NATIONAL BANK OF SERBIA

GOVERNMENT OF THE REPUBLIC OF SERBIA

MEMORANDUM ON THE DINARISATION STRATEGY

December 2018

I INTRODUCTION

Dollarisation[1] or euroisation (when the euro is the dominant currency in financial transactions – bank loans and deposits) is a generally accepted term for partial or full substitution of the domestic currency by a foreign currency as a legal tender, measure and/or store of value. Dollarisation occurs mainly in countries where economic agents, due to long-lasting macroeconomic instability reflected particularly in high and volatile inflation and strong depreciation of the domestic currency, lose confidence in that currency and increasingly resort to a foreign currency. In addition to an extended period of macroeconomic instability that diminishes confidence in the domestic currency, dollarisation may be reinforced by an underdeveloped financial market. It also takes place in countries undergoing initial phases of transition.

Though small and open economies that integrate in global economic flows naturally use a foreign currency to an extent, a high degree of dollarisation produces numerous negative effects on macroeconomic and financial stability. A pronounced currency mismatch of income and expenses, as well as currency mismatch of liabilities and claims, *makes economic agents more vulnerable to external shocks*, given that they earn mainly in the domestic currency, while their borrowing liabilities are mainly foreign currency-denominated. In regard to corporates and households that borrow in a foreign currency, pronounced depreciation of the domestic currency significantly increases the domestic-currency equivalent of their liabilities and diminishes their creditworthiness. This effect is even more visible in the household sector, as businesses tend to generate income in a foreign currency mainly from exports. Moreover, a government that largely relies on foreign-currency borrowing may face the problem of public debt sustainability in periods of sharp depreciation of the domestic currency. Through the currency exposure of clients whose creditworthiness diminishes at times of depreciation, banks are exposed to an indirect credit risk (spill-over of the FX risk to credit risk). In all these cases, higher depreciation of the domestic currency has the potential to affect the stability of the banking, and thus the entire financial system. Economic policy makers are therefore often unable to use to a higher degree the exchange rate as an automatic stabiliser of balance of payments imbalances in case of external shocks.

A high degree of dollarisation also diminishes the efficiency of conduct of monetary and fiscal policies, and thus the overall effects of economic policy on macroeconomic and financial stability in the case of heightened volatility of the domestic currency. The spill-over effect of the exchange rate to inflation is high in countries with a high degree of dollarisation, i.e. depreciation spills over to inflation to a faster and higher degree. The transmission of monetary impulses via the interest rate channel is limited to the domestic-currency market as interest rates on FX and FX-indexed loans depend on interest rates in the money market of the currency in which they were approved or in which they are indexed, rather than on the measures of domestic monetary policy. In such an environment, it is more difficult for the central bank to achieve its price stability objective. No less important is the effect on fiscal indicators. When the

[1] Dollarisation is the term more frequently used in world literature as pegs to the dollar are more widespread than to the euro. This is why we will use the term dollarisation in the introduction, while once we move to the case of Serbia we shall use the term euroisation.

foreign currency share of public debt is high, i.e. when public debt features a high degree of dollarisation, significant depreciation of the domestic currency increases the risk of public debt sustainability. Investors require higher yields on their investment in such country, the risk premium and costs of funding increase, and so does the government's need for new borrowing. All this further limits the counter-cyclical effect of fiscal policy on economic activity and the real sector, and thus on macroeconomic stability as well.

Because of all the negative effects of higher dollarisation, economic policy makers are well aware of the significance of addressing this issue. They are also aware that the process of dedollarisation cannot be fast, particularly in the case of deeply entrenched roots of dollarisation. Restoring confidence is a long-term process that needs to be supported with lasting results in terms of achieving and maintaining macroeconomic stability. Economic policy makers are also aware that there is no universal solution that would be equally effective in all countries. Experience also shows that a lasting reduction in the degree of dollarisation is possible, but that resorting to administrative measures to ban the use of foreign currencies is not a good solution because it does not help increase confidence in either domestic currency or policy makers, wherefore the results are only short-lived. In fact, the enactment of administrative measures requiring mandatory conversion of foreign currency claims (loans) in the domestic currency entails the risk of a sudden depreciation of the latter (or of a significant central bank intervention in the foreign exchange market to mitigate depreciation pressures), and hence the risk of potential losses that could undermine the stability of the local financial sector. To resolve the issue systemically and, more importantly, in a sustainable way, economic policy makers must carefully weigh up dedollarisation measures and activities and adjust them to the specific characteristics of the local economy (the phase of the country's economic development, the phase of the economic and financial cycle, the level of development of the financial market, exchange rate regime, etc.). The experience of other countries also shows that the stabilisation of macroeconomic conditions was the necessary and most important prerequisite for a durable solution to the problem of dollarisation, but that it was not sufficient *per se* and that it had to be complemented with prudential measures. In this context, a comprehensive strategy that combines macroeconomic with macroprudential and microeconomic policies, defined and implemented by all relevant stakeholders – government, central bank, commercial banks and non-bank sector – could be of great help in addressing dollarisation in a durable and sustainable way.

In the run up to the crisis, Serbia was in the category of highly euroised economies, with more than 70% of total loans/deposits denominated in foreign currency. This suggests the level of euroisation in Serbia was not conditioned by financial cycles. The escalation of the global economic crisis in late 2008, that caused a decline in economic activity, strong depreciation of the dinar, strained access to foreign sources of funding and the consequent build-up in NPLs, only highlighted the need for the Government of the Republic of Serbia (hereinafter: Government) and the National Bank of Serbia (hereinafter: NBS) to focus more on addressing the issue, not only because of its complexity, but also because of its adverse effects on macroeconomic and financial stability.

Recognising the need to resolve the issue of high euroisation in a systemic and sustainable way, i.e. to increase the use of the dinar in the financial system in order to strengthen the country's financial stability, lessen the risk of currency changes to the most vulnerable sectors of the economy, reinforce the efficiency of monetary and fiscal policies, and by extension, create preconditions for strong and durable economic growth, the Government and the NBS signed in March 2012 the *Memorandum on the Strategy of Dinarisation of the Serbian Financial System*[2] (hereinafter: 2012 Memorandum). The 2012 Memorandum defines the objective, measures and activities to be taken with a view to strengthening confidence in the national currency and promoting its use in the financial system. Instead of the term deeuroisation, the Memorandum uses the term dinarisation.

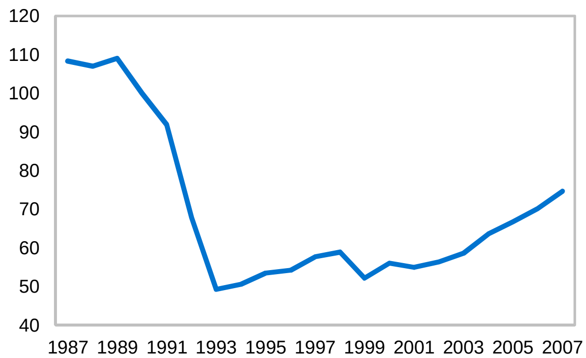
Having in mind that macroeconomic stability has been ensured and financial stability reinforced since the signing of the 2012 Memorandum, the Government and the NBS agree that conditions are now in place to update the existing strategy and define a new one. Aware that dinarisation is a gradual and long-term process, the Government and the NBS reflected on the results achieved by the measures and activities taken thus far and, based on them, agreed and defined additional measures and activities so as to encourage further dinarisation and reduce the foreign currency risk in the system.

[2] http://www.nbs.rs/internet/english/30/MemorandumVladaDinarizacija_20120406_eng.pdf

II CAUSES OF EUROISATION IN SERBIA AND REASONS FOR DEFINING THE DINARISATION STRATEGY

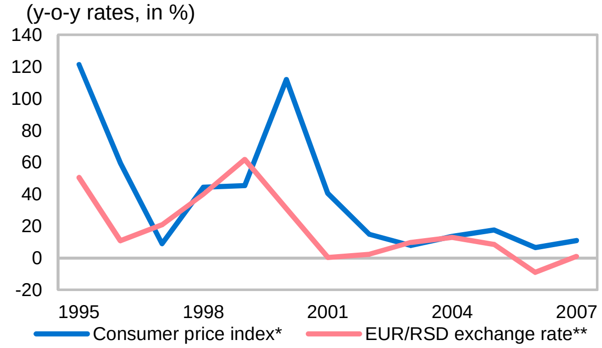
High dollarisation is a common feature of a large number of emerging economies. In Serbia's case, the roots of euroisation run very deep. Similar to other emerging economies, they can be traced back to a long history of macroeconomic instability and high and volatile inflation, and during the 1990s, hyperinflation as well. In the period of macroeconomic instability, i.e. pronounced internal and external imbalances, the domestic currency weakened considerably, dampening the interest of economic agents in holding dinar assets. In order to protect themselves from losses, in anticipation of further depreciation of the domestic currency and a rise in inflation, economic agents increasingly saved in foreign currency – first in Deutsche marks and then in euros.

Chart 1 **Movements in Serbia's GDP**
(indices, 1990=100)



* Prior to 1995, the calculation was based on domestic product growth dynamics.

