

Table II.2.2. **FX forward transactions between residents and banks in 2024, monthly data**

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	11.7	46	0.5	7.1	78	0.3
February	49.6	62	2.4	3.0	108	0.1
March	26.1	63	1.1	5.4	96	0.2
Total in Q1	**87.4**	**60**	**1.3**	**15.5**	**90**	**0.2**

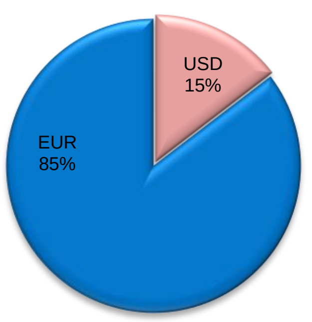
Source: NBS.

Chart II.2.1. **Currency structure of FX forward purchase of residents from banks in Q1 2024**



Source: NBS.

Chart II.2.2. **Currency structure of FX forward sales of residents to banks in Q1 2024**



Source: NBS.

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

Period	Share of dinar in total receivables, outstanding amounts, e.p.			Share of dinar in total loans, new business, p.a.*			Share of dinar in total deposits, outstanding amounts, e.p.			Share of dinar in total deposits, new business, p.a.*		
	Corporates	Households	Total	Corporates	Households	Total	Corporates	Households	Total	Corporates	Households	Total
2008	33.8	22.2	29.2				50.3	12.5	27.6			
2009	26.2	22.1	24.7				52.5	10.9	25.6			
2010	32.2	27.6	30.5	41.8	51.1	43.5	45.0	8.5	19.8	51.4	2.7	25.0
2011	27.3	32.6	29.2	33.3	44.0	35.9	44.9	10.1	21.5	51.3	3.8	32.8
2012	24.2	35.1	28.0	31.0	59.6	36.5	43.9	8.8	19.3	62.0	4.6	38.1
2013	20.0	37.9	26.8	24.6	63.6	35.0	52.4	11.5	23.1	65.2	8.2	44.1
2014	25.0	41.0	31.2	33.2	71.7	44.2	53.6	12.3	24.5	67.6	12.3	46.5
2015	19.4	42.8	28.6	16.8	67.8	30.3	55.6	13.9	27.2	69.1	16.0	52.8
2016	19.4	47.0	31.2	21.5	74.1	36.8	54.0	15.8	28.8	69.3	20.1	56.6
2017	17.5	51.8	33.0	19.3	71.0	36.0	56.5	16.9	30.8	75.6	22.7	64.3
2018	15.4	53.6	33.0	18.3	73.1	36.8	53.1	19.2	32.2	81.1	20.3	66.7
2019	14.0	55.4	33.1	16.9	66.9	33.5	58.3	22.1	35.1	74.9	25.0	63.9
2020	21.0	55.9	37.3	31.5	69.8	43.6	61.3	26.8	40.1	81.3	26.6	70.1
2021	24.0	54.6	38.3	25.5	67.9	39.4	59.4	28.3	40.3	81.1	30.4	71.0
2022	19.4	53.1	35.1	20.3	68.2	35.3	58.3	27.6	40.1	80.3	21.4	68.6
2023	17.3	54.1	34.5	18.3	75.4	36.3	62.7	31.4	44.4	76.6	21.8	64.7
Q1 2024	17.8	54.5	35.2	19.3	79.9	43.1	61.3	31.2	43.4	73.6	25.3	60.1

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

Source: NBS.

