National Bank of the Republic of Macedonia



Government of the Republic of Macedonia



# STRATEGY FOR DENARIZATION OF THE REPUBLIC OF MACEDONIA

December 2018

WITH JOINT EFFORTS TO A MORE STABLE FINANCIAL FUTURE

	- 2
NTRODUCTION	3
DEEUROIZATION – PREVIOUS EXPERIENCE, UNDERTAKEN MEA	ASURES A
URRENT DEVELOPMENTS	
UTURE MEASURES TO SUPPORT THE PROCESS OF DENARIZATION trategic commitment to conduct sustainable macroeconomic pol	
rudential regulations	
evelopment of financial markets and other measures	

### **INTRODUCTION**

The euroisation which appeared in response to the weak macroeconomic fundamentals in the developing countries in the course of the past few decades, is mostly explained as a process in which natural persons and legal entities from a certain country have an increased use of assets (or liabilities) denominated in a currency different from the domestic currency. The experience of the developing countries in the past few decades suggests that the euroization mostly starts in periods of high and/or hyperinflation, when the significant fall in the value of the domestic currency strengthens its substitution for another currency. The process of currency substitution is mostly gradual, whereby the domestic currency first loses its role of means of exchange, usually followed by a reduced role as a means of valuation of goods and services (mainly for larger transactions, such as real estate, machines and equipment, etc.) and penetration of euroization in the financial sector, where the domestic currency loses its role of means of savings. Hence, the economic literature includes several types of euroization:

 $\checkmark$  transactional euroization, where the foreign currency (dollar or euro) is used as a means of exchange in the domestic transactions;

✓ **real euroization**, which includes indexation of the domestic transactions with the exchange rate. The real exchange rate volatility, due to high and variable inflation rate, is mostly the main reason for denomination of purchase and sale agreements in foreign currency, thereby ensuring a more stable real value of goods. Usually, real euroization strengthens financial euroization.

✓ **financial euroization**, which shows the substitution of assets and liabilities in a domestic currency for financial assets and liabilities in a foreign currency. The level of financial euroization is measured by the share of loans and deposits (assets and liabilities) in a foreign currency in the total balance sheet of the banks. The euroized financial system is a source of significant risks, which usually arise from the currency mismatch of assets and liabilities, which can incur losses for the banks in case of fluctuation of the exchange rate.

The economy may include simultaneously multiple types of euroization and then the measures of the economic policy makers are aimed at the main type of euroization.

The Republic of Macedonia is facing the challenges posed by euroization, as is also the case with the other countries in the region. Euroization as a phenomenon has a long history in the Macedonian economy. It is largely due to factors from the past, while the numerous shocks that hit the economy are an additional factor that contributes to euroization of the economy. Recognizing the negative effects of the euroization and the related risks, the National Bank and the Ministry of Finance regularly undertake measures for denarization of the economy and reduction of the propensity to hold foreign currency. The analyses show that the current measures give results, which is

visible through the gradual mitigation of the euroization rate. However, the last political crisis has shown that the sensitivity to shocks is great, so the economy becomes vulnerable. The adoption of this strategy confirms the efforts for further strengthening of the confidence and the expansion of the use of the domestic currency, which will contribute to reducing the euroization rate as a significant factor for maintaining a stable economy and a sound banking sector. Moreover, one should bear in mind that it is not possible to fully eradicate euroization. At the same time, the Republic of Macedonia has a strategic commitment to integrate with the countries of the European Union and the European Monetary Union.

# DEEUROIZATION – PREVIOUS EXPERIENCE, UNDERTAKEN MEASURES AND CURRENT DEVELOPMENTS

# TRENDS IN DEEUROIZATION OR DENARIZATION IN THE REPUBLIC OF MACEDONIA

The experience of the Macedonian economy with euroization, as well as the experience in the region, is that once it is established, it becomes a long-term problem that is very difficult to eradicate. Policymakers in the Republic of Macedonia recognize the negative effects of euroization and actively contribute to reducing the propensity to hold foreign currency. Within these frames, the first and main pillar is the maintenance of macroeconomic and financial stability, which has been successfully achieved for years. The second pillar are the special targeted measures that policymakers regularly undertake, as well as the adjustment of the relevant regulations. However, the negative experience from the past remains deeply engraved in the memory of economic agents, which leaves traces on their behavior. The result is high sensitivity to shocks, which increases the vulnerability of the economy. This situation confirms the necessity of constant undertaking of activities and promoting appropriate measures for strengthening the confidence in the domestic currency and its use in the financial system.

Maintaining a high euroization rate, as a typical phenomenon for transition economies and developing countries, is a long-term characteristic also of the Macedonian economy. Euroization in the Republic of Macedonia dates from the time of monetary independence and over the years it is found in various forms, such as: **transactional** (when the foreign currency is used as a means of exchange in domestic transactions), **real** (when the foreign currency is used as a means of valuation of goods and services) and **financial** (when the foreign currency has the role of a means of savings). The degree of existence of

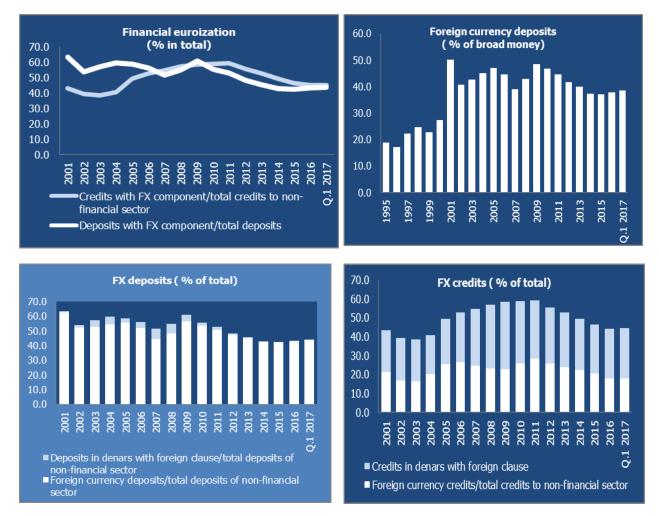
transactional and real euroization is difficult to measure. Certain legal norms<sup>1</sup>, although they minimize their existance, however the practice includes these forms of euroization. Transactional euroization is associated with the existence of grey economy, i.e. with the execution of unregistered payments in euros (for goods and services), which can be supported by the high level of private transfers, i.e. inflows in currency exchange operations, which probably in part derive from these transactions. The real euroization is associated with the propensity to present the high values of goods and services in foreign currency (real estate, cars, package tours, loans, etc.). On the other hand, financial euroization includes an appropriate indicator for its assessment, i.e. the share of deposits and loans with currency component in the total deposits and loans of the private nonfinancial sector<sup>2</sup>, respectively. Thus, financial euroization indicators place the Macedonian economy in the group of highly euroized economies. For the period December 2001 -December 2016, the share of deposits with currency component in the total deposits of the private non-financial sector amounted to 52.9%, on average, while the total loans with currency component accounted for about 50%, on average, of the total loan portfolio of the private sector. A large part of the occurrence of euroization in the banks' balance sheets (financial euroization) is a result of the euroconversion in 2001, when the accumulated savings in Deutschmarks, the dominant currency in which the population saved at home, were transferred to the banking system because of the free conversion into euros, and in a certain part were retained as a deposit core in the period after.