Chart 2 **Movements of inflation and EUR/RSD exchange rate, 1995–2007**
(y-o-y rates, in %)



* Until 2007, retail price index. Due to hyperinflation in 1993, the prior period is not shown.
** (+) depreciation, (-) appreciation

Faced with a lack of dinar sources of funding (because economic agents lost confidence in domestic currency) and inability to ensure alternative dinar sources through issuance of dinar securities, banks started to offer FX and FX-indexed loans. This process intensified further with the entry of foreign banks (banks in majority foreign ownership) into the domestic market in the 2000s, greater availability of cheaper external sources of funding and the return of FX savings into the banking system. While bank clients are exposed to the direct risk of a dramatic increase in the dinar amount of their liabilities to banks in case of sharper depreciation of the dinar, banks are exposed to credit-FX risk via their clients in case of clients' inability to service their obligations under FX or FX-indexed loans. As the global financial crisis culminated and several episodes of strong depreciation of the dinar occurred, non-performing loans built up.

The growth in euroisation also heightened the pass-through effect of the dinar on inflation, which further increased the inflation level and its volatility. At the same time, the rise in euroisation dented the effectiveness of monetary policy via the interest rate channel. In conditions of heightened fiscal and external imbalances, the domestic economy became more vulnerable to external shocks. Due to the high and volatile inflation, a build-up in NPLs, relatively strong external shocks and unstable capital flows to emerging economies, in the first years after the crisis monetary policy was unable to provide support to economic recovery to a larger extent. At the same time, the emerging issue of public debt sustainability made it impossible for fiscal policy to exert any major countercyclical effect and prevent the economy from plunging into recession.

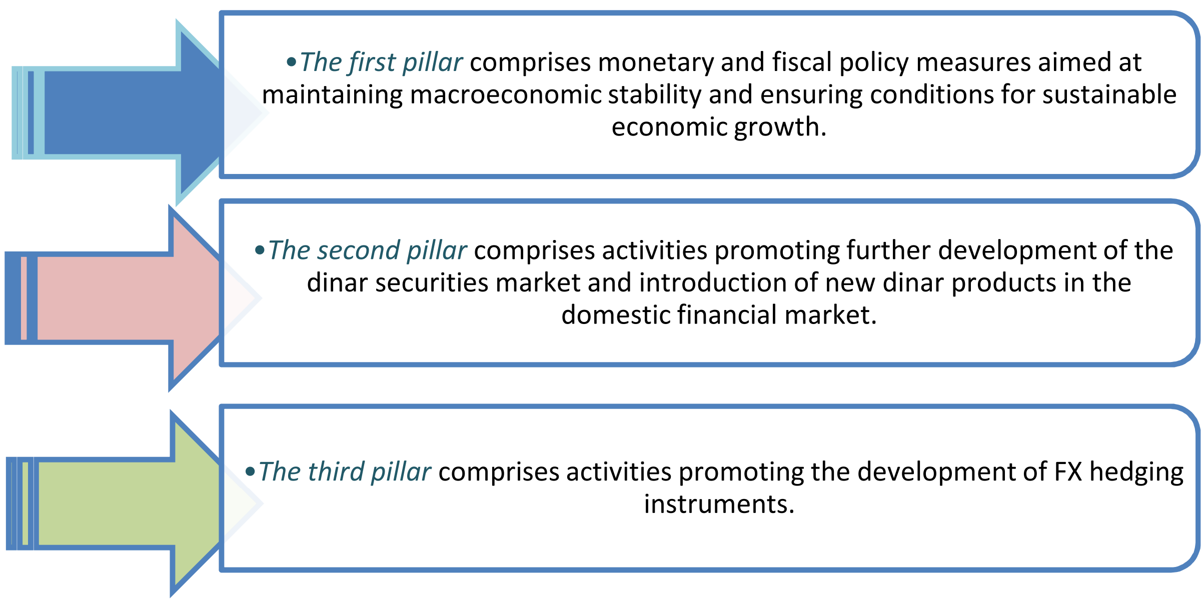
Given that excessive use of foreign currency in the domestic financial system and heavy reliance on foreign sources of funding came particularly to the fore during the global economic crisis, the Government and the NBS continued to adopt measures and activities in order to increase dinarisation and reduce FX risk in the system. Measures and activities aimed at strengthening the confidence in the dinar included primarily measures of monetary and fiscal policies, which helped to achieve and maintain price and overall macroeconomic stability over the last five years and to create conditions for a sustainable economic growth and sound and robust financial sector. However, since it took decades to generate high euroisation, these measures will also take time to yield their full effects and completely restore confidence in the dinar. In order to speed up this process, the Government and the NBS have developed the Strategy of Dinarisation of the Serbian Financial System, agreed upon and defined by the signing of this Memorandum (hereinafter: the Strategy). The Strategy builds on the *2012 Memorandum*, which defines the key principles and objectives of the dinarisation process. The Strategy is a result of joint efforts and coordination of all relevant institutions – the Government, NBS, commercial banks and non-banking sector – and its objective is to tackle high euroisation in a systemic and sustainable manner.

III OBJECTIVE AND KEY PRIORITIES OF THE DINARISATION STRATEGY

The objective of this Strategy is to support greater use of the dinar and reduce FX risk in the domestic financial system.

Given that Serbia is a small and open economy with strong economic and financial links with the European Union, it is unrealistic to expect that the use of the euro could be completely eliminated. Also, since the roots of euroisation run very deep, the process of dinarisation (deeuroisation) cannot be either quick or simple. This Strategy therefore aims for a gradual and systematic adjustment of assets and liabilities of the banking and non-banking sectors, with the NBS's and Government's measures being based on market-oriented solutions and in line with the achieved macroeconomic and financial stability.

Activities that are part of the dinarisation process are defined within the three interconnected pillars identified as the cornerstones of progress in dinarisation. Activities under each pillar are implemented independently, but the progress achieved under one pillar contributes to the effectiveness of measures and activities under the other two pillars.



Since the long history of macroeconomic instability was the key generator of high euroisation in Serbia, the key for raising confidence in the national currency are low and stable inflation, relative stability of the exchange rate, and financial stability over an extended period of time. This helps reduce corporates and households' interest in holding foreign currency savings as a protection against FX risk and the risk of high inflation.

An important link in the dinarisation process is the development of the domestic financial market, as it helps to ensure longer-term dinar sources of funding for the government, financial sector and corporates, while creating at the same time additional opportunities for saving and investing in dinars.

Thus, activities aimed at further development of the market of long-term dinar securities and introduction of new dinar products in the domestic financial market constitute the second pillar of the Dinarisation Strategy. The development of the market of dinar securities and in particular the issuance of longer-term dinar securities are important for creating the long-term benchmark yield curve which makes a more reliable basis for pricing long-term sources of funding and thus for opting for long-term borrowing in dinars. Creation of a benchmark yield curve is also important for the development of a corporate securities market, because it sets a benchmark for pricing corporate securities, which is one of the preconditions for the development of a private debt market.

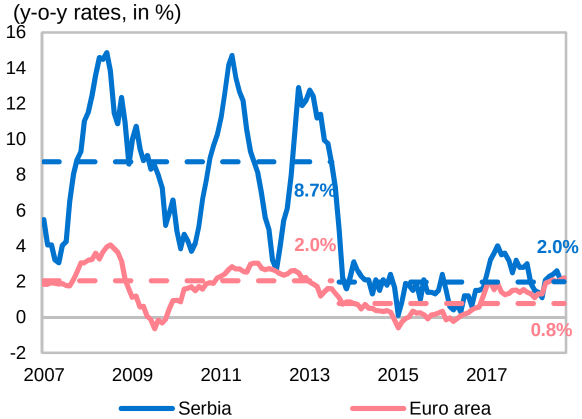
In parallel with the increasing use of the dinar, FX risk in the domestic financial system can also be reduced by a further development of the market of FX hedging instruments. Therefore, all activities aimed at raising awareness about the necessity to hedge against FX risk in those entities that lack natural protection[3], represent an important element of the dinarisation strategy. A greater use of FX hedging instruments would increase the certainty and safety of operations and bolster the ability of corporates to preserve their competitive position in the international market, especially in times of heightened turbulences in the international environment. Greater use of these instruments would also help create a climate in which corporates and households do not have to worry so much about the consequences of excessive exchange rate volatility. It is therefore important to raise awareness of market participants about the advantages of using these instruments.

[3] Natural protection against FX risk or the so-called natural hedging is a situation in which there is complete matching in currency composition of an entity's income and expenses.