Table B Currency structure of household savings and public debt

Period*	Household savings				Public debt (central government)			
	Dinar savings (RSD mn)	FX savings (EUR mn)	Total savings (RSD mn)	Share of dinar savings in total savings (%)	Public debt in RSD (RSD bn)	Public debt in foreign currency (RSD bn)	Total public debt (RSD bn)	Share of RSD public debt in total public debt (%)
2008	10,575.0	4,679.1	425,145.0	2.5	19.9	758.1	778.0	2.6
2009	12,400.0	5,904.5	578,577.0	2.1	120.6	823.8	944.4	12.8
2010	13,848.7	7,105.8	763,495.8	1.8	187.1	1,095.4	1,282.5	14.6
2011	19,664.1	7,611.2	816,110.9	2.4	248.9	1,298.6	1,547.5	16.1
2012	17,882.9	8,272.3	958,597.0	1.9	385.4	1,629.3	2,014.8	19.1
2013	34,015.4	8,418.5	999,125.2	3.4	469.1	1,840.0	2,309.0	20.3
2014	38,615.1	8,524.6	1,069,732.9	3.6	588.6	2,164.6	2,753.2	21.4
2015	45,968.2	8,628.6	1,095,435.6	4.2	668.9	2,349.7	3,018.6	22.2
2016	51,063.9	8,987.3	1,160,744.3	4.4	639.8	2,424.8	3,064.6	20.9
2017	50,152.0	9,373.2	1,160,614.5	4.3	632.5	2,117.2	2,749.7	23.0
2018	61,079.9	9,955.1	1,237,720.8	4.9	708.4	2,011.8	2,720.2	26.0
2019	79,573.6	10,804.3	1,350,075.9	5.9	781.3	2,034.4	2,815.6	27.7
2020	93,057.4	11,435.8	1,437,685.6	6.5	958.0	2,177.8	3,135.8	30.5
2021	104,184.7	12,736.2	1,601,732.8	6.5	1,010.2	2,533.1	3,543.2	28.5
2022	96,287.5	13,715.0	1,705,363.3	5.6	983.5	2,926.4	3,909.9	25.2
2023	137899.3	14416.1	1,827,087.5	7.5	917.8	3,318.3	4,236.1	21.7
Q1 2024	151675.7	14813.6	1886961.0	8.0	954.3	3302.9	4257.2	22.4

* Indicators show data at end-period.

Sources: NBS, Ministry of Finance.

Table C Overview of measures and activities contributing to the dinarisation of the Serbian financial system (1/2)

Period of adoption of measure/implementation of activity	Description of measure/activity	Expected effects
June 2005	RR differentiation rate on dinar and FX sources of bank financing.	Stimulating banks to use dinar sources of financing more
May 2011	LTV limit for FX-indexed mortgage loans of 80%, with no such limit prescribed for dinar loans. In December 2017 this limit was loosened to 90% in cases when the loan is approved as a measure of government support to certain categories of natural persons, and in June	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	Promoting hedging against FX risk for financial service consumers
	Prescribed requirement for advertising of credit and deposit services and leasing operations: when the advertising message contains numerical data, the currency in which the service is denominated must be stated in a representative example.	
	Prescribed requirement for banks and lessors to offer financial services in dinars, unless the consumer requires otherwise.	
April 2012	The NBS and the Republic of Serbia Government signed the Memorandum on the Strategy of Dinarisation of the Serbian Financial System.	Defining objectives, measures and activities that the NBS and the Republic of Serbia will implement in order to strengthen confidence in the national currency and its use in the financial system
May 2012	Societe Generale Banka Srbija a.d. Beograd issued the first dinar bond in the domestic market, without a currency clause, with three year maturity.	Capital market development
September 2012	By the adoption of the Law Amending the Law on Personal Income Tax, the tax on i.nterest 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

Table C Overview of measures and activities contributing to the dinarisation of the Serbian financial system (2/2)