Overall, the presence of euroization in the Republic of Macedonia is attributable to several key factors, as follows: 1) the high economic instability from the early transition period when the Macedonian economy faced hyperinflation and high exchange rate volatility; 2) the negative experience with the frozen foreign exchange savings from the previous system; 3) the numerous external and domestic shocks of economic and non-economic nature, that the country faced with in the past period and 4) the relatively high inflows of private transfers and remittances from abroad, which mainly increased over the years. Hence, it can be concluded that euroization is largely attributable to factors inherited from the past affecting the behavior of economic agents, whereby they see the foreign currency as the custodian of value and means of protection against risks.

<sup>&</sup>lt;sup>1</sup> The Law on the Monetary Unit of the Republic of Macedonia (Official Gazette of the Republic of Macedonia No. 26/92) and the Law on the Use of the Monetary Unit of the Republic of Macedonia (Official Gazette of the Republic of Macedonia No. 26/92) define that the denar is the single legal tender in the Macedonian economy and that the expression of values and amounts should be in denars. In particular, for cashless transactions, the Law on Payment Operations (Official Gazette of the Republic of Macedonia No. 113/07, 22/08, 159/08, 133/09, 145/10, 35/11, 11/12, 59/12, 166/12, 170/13, 153/15 and 199/15) defines that the payment operations refer to payments in Denars made by the participants in the payment operations through the payment operations carriers.

<sup>&</sup>lt;sup>2</sup> Deposits of the private non-financial sector refer to deposits of households and non-financial companies, private and public. The category also includes deposits of non-residents, the share of which in the total deposits and loans is small and below 1%. The household sector has no limitations on the disposal of foreign exchange savings, i.e. it can purchase foreign currency on the foreign exchange market and place foreign exchange savings. The corporate sector includes limitations, i.e. the currency structure of deposits is determined by the setup of the foreign exchange arrangement. The corporate sector may have foreign exchange market for saving. The corporate sector includes demand on the foreign exchange market only if there are payments to abroad. Taking into consideration these limitations, the propensity to hold foreign currency and the related factors reflect more the behavior of the household sector.

The practice and professional literature show that the maintenance of macroeconomic and financial stability is critical for successful and durable deeuroization in the long run. The stable macroeconomic environment strengthens the confidence in the domestic currency and in the banking sector, contributing to gradual redirecting from euroization to denarization of the financial sector. For more efficient reduction of euroization, macroeconomic policymakers can also contribute by adopting special macro-prudential and institutional measures, which will encourage wider use of the domestic currency and will provide adequate protection against currency risk. However, the experience shows that once it is established, euroization is very difficult to eradicate. This is also confirmed by the trends in the Macedonian economy.



Source NBRM.

Thus, the first period of more significant denarization of the economy was the period of 2005-2007, which comes after years of maintaining a sound and stable banking sector and conducting credible policies that bring macroeconomic and financial stability. Supported by the stimulating macroeconomic environment and the attractive yields of denar saving instruments, the share of foreign currency deposits in total deposits at the end of 2007 reduced to 52% from 60% at the end of 2004. These trends were terminated with the emergence of the global economic crisis (2008-2009), when the great uncertainty deteriorated the expectations of economic agents. They reacted with increased demand for

foreign currency, which increased the euroization of deposits to 61% at the end of 2009. However, they were temporary trends in response to the external shock. The stability of the exchange rate was successfully preserved, which contributed to fast stabilization of the expectations.

In the period 2010-2015, in conditions of sound domestic macroeconomic environment, financial euroization again registered a downward trend, when there was a strong denarization of the domestic economy. These developments were significantly influenced by the numerous macro-prudential measures that the National Bank implemented in this period aimed at supporting Denar savings. An additional factor were the developments in the euro area and the escalation of the European debt crisis, which caused a temporary mistrust with domestic entities in the euro and redirecting to the domestic currency. Thus, at the end of 2015, compared with the end of 2009, the share of foreign currency deposits in total deposits reduced by 18 percentage points (from 61% to 42%). These trends were also followed by positive shifts in the maturity structure expressed through decreased propensity to save in the short term (in denars and foreign currency), at the expense of increased demand for long-term deposits in domestic currency, a process which started in 2009, but it intensified after 2011. In the course of 2015, the Macedonian economy was hit by two shocks - the domestic political crisis and the escalation of the Greek debt crisis. The euroization rate remained relatively stable, indicating the households' confidence in the banking sector and in the stability of the exchange rate. However, the deepening of the domestic political crisis in the second quarter of 2016, intensified by speculation on devaluation of the denar, temporarily deteriorated the expectations of economic agents which was transferred through an increased demand for foreign currency and deposit withdrawal from the banking sector. The euroization of deposits moderately increased and at the end of the second quarter of 2016 reached 44% (42% at the end of 2015). This situation was quickly overcome as a result of the timely and appropriate reaction of the National Bank to stabilize the foreign exchange market and support the trend of denarization of the economy. This enabled moderate stabilization of the euroization of deposits by the end of 2016, when euroization was 43.0%. However, the uncertain political situation after the elections from December 2016 was reflected negatively on the deposit developments in 2017, and the euroization of deposits registered a moderate growth to the level of 43.6% at the end of the first quarter of 2017.