IV ACTIVITIES TAKEN THUS FAR

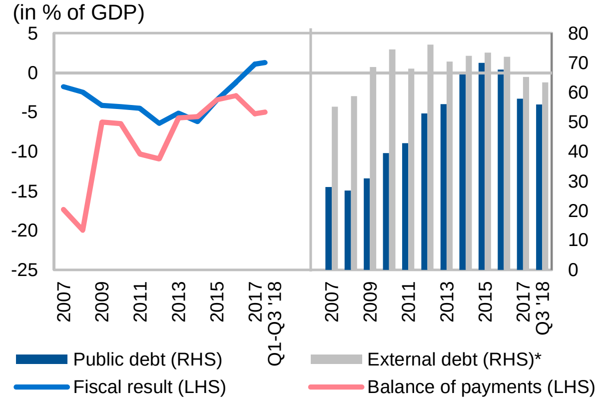
Economic policy measures taken by the Government and the NBS in the last six years which, working in synergy, contributed to the achievement and maintaining of macroeconomic stability, a significant narrowing in fiscal and external imbalances, low and stable inflation, strengthening of financial stability and relative stability of the exchange rate, represent the necessary and most important step toward the permanent resolving of the issue of high euroisation. The results are most visible in that segment. The greatest support to the rise in dinarisation came from consistent implementation of monetary policy in the inflation targeting regime, and from consistent implementation of the programme of fiscal consolidation and structural reforms. The combination of these policies reduced internal and external imbalances, strengthened the country's macroeconomic indicators and secured the foundation for sustainable growth.

Chart 3 **Inflation in Serbia and the euro area**
(y-o-y rates, in %)



Sources: Eurostat, SORS and NBS calculation, as at October 2018.

Chart 4 **Indicators of fiscal and external position**
(in % of GDP)

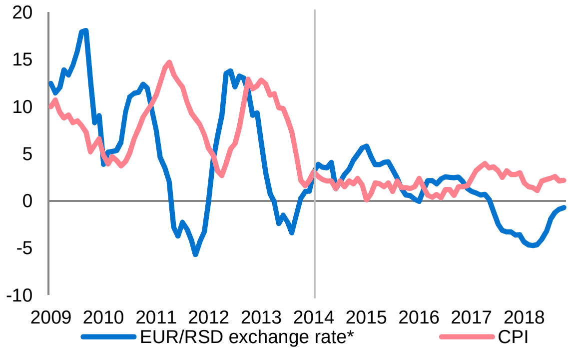


Source: NBS. *June 2018.

Inflation targeting and managed floating exchange rate implemented by the NBS constitute compatible monetary policy and exchange rate regimes, which proved to be conducive to reducing dollarisation in other countries as well. What lies at the core of this regime is medium-term price stability. It is achieved by attaining the targeted inflation rate and anchoring inflation expectations of market participants, these being at the same time the main elements of the first and most important pillar of the Strategy. By achieving and maintaining low and stable inflation in the long run and anchoring inflation expectations, the NBS helps to eliminate what was until recently an entrenched fear of market participants – that the dinar would continue to depreciate and inflation would remain high – and thus helps change their preference for saving in foreign currency.

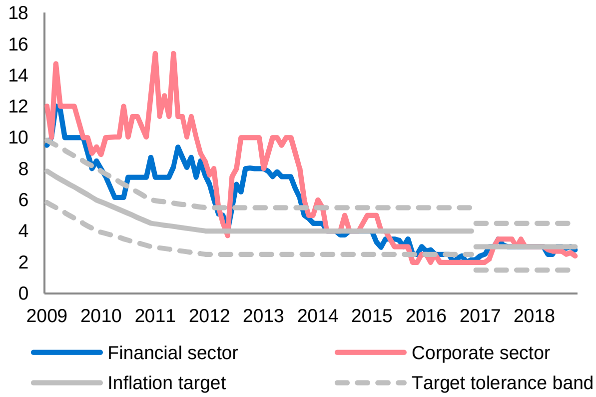
Over the last five years the NBS achieved and subsequently maintained price stability. By a responsible monetary policy and its successful coordination with the fiscal policy, in 2013 alone inflation was lowered from 12.8% at the start of the year to 2.2% at year-end. Since then, inflation has moved at a low and stable level of around 2% and in this respect, Serbia is today comparable to other European countries. Maintained low inflation also contributed to higher credibility of monetary policy, that is to the drop and anchoring of inflation expectations of market participants to the level of targeted inflation, which strengthened their confidence in the dinar. Additionally, the decision which the NBS made jointly with the Government, to lower the targeted inflation rate to 3% starting from 2017, attests to the determination of economic policy makers to keep inflation low, stable and predictable in the medium-run. This contributes to further improvement of business and investment environment and creates the basis for a decline in long-term interest rates, as well as for greater use of the dinar in financial transactions.

Chart 5 **Movements of inflation and EUR/RSD exchange rate**
(y-o-y rates, in %)



* (+) depreciation, (-) appreciation
Sources: NBS and SORS, as at October 2018.

Chart 6 **One-year ahead inflation expectations**
(in %)



Sources: NBS, Gallup, Ipsos, Ninamedia, as at October 2018.

Curbing of inflation and its maintenance at a low and stable level laid the groundwork for monetary policy easing as of mid-2013 that was further stepped up by the adoption of a credible fiscal consolidation programme in late 2014 and its subsequent implementation. The effects of monetary policy easing are reflected in the fact that from May 2013 until April 2018 the key policy rate was cut by 8.75 pp, to 3%. Monetary policy accommodation passed through to dinar lending rates which recorded a sharp decline (by over 10 pp). This was one of the key factors that also boosted the demand for dinar loans.

Speaking of fiscal policy measures, the adoption and consistent implementation of the fiscal consolidation programme enabled a sharp fiscal adjustment evidenced in the fiscal deficit's reduction from 6.2% in 2014 to 1.2% in 2016 and its turning into a surplus of 1.1% of GDP in 2017. Medium-term fiscal deficit is projected at the sustainable level of 0.5% of GDP. With lower financing needs of the government, public debt -to-GDP ratio has been on a downward path since 2016, measuring below 60% at end-2017 and continuing the decline in 2018.

The strengthening of the domestic economy is what underpins the relative stability of the exchange rate and what outweighed the negative effects of turbulences in the international financial market. The NBS intervened in the FX market exclusively to mitigate excessive short-term volatility of the exchange rate, without any intention to affect its trend. In the period since 2017 the dinar came under stronger appreciation pressures more frequently, prompting the NBS to intervene more on the purchase side. This additionally bolstered the country's FX reserves, creating at the same time an appropriate buffer against potential larger external shocks in the future. It also raised awareness among market participants that exchange rate can move in both directions, contrary to their earlier expectations which were mostly oriented toward significant depreciation due to the long history of macroeconomic instability.

Being aware that the problem of euroisation in Serbia has been generated for decades and that it is deeply entrenched, the NBS and the Government undertook additional measures and activities in order to step up the process of reaching the satisfactory level of dinarisation. The overview of these measures and activities is given below, whereas their chronological overview is presented in Annex 1.

4.1 ADDITIONAL MEASURES AND ACTIVITIES OF THE NBS

Apart from ensuring price stability and strengthening financial stability, the NBS took numerous measures and activities aimed at increasing confidence in the domestic currency and promoting greater use of the dinar.

Starting from the objectives of their adoption and implementation, measures and activities can be classified into those aimed primarily at:

1) encouraging banks to rely more on dinar sources of funding and increasing the share of dinar in total loans;
2) development of the domestic dinar financial market;
3) FX risk hedging, promotion and development of FX risk hedging instruments.

Some of the measures and activities are designed in such a way as to contribute to the realisation of several objectives at the same time.

1. **Encouraging banks to rely more on dinar sources of funding and increasing dinar loans**

The set of measures aimed at encouraging banks to rely more on dinar sources of funding and increase dinar lending includes the required reserve instrument and measures of macro- and micro- prudential policies:

- **Differentiated required reserve ratios have been applied on the dinar and FX base in favour of dinar sources of funding**, as well as in favour of long-term sources. These measures are aimed at encouraging banks to rely more on long-term dinar sources of funding, with a view to increasing the degree of dinarisation on the liabilities side. In addition, **the required reserve ratio on the portion of FX base composed of banks' dinar liabilities indexed to an FX-clause was set at 100% in January 2016.**
- **The Decision on Measures for Safeguarding and Strengthening Stability of the Financial System introduced a limit for FX and FX-indexed mortgage loans approved to households, setting the loan-to-value ratio** at 80%, which is not applied to dinar loans. The objective of this measure is to support the use of dinar housing loans. In December 2017 this limit was relaxed to 90% for loans that are approved as part of government support to certain categories of natural persons.

- **The Decision on Measures for Safeguarding and Strengthening Stability of the Financial System prescribes minimum mandatory downpayment of 30% for loans approved to natural persons in foreign currency or in dinars, when linked to an FX-clause, with the exception of housing loans and credit cards, while exempting all dinar loans from this requirement**. This measure is also aimed at ensuring preferential treatment of dinar lending to households.
- **The Decision on Measures for Safeguarding and Strengthening Stability of the Financial System banned the possibility of lending to households in foreign currency other than the euro.**
- **The Decision on Capital Adequacy of Banks limited the total net open FX position at 20% of the bank's capital**. The aim of this measure is to curb FX risk by limiting the amount of FX-indexed and FX lending relative to FX sources of funding.
- **According to the Decision on Liquidity Risk Management by Banks and the Decision on Risk Management by Banks, dinar government securities with minimum maturity of three months, in the amount of 90% of their fair value, are included among level 1 liquid receivables, which is not the case with FX or FX-indexed securities.** This measure is aimed at encouraging banks to rely more on dinar sources of funding and boosting the demand for dinar rather than FX securities issued by the government.
- In November 2013 the NBS adopted the **Decision on Terms and Conditions of Performing Foreign Credit Transactions in Dinars, allowing international financial institutions (IFIs) founded by foreign states to grant dinar loans to banks, legal persons and entrepreneurs.** Owing to the amendments to this Decision, in December 2016 an IFI issued a three-year dinar bond worth RSD 2.5 bn and subsequently lent dinar funds, thus providing a contribution to the development of the capital market.
- In June 2017 the **Decision on the Rate and Manner of Maintaining the Systemic Risk Buffer set the systemic risk buffer** at 3% of total FX and FX-indexed placements of a bank approved to corporates and households in the Republic of Serbia. It is applied to banks in which the share of such placements in total placements approved to corporates and households in the Republic of Serbia exceeds 10%. This way, banks are encouraged to bring down the degree of euroisation, because the reduction in the share of FX and FX-indexed placements in total placements entails a lower amount of capital requirements.