Period of adoption of measure/implementation of activity	Description of measure/activity	Expected effects
June 2017	The first trading in EBRD-issued dinar bonds in the Belgrade Stock Exchange (in the amount of RSD 60 mn).	Secondary financial market development
	A part of EBRD proceeds from the issue of dinar bonds in the domestic market was onlent to corporates through domestic banks. The loans were mainly used for financing of agriculture and refinancing.	Increasing the dinarisation of corporate loans
	The NBS set the systemic risk buffer rate at 3% of total FX and FX-indexed receivables of a bank approved to corporates and households in the Republic of Serbia, for banks whose share of FX and FX-indexed in total corporate and household receivables exceeds 10%.	Limiting the risk of euroisation, one of the key structural non-cyclical systemic risks to the stability of the financial system of the Republic of Serbia.
December 2017	The Government issued a new type of bond in the domestic financial market – saving bond .	Development of the financial market by promoting alternative form of savings and facilitating access to the government securities market for the general public
Since April 2018 (the last change), as well as before	Differentiated RR remuneration rate: 1.25% on dinar RR, no remuneration on FX RR.	Stimulating banks to rely more on dinar sources of funding
June 2018	The Law on Financial Collateral was adopted.	Achievement and improvement of the legal certainty and efficiency relating to the performance of obligations in the financial market (regulating financial collateral arrangements as well as procedures for enforcement of the collateral), as preconditions for further development of the financial market.
December 2018	The NBS and the Republic of Serbia Government signed the new Memorandum on the Strategy of Dinarisation of the Serbian Financial System.	Reviewed the results of measures and activities taken so far and, starting from them, agreed on additional measures and activities aimed at further increase in dinarisation and curbing of the FX risk in the system
	Amendments to the Law on Public Debt introduced the institute of primary dealer and envisaged the possibility of using financial derivatives for the purposes of public debt management.	Increasing liquidity and developing the domestic financial market.
December 2019	Amendments to the Decision on Capital Adequacy of Banks envisage lower capital requirements for banks to cover risks arising from dinar receivables to micro enterprises, small and medium-sized enterprises, entrepreneurs and farmers. Also, capital reduction is envisaged for banks whose share of new FX and FX-indexed loans approved to corporates, enterpreneurs and farmers for specific purposes has exceeded the defined level.	Incentivising banks to increase dinar lending.
	Amendments to the Law on Public Debt enable foreign legal persons (e.g. Euroclear) to clear and settle transactions related to the purchase and sale of government securities in the domestic capital market.	Facilitating foreign investor access to the domestic market of government securities, increasing efficiency and broadening the financial investor base on that market.
February 2020	Amendments to the Law on the Capital Market harmonise the provisions of that Law with the Law on Public Debt, in terms of the possibility for foreign legal persons (e.g. Euroclear) to clear and settle transactions related to the purchase and sale of financial instruments in the domestic capital market.	Facilitating foreign investor access to the domestic capital market, increasing efficiency of the domestic financial market and broadening the financial investor base.
	On 18 February 2020, Serbia issued its first 12Y government bond, at a coupon rate of 4.50%. Thus, the yield curve of longer maturities was extended, enabling banks to form the price of long-term dinar loans.	Development of the financial market.
May 2020	The NBS introduced bonds issued by the domestic companies with a certain credit rating (determined by the Business Registers Agency) in the portfolio of securities traded in the NBS open market, and in the list of acceptable collateral when approving NBS loans for daily liquidity and short'term loans based on the securities pledge.	Capital market development, through incentive to banks to hold in their portfolios dinar corporate bonds.
July 2020	Amendments to the decision on interest rates, which the NBS applies in its monetary policy conduct, envisage that banks which approve dinar loans to clients under the guarantee scheme at rates at least 50 bp lower than the maximum (one-month BELIBOR + 2.5 pp) are entitled to the remuneration rate for dinar reserve requirements from the NBS (which currently stands at 10 bp) increased by 50 bp, on the amount equal to the amount of those loans approved under more favourable terms, and which do not exceed the amount of calculated dinar reserve requirements.	Encouraging dinar lending.
June 2021	Dinar bonds of the Republic of Serbia are included in renowned indices of J.P. Morgan investment bank.	Boosting liquidity and development of the domestic capital market.
October 2021	Clearstream included Serbian capital market in its global network.	Direct settlement of securities issued in RSD is enabled for foreign investors, which should have a positive effect on the domestic capital market liquidity and development of this market in the coming period.

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 expressed by the gross principle, i.e. not reduced by allowances for impairment. When excluding the exchange rate effects, the exchange rate of the dinar against the euro, the US dollar, Swiss franc, UK pound sterling and Japanese yen is taken into account.
- The new loans category does not include refinancing loans at interest rates significantly below the market rates, or revolving loans, current account overdrafts and credit card loans.
- The new deposits category includes termed deposits and notice deposits while it does not include overnight deposits.
- Deposits include dinar and FX (including FX-indexed) deposits.
- Household savings include savings of residents and savings of non-residents.
- Public debt of the Republic of Serbia refers to the debt of the central level of government.

Index of charts and tables

Charts

Tables