Regarding the euroization of assets, in the case of the Republic of Macedonia, changes in the currency structure of loans are highly attributable to changes in the currency structure of deposits, as expected considering that deposits are the main source of financing of the domestic banks. By adjusting the assets to changes on the liabilities side in the balance sheet, banks seek to protect themselves against currency risk. The demand for foreign currency loans can be partly attributed to the more favorable interest rates that banks offer on the loans in foreign, compared with the loans in domestic currency. On the other hand, contrary to most countries from Central and Southeast Europe, Macedonian banks maintain a very low indebtedness to parent banks, so that the foreign sources of financing do not represent a factor for increased supply of foreign currency loans. Faster growth in foreign currency lending was registered after the liberalization of foreign currency lending

in 2003, whereby domestic banks were allowed to approve foreign currency loans for all clients – the households and the corporate sector, for payments in the country and abroad, contrary to the previous system which allowed foreign currency lending only to companies, for payment of liabilities to abroad. However, such measure was a response to the significant increase in foreign currency deposits at the end of 2001, because of the euroconversion, and contributed to preventing the outflow of foreign currency abroad (of the deposited euro deposits), as well as in order to encourage financial intermediation, in conditions of maintaining an appropriate compliance of the banks' currency position. Thus, in the period 2004-2009, the euroization of loans registered a growth trend, reaching 59% in 2009. From 2011, along with the denarization of the banks' liabilities, denarization of the loans to the private sector is also visible, whereby at the end of the first quarter of 2017 the loans with currency component accounted for about 45.3% of the total loans to the private sector.

Overall, the main conclusion from the experience of the Macedonian economy with financial euroization, is that once it is established, it becomes a long-term problem that is very difficult to eradicate. Conducting credible macroeconomic and financial policies and adopting special targeted measures are the factors that contribute to mitigating euroization. The results of these policies are particularly evident in the period after the global economic crisis when there was a strong denarization of the economy. However, the negative experience from the past remains deeply engraved in the memory of economic agents, which leaves traces on their behavior. The result is high sensitivity to shocks, which is why the vulnerability of the economy increases. This situation confirms the necessity of regular undertaking of activities and promoting appropriate measures for strengthening the confidence in the domestic currency and its use in the financial system. A brief overview is given below of the measures adopted so far in this domain, followed by a review of the measures that this strategy provides for the next medium-term period.

# REVIEW OF THE MEASURES UNDERTAKEN SO FAR TO SUPPORT DENARIZATION

The high level of euroization imposes numerous limitations on the domestic economy, considering that the wide use of the foreign currency reduces the efficiency of the monetary policy and increases the vulnerability of the financial sector. Aware of the risks from euroization, economic policymakers have been continuously undertaking various types of measures in the previous period, according to the situation and priorities of macroeconomic policies in the given period. Thus, after the monetary independence, monetary and fiscal policy were focused on reducing the inflation rate and achieving macroeconomic stability. In the next phases, the development of the domestic financial markets and the earmarked prudential measures were the pillar of the activities for denarization of the economy.

The first group of measures aimed at supporting the process of denarization of the Macedonian economy includes the measures of the monetary and fiscal policy aimed at strengthening the macroeconomic environment and maintaining the stability of the financial sector. Conducting prudential and responsible macroeconomic policies has been characteristic of the Macedonian economy for a longer period of time, which is confirmed by the maintenance of a stable macroeconomic environment with low and stable inflation, stable external position and sustainable level of public debt. Financial stability is also successfully maintained by promoting a sound, stable and competitive banking sector. The stable macroeconomic environment and the maintenance of the financial sector are important factors that constantly contribute to strengthening the confidence in the domestic currency and in the banking sector, contributing to a larger share of the domestic currency in the real economy and in the financial sector.

**The second group** includes the special targeted measures aimed at supporting denarization, which were adopted in the previous period, and can be classified in four subgroups, as follows: 1) macro-prudential and regulatory measures; 2) structural/institutional policies; 3) other measures; 4) transparency in the National Bank's operations and 5) financial education.

#### Macro-prudential and regulatory measures

This group includes the measures aimed at reducing financial euroization. This includes the measures aimed at managing the currency and credit risk of banks and the measures in the field of reserve requirement. Thus, in 2002, the National Bank for the first time regulated the process of lending in foreign currency to residents, and in 2003 for the first time introduced the possibility of foreign currency lending to residents in the country. This change was made possible by the amendments to the Law on Foreign Exchange Operations, and was imposed in response to the significant increase in foreign currency deposits at the end of 2001, because of the euroconversion and was intended for preventing the outflow of foreign currency from the deposits collected in euros abroad (which could have happened due to the maintenance of the open currency position by banks) and increased financial intermediation. In 2006, the National Bank prescribed regulations which, in addition to the foreign currency loans in the country, also included the loans in denars with foreign exchange clause. These regulations regulated the terms under which banks could approve foreign currency loans and loans in denars with foreign exchange clause, so that banks could approve such loans only if: the client has been classified by the bank and by the banking system, in accordance with the Credit Registry of the National Bank, in the lowest risk categories (A or B) or the claim has been covered by a first-rate collateral instrument. Also, banks were required to have internal regulations on managing the credit risk arising from the currency risk of clients, which, among other things, were aimed at including criteria for assessment of the non-compliance of the currency position of clients, exposure limits based on these types of foreign currency loans, regular stress testing of the impact of changes in the exchange rate on the bank's loan portfolio (at least on an annual basis). The objective of these requirements was to improve the quality of the lending in foreign currency and consequently to mitigate the credit risk associated with this type of

exposures. The regulations provided conditions for banks for more appropriate structuring and assessing of the risks associated with exposures with foreign exchange component.