2. **Development of the domestic dinar financial market**

- In conducting monetary operations, the **NBS accepts as collateral exclusively dinar securities** issued by the government, the NBS or IFIs. In April 2013, the NBS allowed that dinar securities issued by IFIs and financial institutions with prime credit rating may also be used in monetary operations.

- **The Law on Financial Collateral, adopted in June 2018, regulates financial collateral arrangements and realisation of financial collateral in accordance with the international standards and best market practices.** The Law envisages fiduciary transfer of title to collateral, enabling the collateral taker (creditor) to dispose with the collateral without restrictions. In addition, it explicitly regulates repurchase agreements, close-out netting in financial agreements etc. This improves legal security and efficiency in carrying out financial transactions, reduces credit risk between participants in the financial market and increases liquidity of financial instruments. It also supports faster development of the market of repo operations and boosts secondary trading in the securities market. As a result, the first domestic ISDA master agreement was concluded, modelled after the best international practices.

- **A comprehensive reform of the payment system was carried out. In an integral and comprehensive manner, state-of-the-art payment services have been introduced in the Serbian legal system and the use of modern payment instruments has been enabled** (e-banking, m-banking, use of all types of payment cards, digital wallets, etc.). The Law on Payment Services has provided legal framework for the establishment and business of electronic money institutions and payment institutions, which is an important step towards modernisation of the national payment system, as it improves client safety, increases the efficiency of payment transactions and enables development of innovative forms of payment. The Law introduces electronic money and prescribes the conditions for its issuance, use and purchase, while creating the preconditions for a much stronger competition in the payment services market, allowing for cheaper, faster and more efficient payment transactions. These amendments and improvements increase the share of dinar payments through account, reduce grey economy and strengthen the domestic payment system.

3. **FX risk hedging, promotion and development of FX risk hedging instruments**

- **With a view to encouraging interbank swap operations,** the NBS conducts regular two-week and three-month swap auctions of purchase/sale of foreign currency from/to banks.

- **The Law on the Protection of Financial Services Consumers prescribes the requirement for banks to inform customers in writing, in the pre-contractual stage, of the risks they are assuming when opting for a bank service in foreign currency or indexed to a foreign currency**. It also requires that when advertising deposit and credit services and leasing operations, where the advertising message includes numeric data, the currency in which the service is approved must be unequivocally specified. It obliges banks and lessors to first offer the service in dinars, unless required differently by the consumer.

- **In accordance with the amended Decision on Terms and Manner of Calculating the Effective Interest Rate and the Layout and Content of Forms Handed Out to Consumers, as of 1 January 2019 banks (and financial lessors) are obligated**, inter alia, to give to potential clients a dinar offer of a contract on deposit, loan/payment card, leasing, current account overdraft and/or opening and maintaining an account. If the consumer, however, requires that he be offered a loan/lease contract in a foreign currency or with a currency clause, a bank and/or financial lessor will inform the consumer of **the risks assumed** by borrowing in foreign currency or with a currency clause, by specifying those risks on the prescribed forms. This is expected to raise consumer awareness of the risks of borrowing and to indirectly encourage borrowing in dinars.

- **The NBS organised, both on its own and in cooperation with other relevant institutions (Ministry of Finance, Serbian Chamber of Commerce, ACI Serbia, Association of Serbian Banks)** numerous educational panels aiming at promotion and further development of FX hedging instruments. Other forms of communication with the public were also used to raise awareness on the importance of using these instruments. In April 2018, the NBS, in cooperation with the Serbian Chamber of Commerce, organised the conference “Hedging against Exchange Rate Risk”. The conference gathered representatives of the corporate sector and banks, in order to familiarise Serbian companies with the instruments which hedge against market risks and thus increase business certainty.

4.2 ADDITIONAL MEASURES AND ACTIVITIES OF THE GOVERNMENT

The Government's measures and activities aimed at increasing the degree of dinarisation provided a major contribution to the development of the domestic financial market. The Government also took measures to encourage dinar savings, to create new investment options in dinars and support greater use of dinar loans.

1. Development of the domestic dinar financial market

- The development of the domestic financial market began in 2009 when the Public Debt Administration of the Ministry of Finance **launched the sale of dinar treasury bills** at market terms. In the initial stage, it issued the three- and six-month treasury bills. In time, their maturity was extended. With this a long-term dinar yield curve was formed as the basis for pricing securities issued by banks and corporates, as well as for pricing long-term dinar loans.
- As of 2015, **government dinar securities may also be traded in the Belgrade Stock Exchange**, which can contribute to the development of the dinar capital market in Serbia.
- From 2016 onwards **benchmark dinar bonds were sold in larger amounts**, which allowed for organisation of primary sale several times during the year, by reopening the issue. In addition, larger-size issues contribute to higher liquidity of dinar securities and encourage further development of the secondary market.
- In December 2017 the government issued **dinar savings bonds for households**, in order to facilitate access to the domestic market of dinar securities and promote an alternative, risk-free form of saving for households.

2. Increasing dinar loans and encouraging banks to rely more on dinar sources of funding

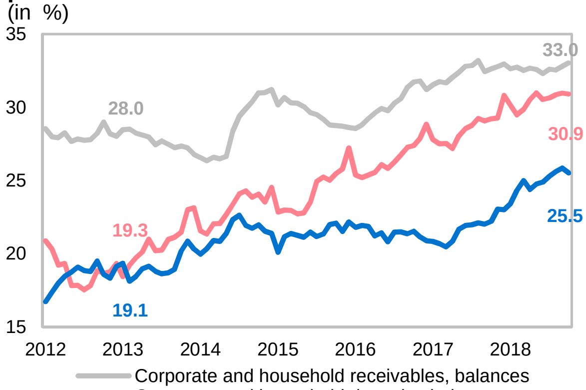
- In September 2012, *the* Law Amending the Law on Personal Income Tax **raised the income tax rate on FX savings from 10% to 15%, while keeping 0% rate on dinar savings**, in order to support dinar savings and boost dinar lending.
- In 2014, the Government adopted the **programme for subsidising interest rates exclusively on dinar corporate loans, with the maximum repayment term of 18 months.** Around 130 bn-worth of dinar loans were approved under the programme.

V PROGRESS MONITORING IN THE DINARISATION PROCESS AND THE RESULTS ACHIEVED SO FAR

According to *the 2012 Memorandum*, the NBS and the Government agreed that the degree of dinarisation of the financial system be measured by the share of dinar receivables in total household and corporate receivables and by the share of dinar deposits in total household and corporate deposits. They also agreed on supplementary indicators such as currency structure of public debt, liquidity in the primary and secondary markets of dinar securities, maturity structure of dinar securities and other. In this context, dinar receivables, dinar deposits and dinar securities relate only to pure dinar categories, i.e. receivables, deposits and securities without any form of currency clause, enabling their indexation to inflation.

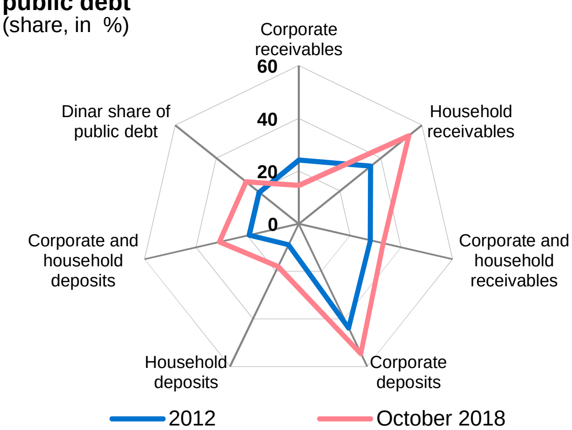
The most significant indicators of the degree of dinarisation a) share of dinar receivables in total corporate and household receivables, b) share of dinar deposits in total corporate and household deposits, c) share of dinar in total public debt, reveal that in the past six years progress has been achieved in the dinarisation process (since the 2012 Memorandum was signed). The greatest progress was made on the deposit side, which is also a key factor for pushing forward loan dinarisation. Progress was also recorded in public debt, thanks to increasing government orientation to the issuance of dinar securities. Slower progress was recorded in loans, primarily corporate loans, due to the fact that enterprises still mostly rely on FX-indexed loans. In case of household loans, the increase in the degree of dinarisation was the most pronounced.

Chart 7 **Dinarisation of receivables, deposits and public debt**
(in %)



Sources: NBS and Ministry of Finance, as at October 2018.

Chart 8 **Dinarisation of receivables, deposits and public debt**
(share, in %)



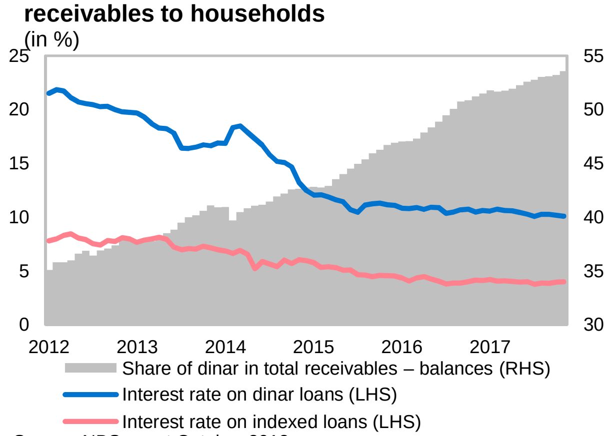
Sources: NBS and Ministry of Finance.

5.1 DEGREE OF DINARISATION OF RECEIVABLES

In October 2018, 33.0% of total corporate and household receivables were in dinars, up by 5.0 pp compared to end-2012, i.e. the year in which the 2012 Memorandum was signed.

A distinctive upward trend in dinarisation was recorded in *household lending*. In mid-2017 that share exceeded 50% and in October 2018 it reached maximum of 53.6% (an increase of 18.5 pp relative to end-2012). This can be attributed primarily to the NBS monetary policy easing, which led to a sharp decline in interest rates on dinar loans, as well as to the adopted regulations aimed at ensuring preferential treatment of dinar household lending. These measures were an adequate supplement to the macroeconomic stabilisation of the country and lower interest rates on dinar loans in promoting dinar household borrowing. What attests best to their effectiveness is the fact that since 2016, almost three quarters of new household loans have been approved in dinars. For the sake of comparison, in 2012 this share averaged 60%. Looking at the type of loans, the highest degree of dinarisation is recorded in new cash loans, which are almost entirely in dinars (over 99%), while dinarisation of consumer loans increased to over 75%. Dinarisation of housing loans also increased, though not to a large degree. Macroeconomic stability and significantly reduced interest rate differential on dinar and euro-indexed loans paved the way for the approval of long-term dinar housing loans as of 2016. These loans are approved with up to 30-year repayment term and at a rate of 4–5%, at which, until a few years ago, euro-indexed loans were approved.

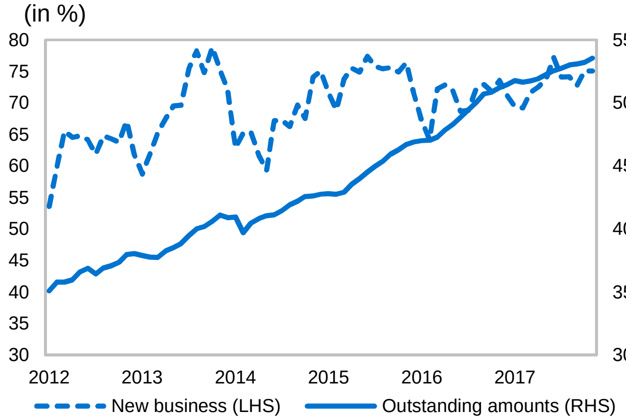
Chart 9 **Interest rate differential and dinarisation of receivables to households**



Source: NBS, as at October 2018.

Chart 10 **Dinarisation of households receivables**

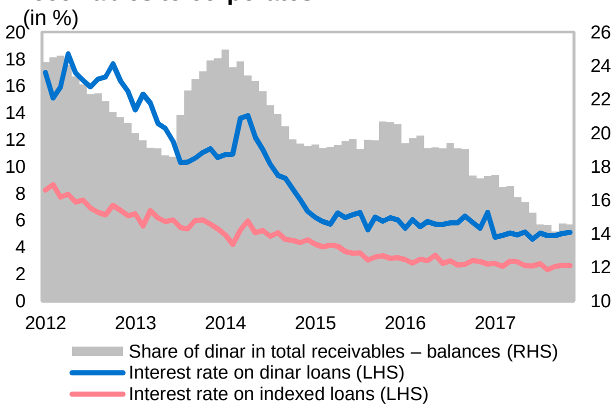
(in %)



Source: NBS, as at October 2018.

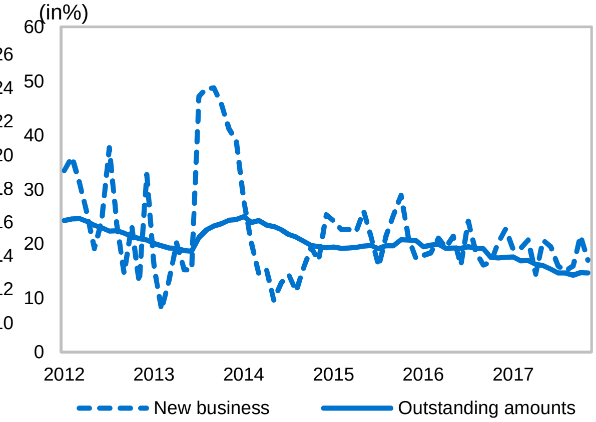
Unlike households, corporates take predominantly FX-indexed and FX loans. In the observed period, the increase in **the degree of dinarisation of corporate receivables** was recorded in 2014 (by 5.0 pp, to 25.0%), as a result of the subsidised corporate lending programme, where liquidity and current assets loans were approved only in dinars, without an FX-clause. However, the maturing of these loans during 2015 and in the first half of 2016 and in part the write-off of NPLs (for example, enterprises in bankruptcy, whose loan liabilities were converted into dinars due to the bankruptcy procedure) which intensified after the adoption of the National NPL Resolution Strategy resulted in the fall of corporate loan dinarisation after 2014. As for the newly approved loans, the share of dinar corporate loans has been relatively stable, equalling 20% on average in the past three years. The dinarisation of the most frequently used loans – current assets loans, is approximately the same. The dinarisation of investment loans is not high (6%), due to the fact that these loans are mostly used for imports of equipment and import loans are entirely foreign currency-denominated. The dinarisation of the heterogeneous category of other loans is constantly rising (to 41% in 2018).

Chart 11 **Interest rate differential and dinarisation of receivables to corporates**



Source: NBS, as at October 2018.

Chart 12 **Dinarisation of corporate receivables**



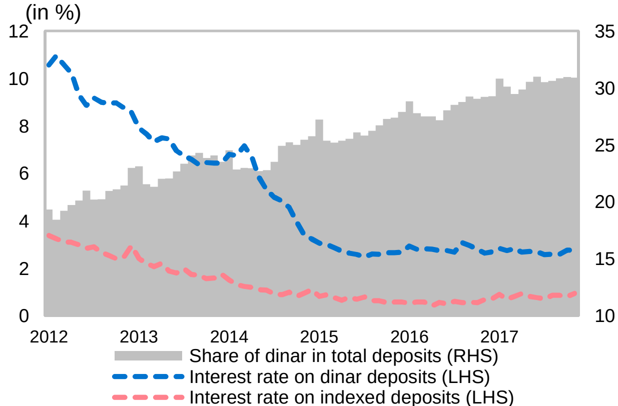
Source: NBS as at October 2018.

5.2 DEGREE OF DINARISATION OF DEPOSITS

Significant progress was made in the dinarisation of deposits. In October 2018, **the share of dinar in total corporate and household deposits** equalled 30.9%, up by 11.6 pp relative to end-2012, when it equalled 19.3%. The main factors that contributed to the increase in dinarisation of deposits are a longer period of low and stable inflation and relative stability of the exchange rate, as well as the strengthening of the domestic financial system. The required reserve policy and tax incentives stimulated the dinar sources of funding for banks, which also contributed to the increase in deposit dinarisation.

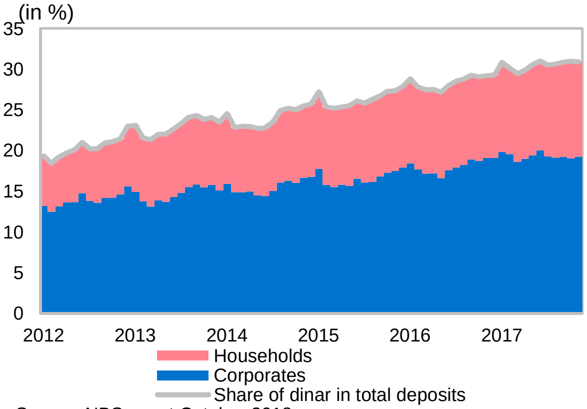
The **degree of dinarisation of corporate deposits** went up from 43.9% at end-2012 to over 50% since 2013, and then to 54.6% in October 2018. In **household deposits**, which account for the dominant part of all private sector deposits (around two thirds), the share of dinar deposits increased by 9.2 pp, to 18.0% in October 2018, indicating greater confidence in the dinar. In October 2018 household dinar savings reached RSD 56.6 bn, their highest level so far and more than three times higher than at end-2012. Although **the share of dinar in total household savings** is still not high, mainly as a consequence the memories of the 1990s hyperinflation, it edged up from 1.9% in 2012 to 4.8% in October 2018.