In 2013, the National Bank made significant amendments to the regulation on credit risk management, which also included the loans with foreign exchange component. These amendments introduced requirements that banks should meet when approving and monitoring this type of exposures. Thus, when approving and monitoring credit exposures, banks are required, among other things, to take into account also the client's exposure to currency risk. In addition to the general principles for credit risk management, banks are required to establish certain criteria for approving loans in foreign currency and loans in denars with foreign exchange clause, including quantitative limits on the share of the exposure of foreign currency loans in the total exposure (by client, by sub-portfolio, etc.), as well as to have an established system for monitoring, analyzing and assessing the client's currency position. The last amendments to this regulation from December 2015 provide that, when approving loans in foreign currency or in denars with foreign exchange clause, banks are required to inform the client of all the risks arising from the use of credit products with foreign exchange component.

This group of measures also includes the prudential regulations on the open currency position of banks, which for the first time was published in 1995, and later (in 2000) replaced with a new one – Decision on open currency position. In 2008, the National Bank issued the Decision on managing the currency risk<sup>3</sup>, which prescribes in details the requirements for managing the currency risk. This regulation also changed the setup of the limits, thus placing only one limit on the aggregate open currency position of the bank of 30% of the own funds. In addition, banks allocate capital for covering the currency risk. A detailed review of the measures in the field of managing the currency and credit risk is given within Attachment1 of this text.

The National Bank actively uses the reserve requirement system to support the process of denarization. The reserve requirement in foreign currency was introduced in June 2003, which was initially set at the same level with the reserve requirement rate also for liabilities in domestic currency included in the reserve requirement base<sup>4</sup>. From 2009, the National Bank started to differentiate the reserve requirement rates from currency aspect, in order to stimulate the process of currency restructuring of the positions from the balance sheet. Thus, the reserve requirement rates for liabilities with currency component were set at a higher level in relation to the reserve requirement rate of liabilities in domestic currency. At the same time, in order to prevent the possible pressures on the foreign exchange market, banks were obliged to fulfill in domestic currency part of the calculated reserve requirement in foreign currency. In order to further support the saving in domestic currency, the National Bank in mid-2013 additionally differentiated the reserve requirement rates from currency requirement rates from currency requirement rates from currency requirement is more

<sup>&</sup>lt;sup>3</sup> http://www.nbrm.mk/?ItemID=22899DCD32AF5A49873198FB6DAAFE3C

<sup>&</sup>lt;sup>4</sup> The reserve requirement was previously applied only to liabilities in domestic currency, thus applying two rates, depending on the maturity structure of deposits: 10% and 5% on sight deposits and term deposits, respectively. Source: http://nbrm.mk/?ItemID=F3420B05F578F3489EB505396638AAB7

pronounced starting from the last quarter of 2011, when the reserve requirement system started to be used more actively to stimulate the process of currency and maturity restructuring of the banks' balance sheets, in favor of the saving in domestic currency in the longer run. The measures are aimed at different sectors and types of liabilities, encouraging banks, through an active approach and appropriate interest rate policy, to affect the private sector's decisions to save. A detailed review of the measures in the field of reserve requirement is given within Attachment 2 of this text.

## Structural/institutional policies

Structural/institutional policies include policies in the field of payment systems, policies to deepen the domestic financial markets, policies to offer alternative financial instruments in relation to the instruments denominated in foreign currency, as well as consumer protection measures. They target all types of euroization.

## Payment systems

One of the measures for improving the process of denarization is the raise in the quality of the payment system in domestic currency. For that purpose, the introduction of the RTGS - MIPS (Macedonian Interbank Payment System) in domestic currency in 2001 enabled efficient payment transactions in large amounts, as well as efficient transactions settlement on the money markets. Related to the process of denarization, it is important to emphasize the positive trends in the payment systems, reflected through the increasing number and amount of transactions in domestic currency carried out through the wholesale and retail payment systems, using credit transfers and payment cards, thereby reducing the role of cash transactions, especially for transactions in foreign currency.

Development of the domestic financial markets

## • Foreign exchange market

In the past period, the NBRM established an effective foreign exchange market, whereby it was especially important to provide easier access and to minimize the needs for holding foreign assets by market participants, as a precautionary measure. Hence, the establishment and the constant development of the legal regulation, the trading infrastructure, the framework for conducting the National Bank interventions on the foreign exchange market, as well as the establishment of the system for collecting data on market activity contributed to an increased turnover on the foreign exchange market (from 30% in 1996 to about 80% of GDP in 2016), as well as to a transparent, market formation of the exchange rate, with a reduced presence of the central bank.

## • Primary government securities market

The development of the debt securities market in Macedonia is a long-term and continuous process, whereby this market segment is predominated by the government securities market. The Ministry of Finance regularly undertakes activities for development of the government securities market. The latest activities in this domain were focused on

continuation of the yield curve of the domestic securities and expansion of the investor base. In the period before 2004, there was an issue of government bonds in foreign currency which were aimed at settling certain structural issues (payment of the frozen foreign exchange savings, denationalization etc.). Starting from 2004, there was a regular issue of government debt securities in domestic currency, which first started with an issue of treasury bills (mainly 3-month treasury bills, and later 6 and 12- month bills) and government bonds (2 and 3-year) from November 2005. In the following period, the government securities portfolio registered continuous growth (from Denar 1,956 million in 2004, to Denar 81,763 million at the beginning of 2016), followed by a maturity transformation to longer-term securities. Namely, in 2011, the government started to issue 5-year bonds, while in 2014, 10-year bonds were issued for the first time, and in 2015, maturity was additionally increased with the issuance of 15-year government bonds. At the same time, there was a gradual increase in the share of long-term bonds in the government securities portfolio, reaching a level of 57.6% at the end of the first half-year of 2017.

Positive trends in the maturity structure of the domestic government securities market were followed by a simultaneous expansion of the investor base. In the first few years (2004-2011), the domestic banks were the dominant owners of government securities, whose investments amounted to about 60%, on average, of the total government securities portfolio. Stronger diversification of the investor base was registered in the last four years, by increasing the share of pension funds, whose investments reached 37.8% in the total amount of government securities at the end of the first half of 2017 and exceeded the level of banks' investments in these instruments (35.9%). The remaining part of the ownership structure mainly consists of the Deposit Insurance Fund and the insurance companies (their investments accounted for 18% and 7.4%, respectively, of the total amount of government securities at the end of the first half of 2017), while the share of other types of investors (domestic non-financial companies, natural persons and non-residents) is insignificant and it is below 1%.