Chart 13 **Interest rate differential and dinarisation of deposits**
(in %)



Source: NBS, as at October 2018.

Chart 14 **Contribution of corporates and households to dinarisation of total deposits**
(in %)

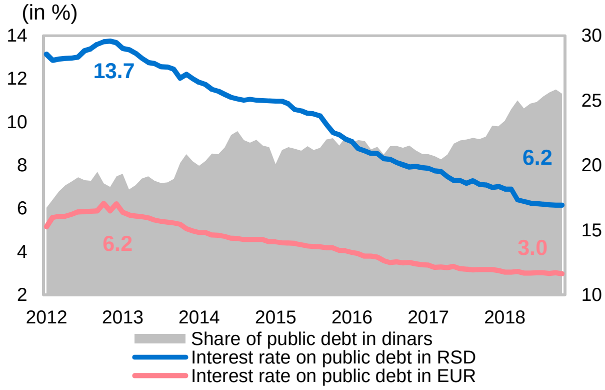


Source: NBS, as at October 2018.

5.3 DEGREE OF DINARISATION OF PUBLIC DEBT

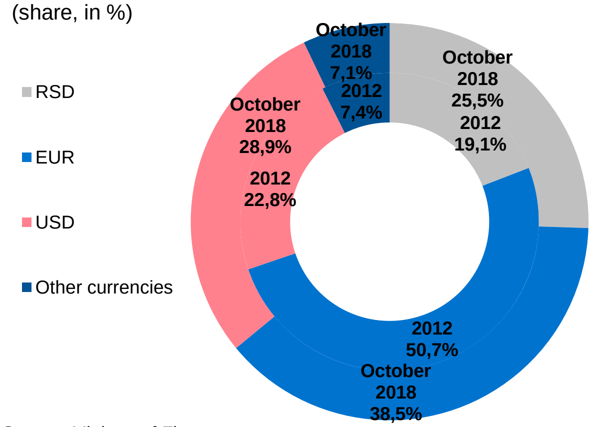
Market development and a significant fall in interest rates on dinar government securities, strongly supported by the monetary policy easing and the decline in the country risk premium owing to the strengthening of domestic macroeconomic fundamentals, have contributed to the increase in the share of dinar in total public debt.

Chart 15 **Interest rate differential and share of dinar in total public debt**
(in %)



Sources: Ministry of Finance and NBS calculation, as at October 2018.

Chart 16 **Currency composition of public debt**
(share, in %)



Source: Ministry of Finance.

That share equalled 25.5% in October 2018, up by 6.4 pp from end-2012, and by 23.0 pp from end-2008, right before the first dinar government securities were issued.

The rise in the dinar share of public debt reduces the country's exposure to FX and interest rate risks, which contributes to public debt sustainability and lower cost of the government's new borrowing.

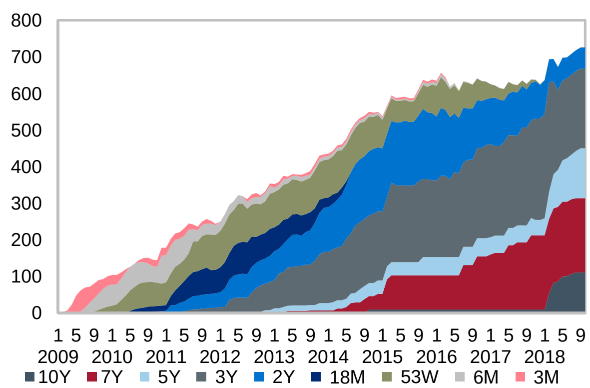
The primary market of dinar government securities is constantly developing – through gradual extension of maturity and higher volume issues. As macroeconomic conditions improved over time, the maturity of these securities extended up to 10 years. The first 10-year security was issued in October

2014, while only two years before that the longest maturity of government securities was five years. The extension of maturities of the issued securities and greater liquidity of the primary market also contribute to the development of the secondary market of these securities, as well as to the establishment of the benchmark dinar yield curve.

Since November 2015, long-term government securities were admitted to the Belgrade Stock Exchange listing, which facilitates the expansion of investor base and development of the capital market. There is a new practice of issuing benchmark dinar bonds in larger amounts since 2016. The aim is to sell the securities multiple times during the year through issue reopening, which will increase the liquidity and support further development of the secondary market of these securities.

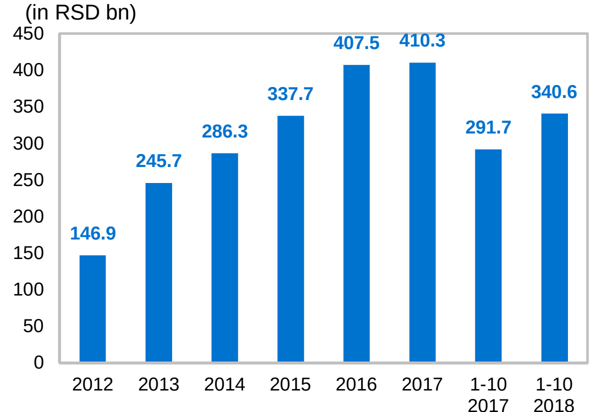
The secondary market has been developing steadily, as testified by the volume of trading in dinar securities, which has been rising from year to year, exceeding RSD 400 bn in 2016 and 2017. Trading volumes continued to rise in 2018. In fact, the first ten months of the year saw an almost 20% higher trading volume than the same period last year.

Chart 17 **Stock of sold dinar government securities**
(in RSD bn)



Source: Ministry of Finance, as at October 2018.

Chart 18 **Trade in dinar government securities in the secondary market**
(in RSD bn)



Sources: Ministry of Finance and CSD and Clearing House

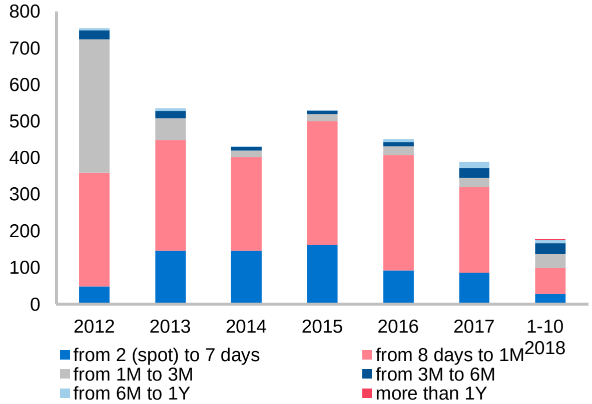
5.4 FX HEDGING INSTRUMENTS

Measures and activities under the third pillar of the Strategy are aimed at greater use of FX hedging instruments. Enterprises mostly use the instrument of forward purchases of foreign currency (around EUR 390 mn in 2017 and around EUR 175 mn in the first ten months of 2018). Foreign currencies are mostly purchased with the maturity of up to one month. The weighted average maturity of these hedging instruments is gradually increasing, especially during 2017 (37 days) and in the first ten months of 2018 (117 days).

Forward FX sale is lower than purchase, but it is gradually rising. The highest annual amount was recorded in 2017 (around EUR 17 mn), when appreciation pressures emerged. In the first ten months of 2018 alone, residents made forward FX sales in the amount of EUR 46.5 mn. These transactions are concluded with longer maturities compared to forward FX purchases. The weighted average maturity of these instruments recorded a significant increase since 2016 (during 2017, it increased to over 300 days, and during 2018, to over one year). The gradual narrowing of the gap between forward FX purchases and sales indicates that the participants are now more aware that exchange rate movements are possible in both directions, not only towards depreciation.

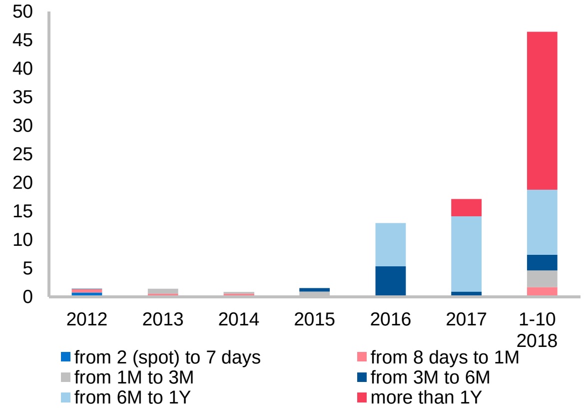
Domestic enterprises do not use other FX hedging instruments sufficiently – from January 2012 to October 2018, there were 105 FX swap transactions concluded between banks and domestic enterprises, and 72 interest rate swaps, as well as one interest rate option.

Chart 19 **Corporate forward purchases**
(in EUR mn)



Source: NBS.

Chart 20 **Corporate forward sales**
(in EUR mn)



Source: NBS.

VI PLANNED ACTIVITIES

The Government and the NBS agree that macroeconomic and financial stability are the cornerstone of a successful dedollarisation/deeuroisation strategy, as in conditions of stability it is easier to increase the use of the national currency over the medium- and long-term horizon. In the past six years macroeconomic and financial stability have been delivered and maintained, meaning that activities under the first pillar of dinarisation have been fully implemented.