Regarding the currency structure, in addition to the government securities in domestic currency, in 2009, the government started to issue government securities in domestic currency with foreign exchange clause. The share of these indexed securities in the government securities portfolio was bigger in the period 2009-2011 (on average, 71%), after which their share registered a strong downward trend, reducing to 32% share, at the beginning of 2016. Since mid-2016, the issue of these securities with foreign exchange clause is mainly related to the longest-term securities, the 10- and 15-year bonds, with the pension funds and insurance companies being the main investors, and contributed to constantly increasing their share in the total stock of government securities, which reached 43% at the end of the first half of 2017.

# • Secondary market for trading in short-term securities, government bonds and repo operations

In this entire period, the National Bank had an active role in promoting and developing new financial instruments and building domestic financial market infrastructure. One of the functions of the National Bank is to organize the secondary market for trading in short-

term securities, government bonds and repo operations on an organized trading platform which was established in 2005. On the organized trading platform, banks set indicative quotations and trade in securities without commissions and other costs. Moreover, the trading and settlement systems and payment systems of the National Bank are linked with the system of the Central Securities Depository, so that payments, settlements and registration of ownership on securities, after trading, are made during the day, on "delivery versus payment" principle. To ensure market transparency in relation to prices and market participants, the National Bank publishes the quotations of banks on its public web site in real time during the day, together with data on the transactions concluded at the end of the day.

Analyzing the setup of the monetary policy instruments, the National Bank has undertaken additional measures that are important for the development of the secondary government securities market and for the development of the financial markets in general. In this context, relying on market-oriented monetary instruments, the introduction of repo operations as a regular instrument, the smaller presence of the central bank on the markets by reducing the frequency of the auctions of CB bills to once a month, are important activities for the market development and have already been established by the National Bank.

## • Measures for more effective management of the banks' liquidity

In the entire period, the National Bank has been undertaking measures for improving the liquidity management by banks, in order to reduce the fluctuations in short-term interest rates and subsequently, increase the attractiveness of the domestic currency. Related to this, the possibility of using the reserve requirement in denars by banks during the period, the introduction of both deposit and credit facility, as well as the open market operations contributed to stabilization of the interbank interest rate of the domestic market and to improvement of financial flows in domestic currency in general.

### □ Consumer protection measures

The consumer protection measures include the regulation on credit risk management<sup>5</sup>, according to the amendments from December 2015, which requires from banks, when approving loans with foreign exchange component, to inform every client of the risks arising from these loans. Also, the Law on Consumer Protection in Case of Consumer Loan Agreements<sup>6</sup> requires from creditors and credit intermediaries to give all necessary information to consumers, including pre-contractual information, information on basic specifics of the offered product and especially their effects, including the consequences that would arise in the event of default on the loan by the consumer, so that consumers can determine whether the offered loan agreement meets their needs and financial standing.

### Other measures

<sup>&</sup>lt;sup>5</sup> http://www.nbrm.mk/WBStorage/Files/Regulativa\_Odluka\_krediten\_rizik\_izmena0.pdf

<sup>&</sup>lt;sup>6</sup> http://www.finance.gov.mk/files/u11/Zastita%20na%20potrosuvaci\_fevruari\_2016\_0.pdf

The other measures aimed at promoting denarization include the change in the mechanism for establishing banks' bids at the CB bill auctions. Thus, in order to increase the effectiveness of the measures in the reserve requirement system aimed at further support of denar savings in the long run, in 2015, the National Bank adjusted the mechanism for banks' participation in the CB bills auction of the National Bank, with the banks' individual share in the total liabilities in domestic currency without currency clause being laid down as the main criterion<sup>7</sup>.

## Transparency in the operations of the National Bank

The National Bank actively works on maintaining a high level of transparency in the operations, especially in the past few years. This way enables maintenance of the public credibility of the central bank as a cornerstone for an effective monetary policy. Related to the transparency of the operations, the National Bank, on a regular semi-annual basis, re-examines the macroeconomic developments and prepares forecasts for the movements of the key macroeconomic variables for the next medium-term period. These analyses are reported to the public through regular press conferences where the Governor, together with the Vice Governors, presents the National Bank's views on the economic prospects in the following period.

Also, the Governor and Vice Governors participate in various domestic forums, conferences and workshops, where, before the professional public, banks or business entities comment on the setup and objectives of the monetary policy in the context of the latest developments and challenges. If needed and at the invitation of the media, the management of the National Bank also participates in television interviews, which also enables a direct address to the general public and familiarization with the views and goals of the National Bank.

In order to strengthen the credibility of the institution in the fulfillment of the commitment to maintain a stable exchange rate, the National Bank publishes its strategic plans, in which, in addition to the National Bank's strategic commitment to maintain the stability of the exchange rate, the public can be informed of the key strategic objectives, the mission, the values and the vision of the National Bank for the coming period.

## **Financial education**

Following the principles of social responsibility, the National Bank has been constantly investing in the financial education of the population, in order to promote financial literacy and create an appropriate financial culture. This contributes to a clearer understanding of the economic processes by the general public and strengthening of the confidence in the institutions and in the domestic currency. In 2011, the National Bank started with a financial education project, which constantly develops and includes many different activities including organizing press workshops, printing educational booklets for the population, development of syllabuses and launching many other projects. Then, a Coordinating Body of Regulatory Institutions for Financial Education in Macedonia was

<sup>&</sup>lt;sup>7</sup> http://www.nbrm.mk/WBStorage/Files/Istrazuvanje\_Kvartalen\_izvestaj\_noemvri\_2015.pdf

established, which is constituted of the National Bank of the Republic of Macedonia, the Ministry of Finance, the Insurance Supervision Agency, the Agency for Supervision of Fully Funded Pension Insurance and the Securities and Exchange Commission of the Republic of Macedonia. The main aim of the Coordinating Body is to define the national strategies for financial education and inclusion. In 2016, within the activities for marking the great anniversary - 70 years of central banking in the Republic of Macedonia, the National Bank produced two educational and informative films which were intended for educating the public for the most important aspects related to the objectives, functions and competences of the central bank and for developing the public interest in the importance and role of the National Bank in the Macedonian society in the past 70 years.

## FUTURE MEASURES OF SUPPORT TO THE PROCESS OF DENARIZATION

# STRATEGIC OBJECTIVE FOR IMPLEMENTING A SUSTAINABLE MACROECONOMIC POLICY

The strategic objective and priority of the economic policy-makers in the following period is maintaining macroeconomic and financial stability in the country, as the starting point for the continuation of the process of denarization. The basic tenets of the macroeconomic policy are expected to create stable expectations in the economy, which would result to an increased economic agents' confidence in the Denar and reduced demand for foreign currency assets.

In the coming period, the National Bank and the Ministry of Finance will continue the implementation of the coordinated monetary and fiscal policy towards achieving stable external position and further maintenance of foreign reserves at an adequate level.

The National Bank of the Republic of Macedonia will continue to apply the monetary strategy for targeting the Denar exchange rate against the euro, as a nominal anchor which is aimed at achieving the main objective - maintaining price stability. The selection and use of the monetary instruments for support of the process of denarization will be conducted in accordance with the existed financial and macroeconomic conditions. In order to further promote the transparency related to the exchange rate targeting strategy, the National Bank will continue to provide comprehensive information to the public regarding the adequate level of foreign reserves, which is of an exceptional importance for the successful implementation of the current stable exchange rate regime.

The Ministry of Finance will continue to implement the sustainable fiscal policy, whose primary objectives are maintaining macroeconomic stability and economic activity support. In the following medium-term period, the plan is to focus on the consolidation of public finances which will ensure gradual reduction of the budget deficit and sustainable public debt level.

### PRUDENTIAL REGULATION

Prudential measures, which are undertaken in order to support the process of deeuroization are aimed at discouraging the financial intermediation in foreign currency, by applying costs amid conducting certain activities. Such impact is expected to adequately reflect on the interest spread between products in domestic and foreign currency and subsequently on the currency structure of banks' portfolios.

#### Further differentiation of reserve requirement ratios in terms of currency

The use of differentiated reserve requirement ratios in terms of currency imposes higher costs for commercial banks amid collecting deposits with a foreign currency component. In that regard, the increase of the reserve requirement ratio on liabilities with a foreign currency component reduces the profitability of the banks from the financial intermediation in foreign currency and subsequently is expected to be transferred to less attractive interest rates on the depository products with a foreign currency component, thus the banks reduce their demand for such type of deposits.

In the past, this approach in the structure of reserve requirements supported the process of structural adjustment of the commercial banks' balances towards greater share in Denar positions. In the following period, in order to continue with the favorable long-term trends in the currency restructuring of banks' liabilities, the active approach towards further differentiation of reserve requirement ratios in terms of currency will be maintained.

# Re-examination of the possibility for gradual reduction of the limits for open foreign currency position of the banks

Within current framework for currency risk management by banks, the allowed limit of aggregate currency position is 30% of own funds, taking into account all the positions with a foreign currency component (foreign currency and currency clause) regardless of the specific currency. In order to reduce the financial intermediation in foreign currency, historical movement of the fulfillment/adherence to the limits for net open foreign currency potion will be analyzed in order to perceive the possibility for a potential gradual reduction of the limit of aggregate foreign currency position.

# Active use of macro-prudential measures for regulating the consumer loans approval with foreign currency components to individuals

In order to reduce the currency risk exposure to households, whose incomes are mainly in domestic currency, the need of introducing macro-prudential requirements in this domain will be examined.

### Examination of the possibility of changes in the deposits insurance scheme

In order to discourage savings in foreign currency in favor of Denar savings deposits, the possibility of changes in the deposits insurance scheme of individuals in the banking system will be considered. Within those frameworks, the possibility of applying differentiated rates of deposits insurance premiums in terms of currency will be considered. This measure is expected to increase banks' costs for foreign currency deposits, which is

expected to contribute for offering more attractive conditions for deposits in domestic currency.

### FINANCIAL MARKETS DEVELOPMENT AND OTHER MEASURES

The established government securities market is a solid base for further development of a liquid financial markets on which, financial instruments in domestic currency issued by several types of issuers will be traded.

### **Financial education**

The regulatory institutions in the financial system will continue their financial education in order to raise general awareness about financial services and development of financial skills, which will widen the investment base and support of domestic financial markets.

### Encouraging issuance of Denar securities

In the following period, the Ministry of Finance will continue to actively manage the public debt, and in terms of currency it will strive to achieve continuous growth of the share of securities issued in domestic currency. Moreover, the possibility of issuing government bonds indexed for the inflation rate in the country will be considered. Thus, institutional investors will receive a new investment opportunity for risk protection instead of long-term government bonds with a currency clause. In order to support and increase the attractiveness of the issuances in domestic currency, it is possible to assume a higher spread between interest rates on securities in domestic currency and with a currency clause with an adequate maturity on the primary market. Such orientation of the currency structure dynamics is expected to enable public debt de-euroization and stimulate the development of domestic financial markets.

Moreover, the National Bank and Ministry of Finance will observe the possibility and cooperate with international financial institutions in order to create stimulative regulatory and market conditions which will enable those international institutions to issue debt securities in domestic currency on the Macedonian financial market. Thus, it will enrich the range of financial instruments available to domestic investors, and simultaneously increase the possibilities for the allocation of investors' exposures to different securities issuers. The funds that will be collected through the issuance of such securities, are anticipated to provide a credit support of small and medium-sized enterprises, which will have a positive impact in the overall economic developments in the domestic economy. Also, encouraging activities for issuing municipal bonds in Denars for financing their debt will be considered. This is exceptionally significant for channeling private transfers in foreign currency for productive purposes and in domestic currency, which currently in the form of cash are mostly used for satisfying private consumption.

# Creation of infrastructure conditions for increased investments of non-residents in the domestic financial markets

In order to increase the competition in the domestic financial markets, especially in debt securities markets, an alternative is to increase the share of investments of non-residents in the domestic markets. In this regard, relevant institutions (Ministry of Finance, Security Exchange Commission and Central Securities Depository) will examine the conditions for

access of the domestic securities depository to one of the international depositories, aiming at establishing a cooperation towards greater accessibility of the Macedonian securities for the foreign investors. Additionally, the conditions for re-registering of the issued securities in Denars will be reviewed.