The NBS and the Government agree to remain consistent in maintaining macroeconomic and financial stability in the future, applying a carefully calibrated set of macroeconomic policy measures appropriate to the phase of the economic and financial cycle. More specifically, the NBS will continue to implement a responsible monetary policy in the inflation targeting regime, i.e. it will continue with its timely response so as to keep inflation stable and low and inflation expectations anchored. Besides, the NBS will continue to apply carefully weighed up regulatory measures in order to keep the financial sector stable and sound. At the same time, maintaining price and financial stability is the best way for the central bank to contribute to sustainable economic growth, and thus, to a further rise in the confidence in the dinar.

The Government's economic policy measures will be geared primarily at running a responsible and consistent fiscal policy in order to safeguard the significant results of fiscal consolidation and to ensure a further reduction in public debt. In addition, the Government will proceed with the initiated structural reform process with a view to improving the business and investment environment additionally.

The creation of a stable environment, characterised by low inflation and a sharp fall in dinar interest rates, paved the way for the Government's increasing focus on borrowing in dinars and at long maturities. This enabled significant progress in activities under the second pillar of dinarisation, i.e. development of the market of dinar government securities and extension of their average maturity. Further development of the dinar money market and capital will remain high on the agenda of the Government and the NBS in the coming period too.

In addition to macroeconomic policies aiming at further gradual reduction of internal and external imbalances, the authorities will continue to apply the prudential measures and activities taken thus far, adjusting some of them as required by the phase of the economic and financial cycle and the progress in increasing dinarisation in individual segments.

Having in mind the effects of hitherto measures and activities, the NBS and the Government agree to take, within the three pillars of dinarisation, additional measures and activities envisaged by the Strategy that could serve as a catalyst to the process of dinarisation.

Should the financial and macroeconomic developments allow so, the NBS and the Government will also consider and take any other measures falling within their scope of competence for the purposes of implementing the process of dinarisation.

6.1. ADDITIONAL PLANNED MEASURES AND ACTIVITIES OF THE NBS

1. **Encouraging banks to rely more on dinar sources of funding and increasing the share of dinar in total loans**

- Continuation of the **policy of differentiated required reserve ratios on the dinar and FX base in favour of the dinar sources of funding**, while at the same time giving precedence to long-term sources of funding. Different modalities regarding the level of required reserve ratios on the dinar and FX base will be considered in order to encourage further growth in the dinar sources of funding, and their effects on macroeconomic developments will be assessed, notably effects on bank liquidity, interest rates and the volume of loans and deposits. Remuneration policy will also be considered.
- The possibility of issuing long-term dinar covered bonds will be analysed, given that the thus raised funds might be channeled into new long-term loans, such as dinar housing loans.

2. **Development of the domestic dinar financial market**

- The NBS will implement measures and activities aimed at strengthening further the credibility of interest rates in the interbank money market (BELIBOR rates), as the basis for the valuation of dinar products and instruments in the money and capital markets, as well as the basis for higher trading volumes and further development of the dinar money market.

3. **FX risk hedging, promotion and development of FX risk hedging instruments**

As additional efforts are needed to bolster the use of FX hedging instruments, the NBS will devote special attention to the measures and activities under the third pillar of dinarisation – **FX risk hedging, promotion and development of FX risk hedging instruments**.

- **The NBS will conduct a bank survey on the type of FX risk hedging instruments they offer, the level of client exposure to currency risk, the amount of hedging costs in foreign exchange transactions, etc.** Besides, there is a possibility of introducing a new report in the decision governing bank reporting requirements. The new report, submitted by banks to the NBS, would contain data on hedged/unhedged borrowers per type of client and materially significant foreign currencies. Based on these reports, and at the level of the banking sector, the NBS would define the criteria for determining client status with regard to exposure to FX risk. In accordance with that, an assessment would be made as to whether it is necessary to introduce specific prudential measures for clients that are not naturally protected from FX risk or that do not use FX hedging instruments, or whether it is necessary to introduce additional regulatory measures (such as higher risk weights for specific types of exposures with a currency mismatch, additional capital requirements for these exposures, etc.), as well as what effects those measures might have on the overall macroeconomic stability and whether their introduction would be justified.
- **The NBS will continue to promote the use of FX hedging instruments,** to explain the necessity of hedging against FX risk and to organise educational campaigns about investment alternatives in dinars in the domestic market.

6.2 ADDITIONAL PLANNED ACTIVITIES OF THE GOVERNMENT

In the coming period too, the Government's dinarisation efforts will be focused primarily on **further development of the dinar securities market**, which will create one of the necessary prerequisites for reducing public debt exposure to the FX risk.

1. **Development of the dinar financial market**

To be specific, in order to ensure further development of the domestic market of government securities, the following activities will be considered (some of which are also defined by the Public Debt Management Strategy for the Period 2018–2020):

- **Including dinar government securities in some of the global indices of emerging market government bonds** (*Local Currency Government Bond Emerging Market Index*). This would increase the investor base and bolster secondary trading, leading to a further reduction in the cost of borrowing through the issuance of dinar government securities;

- **Introducing the system of primary dealers** through which the sale of government securities would be performed in the domestic financial market, for the purposes of improving the efficiency of the secondary market of government securities and the valuation of government securities;
- **Extending the maturity of issued dinar government securities to over 10 years,** so as to extend the dinar yield curve further;
- Continuing **active communication with households to encourage their investment in the Republic of Serbia's savings bonds**.

2. **Growth in dinar loans and savings**

- The Government will continue to **stimulate dinar savings by giving a preferential tax treatment to dinar relative to FX savings**, as well as to stimulate dinar financial instruments.
- **In its future regulations** the Government will continue to **promote the use of the dinar, including in subsidised loan programmes, if any.**

6.3 ADDITIONAL PLANNED ACTIVITIES OF THE GOVERNMENT AND THE NBS

1. **Development of the dinar financial market**

- **To ensure a more adequate estimate of dinar liquidity in the banking system, the Ministry of Finance will regularly submit to the NBS projections of income and expenses and the projected balance on the Consolidated Treasury Account of the Republic of Serbia.** In this context, cooperation between the Ministry of Finance, including the Public Debt Administration, and the NBS will be formalised through a service level agreement that will specify the signatories' rights and obligations, the information and data to be exchanged, and the manner and timeframe of their submission. Also, the Liquidity Committee, composed of representatives of the Ministry of Finance, Public Debt Administration and NBS, will meet on a regular basis.

VII COMMUNICATION WITH THE PUBLIC

An important segment of the dinarisation is regular communication with the public in terms of not only raising awareness of the FX risk and the generally negative effects of the greater use of foreign currency in the domestic financial system, but also in terms of providing information about the taken measures and activities, and their effects. In this context, and as part of the implementation of the Strategy, the NBS and the Government will continue to regularly inform the public about the measures and activities taken, as well as about the progress achieved in the process of dinarisation. Also, they will continue to communicate and explain any changes in monetary and fiscal policies that may affect the degree of dinarisation.

As so far, the Report on Dinarisation of the Serbian Financial System will remain the NBS's main communication tool in terms of providing updates on the measures taken and the progress achieved in the process of dinarisation. This quarterly report contains information on the movements in dinarisation indicators, as well as a detailed overview of the measures and activities taken and the assessment of their effects. In addition, the NBS will continue to publish the Analysis of Profitability of Dinar and FX Savings on a semi-annual basis.

The Ministry of Finance's Public Debt Administration will continue to publish data on the balance and currency structure of public debt, information about the planned auctions of dinar securities and their maturities, as well as about the results achieved in these auctions.

The NBS and the Government will also disclose all essential and relevant information and data relating to the process of dinarisation on their websites and through other means of communication. To acquaint the public with FX hedging instruments and to promote their use, the NBS posted information on these products on its website, as well as calculators for calculating the forward exchange rate of the dinar and comparing the prices of FX purchase forward contracts.

When needed, representatives of the NBS and the Government will organise meetings with representatives of the banking sector and corporate sectors with a view to exchanging information about the introduction of additional measures to support the process of dinarisation and raising awareness of the FX risk and risk hedging options.

VIII FINAL PART

Annex 1: Overview of the measures and activities taken since 2011 to support dinarisation is an integral part of the Strategy.

This Memorandum shall be published on the websites of the Government and the NBS.

As of the date of signing of this Memorandum, the 2012 Memorandum shall cease to be valid.