### Derivatives market development support

In order to overcome the need of maintaining foreign currency liquidity by the banks and their clients, the active cooperation will continue between competent institutions for creating favorable conditions for further development of financial instruments which serve for currency risk management (forward, futures and currency swap). In this regard, the legal regulation will be checked and eventually improved which will enable free use of the currency derivative instruments.

## ATTACHMENT 1

## Measures in the field of managing the currency and credit risk

Measures in the field of managing the currency and credit risk							
Measure	Description of the measure	Date of application					
1. Regulation on managing the liquidity risk							
1.1. Decision on managing the liquidity risk	Obligation of banks to submit monthly reports on the maturity structure of assets and liabilities in domestic and foreign currency	2003					
1.2. Amendment to the Decision on managing the liquidity risk	Determining two liquidity ratios for assets and liabilities in domestic currency and in foreign currency, that fall due within 30 and 180 days (LR30 and LR180)	2008					
1.3. Revision of the Decision on managing the liquidity risk	Defining liquidity ratios (LR30 and LR180), for all claims and liabilities regardless of the currency	2011					
2. Regulation on approvin	ng loans in foreign currency and loans ir	n domestic currency					
with foreign exchange							
2.1. Decision on approving loans in foreign currency to residents	Determining the requirements for approving loans in foreign currency to residents	2003 - 2013					
2.2. Amendment to the Decision on approving loans in foreign currency to residents	Regulating the requirements for approving loans in domestic currency with currency clause. Also, banks should establish policies and procedures for measuring and managing the credit risk	2006 - 2013					
3. Regulation on credit ris	sk management						
3.1. Decision on credit risk management	Obligation for defining internal limits on the share of the foreign exchange exposure in the total credit exposure. Obligation for banks to establish a system for monitoring, analyzing and assessing the foreign exchange position of the client	2008					
3.2.Amendment to the Decision on credit risk management	Improving the management of credit risk arising from currency risk the client is exposed to. Obligation for the bank to establish special criteria for approving loans in foreign currency or in denars with foreign exchange clause, to establish quantitative limits (by client and for the total exposure in foreign currency and with currency clause) and to carry out stress testing of the impact of the changes in the exchange rate on its loan portfolio	2013					
<ul><li>4. Regulation on the risk</li><li>4.1 Amendment to the Decision</li></ul>	Conducting an internal process for capital	2012					
on the risk management	adequacy assessment	2012					