FOR THE NATIONAL BANK OF SERBIA	FOR THE GOVERNMENT OF THE REPUBLIC OF SERBIA
GOVERNOR	PRESIDENT OF THE GOVERNMENT
Dr Jorgovanka Tabaković	Ana Brnabić

ANNEX 1: OVERVIEW OF THE MEASURES AND ACTIVITIES TAKEN SINCE 2011 TO SUPPORT DINARISATION

Period	Measure/activity	Expected effects	Regulatory document
2011 Feb.	Applying different required reserve ratios on the dinar and FX base favouring the former, with differentiation according to maturity in terms of higher ratios of mandatory allocations on liabilities up to two years.	**Encouraging banks to rely more on dinar and long-term sources of funding.**	Decision on Banks' Required Reserves with the National Bank of Serbia
2011 May	LTV limit for FX-indexed mortgage loans is 80%, while the limit for dinar loans has not been set. In December 2017, this limit was relaxed to 90% in cases where the loan is approved as a government-support measure for certain categories of natural persons.	**Ensuring the preferential treatment of dinar household lending.**	Decision on Measures for Safeguarding and Strenghtening Stability of the Financial System (RS Official Gazette, Nos 34/2011 and 114/2017), Section 4
2011 May	Prescribed minimum downpayment/deposit for FX and FX-indexed loans to natural persons (except for mortgage loans) of no less than 30%.	**Ensuring the preferential treatment of dinar household lending.**	Decision on Measures for Safeguarding and Strenghtening Stability of the Financial System (RS Official Gazette, Nos 34/2011 and 114/2017), Section 3
2011 May	As of 2011, the limitation of the ratio between the net open FX position and capital is 20% (increased from 10% to stimulate lending activity).	**Limiting the amount of FX-indexed and FX loans relative to FX sources.**	Decision on Capital Adequacy of Banks (RS Official Gazette, No 103/2016), Section 368
2011 Dec.	The Law stipulates that in the precontractual phase, banks are obligated to notify clients in writing about the risks they assume if they choose a service indexed in a foreign currency or a service in a foreign currency. Also, the offer for the conclusion of a contract must include information about the currency of the service which is the subject of the contract.	**Promoting hedging against currency risk for financial services consumers.**	Law on the Protection of Financial Services Consumers (RS Official Gazette, Nos 36/2011 and 139/2014), Article 17, paragraph 2
2011 Dec.	When advertising credit and deposit services and leasing operations where the advertising message includes a numeric data, banks shall clearly and precisely specify currency in which the service is approved, by offering a representative example.		Law on the Protection of Financial Services Consumers (RS Official Gazette, Nos 36/2011 and 139/2014), Article 15, paragraph 1
2011 Dec.	The Law stipulates that the bank and the lessor shall offer a financial service to the consumer primarily in dinars, unless the consumer demands otherwise.		Law on the Protection of Financial Services Consumers (RS Official Gazette, Nos 36/2011 and 139/2014), Article 17, paragraph 2

Period	Measure/activity	Expected effects	Regulatory document
2012 Apr.	The NBS and the Serbian Government signed a Memorandum on the Strategy of the Dinarisation of the Serbian Financial System.	**Defining objectives, measures and activities to be implemented by the NBS and the Republic of Serbia in order to boost confidence in the national currency and increase its use in the financial system.**	http://www.nbs.rs/internet/english/30/MemorandumVladaDinarizacija_20120406_eng.pdf
2012 Sept	The adopted Law Amending the Law on Personal Income Tax increased the tax on interest on FX savings from 10% to 15%.	**As income from the interest on dinar savings is exempt from personal income tax, this measure is an incentive for citizens to favour dinar over FX savings.**	Law on Personal Income Tax (RS Official Gazette, Nos 24/01, 80/02 – other law, 80/02, 135/04, 62/06, 65/06 – corrected, 31/09, 44/09, 18/10, 50/11, 91/11 – CC, 93/12, 114/12 – CC, 47/13, 48/13 –corrected, 108/13, 57/14, 68/14 – other law, 112/15, 5/2016 - adjusted RSD amount, 7/2017 – adjusted RSD amount, 113/2017 and 7/2018 – adjusted RSD amount), Articles 64 and 65
	Level 1 liquid receivables of a bank include 90% of the fair value of government securities in dinars, with a minimum three-month maturity. This option has not been stipulated for FX securities.	**Development of the capital market, stimulating banks to increase the use of dinar sources of funding.**	Decision on Liquidity Risk Management by Banks (RS Official Gazette, No 103/2016), Section 10
2013 Apr.	Dinar securities without FX clause, issued by IFOs with the prime credit rating, were included by the NBS in the portfolio of securities used in the NBS open market operations, as well as in the list of eligible collateral when approving NBS loans for daily liquidity and short-term loans based on the pledge of securities.	**Development of the capital market through incentives for banks to include in their portfolios dinar securities issued by IFOs for financing loans.**	Decision on Conditions and Manner of Implementing Open Market Operations (RS Official Gazette, Nos 45/2011 and 34/2013), Section 7; Decision on Conditions and Manner of Approving Loans for Maintaining Daily Liquidity of Banks against the Pledge of Securities (RS Official Gazette, Nos 52/2008, 40/2010, 3/2011, 18/2011 and 34/2013), Section 2; Decision on Conditions and Manner of Approving Short-Term Liquidity Loans to Banks against the Pledge of Securities, (RS Official Gazette, Nos 95/2010, 3/2011, 18/2011, 98/2012 and 34/2013), Section 2
2013 Nov.	The NBS adopted a Decision on Terms and Conditions of Performing Foreign Credit Transactions in Dinars specifyign more favourable conditions under which an IFO, a development bank or a financial institution founded by a foreign state may approve dinar loans to domestic banks, legal persons and entrepreneurs, as well as conditions for a domestic bank to approve dinar loans to non-residents and the manner of approving such loans.	**Bolstering dinar lending activity of domestic banks.**	Decision on Terms and Conditions of Performing Foreign Credit Transactions in Dinars (RS Official Gazette, No 98/2013).

Period		Measure/activity	Expected effects	Regulatory document
2014	May	The Serbian Government adopted a subsidised corporate dinar loan programme.	**Increased dinarisation of loans – temporary in nature.**	
2014	Oct.	The Government issued the first ten-year dinar bond.	**Development of the capital market and formation of the yield curve for longer maturities, enabling banks to determine the cost of long-term dinar loans.**	
2015	Nov.	Long-term government securities were included in the Belgrade Stock Exchange Prime Listing.	**Increasing the liquidity and developing the secondary market of government securities.**	
2016	Jan.	The required reserve ratio on the part of the FX base comprising dinar liabilities indexed to an FX clause was increased to 100% from 50% (where it had stood since June 2012).	**Discouraging the use of dinar deposits indexed to an FX clause.**	Decision on Banks' Required Reserves with the National Bank of Serbia (RS Official Gazette, Nos 3/2011, 31/2012, 57/2012, 78/2012, 87/2012, 107/2012, 62/2013, 125/2014, 135/2014, 4/2015, 78/2015 and 102/2015), Section 5
2016	Feb.	The Government issued its first benchmark dinar bond in a larger amount in order to reopen the issue and thus ensure that the bond is sold several times a year.	**Increasing the liquidity and developing the secondary market of dinar government securities.**	
2016	Oct.	Domestic banks started offering housing loans in dinars without an FX clause, under relatively favourable conditions (rates below 5%), with a long repayment period (up to 30 years).	**Growth in long-term dinar lending to households.**	
2016	Dec.	The first domestic dinar bond issued by an international financial institution – EBRD, appeared in the Serbian financial market. The nominal value of the issued bonds was RSD 2.5 bn.	**Development of the financial market.**	

Period	Measure/activity	Expected effects	Regulatory document
2017 June	The first trade in dinar bonds issued by the EBRD took place in the Belgrade Stock Exchange (in the amount of RSD 60 mn).	**Development of the secondary financial market.**	
2017 June	A portion of the funds which the EBRD collected by issuing dinar bonds in the local market was onlent to corporates via domestic banks. These loans were mostly intended for financing agriculture and refinancing.	**Increasing dinarisation of corporate loans.**	
2017 June	The NBS determined the systemic buffer rate of 3% of total FX and FX-indexed bank loans approved to corporates and households in Serbia, for banks where the share of FX-indexed loans to corporates and households in total corporate and household lending exceeds 10%.	**Limiting the risk of euroisation, which is one of the key structural, non-cyclical systemic risks to the stability of the Serbian financial system.**	Decision on the Rate and Manner of Maintaining the Systemic Risk Buffer (RS Official Gazette, Nos 58/2017 and 3/2018), Sections 3 and 4
2017 Dec.	The Government issued a new type of bond in the domestic financial market – the savings bond.	**Development of the financial market by promoting an alternative form of savings and enabling easier access to the government securities market for citizens.**	
2018 Apr.	Differentiation of required reserve remuneration ratios: for dinar required reserve it is 1.25%, while no interest is paid on FX required reserve.	**Encouraging banks to rely more on dinar sources of funding.**	Decision on Interest Rates Applied by the National Bank of Serbia in the Implementation of Monetary Policy (RS Official Gazette, Nos 45/2011, 98/2012, 125/2014, 42/2015, 61/2015, 86/2015, 93/2015, 11/2016, 61/2016, 20/2018 and 28/2018), Section 5
2018 June	The Law on Financial Collateral was adopted.	**Ensuring and improving legal safety and efficiency in performing obligations in the financial market (regulating the issue of contracting and using financial collateral as well as debt settlement procedures) as a precondition for further development of the financial market.**	Law on Financial Collateral (RS Official Gazette, No 44/2018).
2018 Aug.	Decision on Terms and Manner of Calculating the Effective Interest Rate and the Layout and Content of Forms Handed Out to Consumers was adopted.	**Promoting hedging against currency risk for financial services consumers.**	Decision on Terms and Manner of Calculating the Effective Interest Rate and the Layout and Content of Forms Handed Out to Consumers (RS Official Gazette, No 65/2011 and No 62/2018).