## ATTACHMENT 2 USING RESERVE REQUIREMENT FOR MACRO-PRUDENTIAL PURPOSES

instrument    Standing F      january 2005    RF ratios and RR remuneration rate were changed:      Denar and FX RR ratio increased from 7.5% to 10%    FX RR remuneration (10% to 10% to		RR ratios	FX RR maintaining in Denar RR	0% RR ratio	RR remunera
galaria    Patron PR      ganuary 2005    RR ratios and RR remuneration rate were changed:      Drar and FX RR ratio increased from 25% to 10%    PX RR Prince (1%)      jynw.2009    Differentiated RR ratios were introduced:      Re n FX descalar rate (1%)    23% of the FX RR was maintained in domestic currency      january 2012    RR ratios exceptions were introduced:      Re n FX descalar rate (1%)    Contractual maturity of over 2 years indexed to FX      january 2012    RR ratios exceptions were introduced:      Contractual maturity of over 2 years indexed to FX    Contractual maturity of over 2 years corrency      january 2012    Further differentiation on the RR ratios and additional RR exceptions:      contractual maturity of at least 2 years indexed to FX    Contractual maturity of at least 2 years corrections in Denar      2013    Further differentiation on the RR ratios and additional RR exceptions:      september 2013    FX RR ratio in domestic currency was invected from 10% to 8%    The part of the FX RR futfing in domestic currency was on liabilities to norresidents- francial institutions with contractual maturity of over 1 year on liabilities to norresidents- francial institutions with contractual maturity of over 1 year on liabilities to norresidents- francial institutions with contractual maturity of over 1 year on liabilities to norresidents- francial institutions with contractual maturity of over 1 year on liabilitities to norresidents- francial institutions	june 2003	FX reserve requ	irement was introduced	:	
Demar and FX RR ratio increased from 75% to 10%    If X RR recommerced and increased from 75% to 10%      jyme.2009    Differentiated RR ratios were introduced:      RR on FX deposits raised from 10% to summaring differentiation on the banks' liabilities indexed to FX (20%)    23% of the FX RR was maintained in domestic currency      january 2012    RR ratio on the banks' liabilities indexed to FX (20%)    RR ratios exceptions were introduced:      2013    Further differentiation on the RR ratios and additional RR exceptions: increased from 13% to 15%    Investments in Demar introduced in domestic excertion in Demar with original metricular institutions with contractual maturity of up to 1 year increased from 13% to 15%      september 2013    FX RR ratio manual differentiation on the RR ratios and additional RR exceptions: Increased from 13% to 15%      beforuary 2014    Changes in the RR remuneration policy increased from 13% to 15%      february 2014    Changes in the RR remuneration policy increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 8%      september 2016    Further differentiation on the RR ratios increased from 10% to 8%		equal to Denar RR		-	ECB Deposit Standing Fa rate (1%)
Denor and FX RR ratio increased from 75% to 30%    23% of the FX RR was maintained in domestic rated from 10% to 13%    23% of the FX RR was maintained in domestic rated from 10% to 13%    23% of the FX RR was maintained in domestic rated from 10% to 13%    23% of the FX RR was maintained in domestic rated from 10% to 13%    10%      january 2012    RR ratios exceptions were introduced: recence    In household' deposits with contractual maturity of over 2 years report tractual maturity of over 1 year on liabilities to nonresidents- from 2013      september 2013    FX RR ratio tractased from 13% to 15%    The part of the FX RR fulling in domestic currency was increased from 13% to 15%    In FX liabilities to nonresidents- from claimaturity of up to 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonresidents- from claimaturity of over 1 year on liabilities to all nonr	january 2005	RR ratios and RI	R remuneration rate wei	re changed:	
RR on FX deposits raised from 10% in an initialized in domestic currency    Image: Im		ratio increased		-	remuneratio
RR on FX deposits raised from 10% in particulation of the FX RR was raised from 10% in pow RR ratio on the backs' labilities indexed to FX (20%)    RR ratios exceptions were introduced:    In households' deposits with contractual maturity of over 2 years report transactions in Denar      2013    Further differentiation on the RR ratios and additional Re exceptions:      2013    Further differentiation on the RR ratios and additional Re exceptions:      2013    Further differentiation on the RR ratios and additional Re exceptions:      2013    Further differentiation on the RR ratios and additional Re exceptions:      2013    Further differentiation on the RR ratios and additions in the exceptions:      september 2013    FX RR ratio Increased from 13% to 15%      FX RR ratio Increased from 13% to 15%    The part of the FX RR fullfile in domestic currency was increased from 13% to 15%      february 2014    Changes in the RR remuneration policy increased from 10% to 8%    In addition on the RR ratios increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 8%    In Dear Idailities to households increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 6 8%    In Dear Idailities to households intractual maturity of over 1 year intractual maturity of over 1 year intractual maturity of over 1 year      february 2016    Changes of the RR ratios intractual maturity of over 1 year <td>іули.2009</td> <td>Differentiated R</td> <td>R ratios were introduce</td> <td>d:</td> <td></td>	іули.2009	Differentiated R	R ratios were introduce	d:	
banks' labilities (20%)    RR ratios exceptions were introduced:    In households' deposits with contractual maturity of over 2 years repo-transactions in Denar      2013    Further differentiation on the RR ratios and additional RR exceptions:      Iberruley 2013    Further differentiation on the RR ratios and additional RR exceptions:      Iberruley 2013    Further differentiation on the RR ratios and additional RR exceptions:      Iberruley 2013    Further differentiation on the RR ratios and additional RR exceptions:      Iberruley 2013    FX RR ratio increased from 13% to 15%      Iberruley 2014    The part of the FX RR fulfile in domestic currency was increased from 13% to 15%      Iberruley 2014    Changes in the RR remuneration policy increased from 10% to 8%      September 2015    Further differentiation on the RR ratios increased from 10% to 8%      september 2015    Further differentiation on the RR ratio increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to 8%      september 2015    Further differentiation on the RR ratios increased from 10% to gen dename      september 2015    Further differentiation on the RR ratios 1000000000000000000000000000000000		RR on FX deposits raised from 10% to	<b>23%</b> of the FX RR was		
2013    Further differentiation on the RR ratios and additional RR exceptions: reportansactions in Denar      rebruary 2013    Further differentiation on the RR ratios and additional RR exceptions: Lowering RR base for the amount of investments in domestic deti securities in source 2 years on liabilities for issued debt securities in Denar with original maturity of at least 2 years      september 2013    FX RR ratio increased from 10% to 8%    The part of the FX RR fulfilied in domestic currency was increased from 23% to 30%    on FX liabilities to nonresidents- financial institutions with contractual maturity of up to 1 year      february 2014    Changes in the RR remuneration policy increased from 10% to 8%    FX RR ratio in domestic currency was increased from 23% to 30%    on liabilities to nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 1 year      september 2015    Further differentiation on the RR ratios RR for denar liabilities to X    on Denar liabilities to households with contractual maturity of over 1 year      may 2016    Changes of the RR ratios RR for denar liabilities to mark from increased from    on Denar liabilities to households with contractual maturity of over 1 year		banks' liabilities indexed to FX		-	-
2013    Further differentiation on the RR ratios and additional RR exceptions:      reportansections in Denar    Envering RR base for the amount of investments in domestic dettises used by systematically important sectors      reportansection:    Investments in domestic dettises used by systematically important sectors      september 2013    FX RR ratio increased from 23% to 30%    on FX liabilities to nonresidents-financial institutions with contractual maturity of at least 2 years      september 2013    FX RR ratio increased from 23% to 30%    on FX liabilities to nonresidents-financial institutions with contractual maturity of up to 1 year      on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year    on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year      february 2014    Changes in the RR remuneration policy    on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year      september 2015    Further differentiation on the RR ratios    on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year      september 2015    Further differentiation on the RR ratios    on Denar Itabilities to households with contractual maturity of over 1 year      september 2015    Further differentiation on the RR ratios    on Denar Itabilities to households with contractual maturity of over 1 year      may 2016    Changes of the RR ratios    on Denar	ianuary 2012		tions were introduced:		
2013    Further differentiation on the RR ratios and additional RR exceptions:      february 2013    Further differentiation on the RR ratios and additional RR exceptions:      september 2013    FX RR ratio increased from 13% to 15%    The part of the FX RR fulfilled in domestic currency was increased from 23% to 30%    on FX liabilities to nonresidents-financial institutions with contractual maturity of up to 1 year on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents-financial institutions with contractual maturity of over 2 years.      february 2014    Changes in the RR remuneration policy    on Demar RR ratio on the RR ratios in creased from 10% to 8%      september 2015    Further differentiation on the RR ratios in domestic currency was increased from 10% to 8%    on liabilities to nonresidents-financial institutions with contractual maturity of over 1 year on liabilities to nonresidents-financial institutions with contractual maturity of over 2 years.      february 2014    Changes in the RR remuneration policy    on Demar RR ratios in the contractual maturity of over 1 year on ilabilities to households with contractual maturity of over 1 year on ilabilities to households in the contractual maturity of over 1 year on ilabilities to households in the contractual maturity of over 1 year on ilabilities to households in the contractual maturity of over 1 year on ilabilities to households with contractual maturity of over 1 year on ilabilities to households with contractual maturity of over 1 year on ilabilities to households with contractual maturity of over 1 year on ilabilitis to households with contractual maturity of over 1 yea	Junuary 2012	-	-	contractual maturity of over 2 years	-
february 2013    Image: September 2014    Image: September 2014    Image: September 2014    Image: September 2014    Image: September 2015    Image: September 2015 <td>2012</td> <td>Further differen</td> <td>tistion on the DD ratios</td> <td></td> <td>~</td>	2012	Further differen	tistion on the DD ratios		~
september 2013    FX RR ratio increased from 13% to 15%    The part of the FX RR fulfiled in domestic currency was increased from 23% to 30%    on FX liabilities to nonresidents- financial institutions with contractual maturity of up to 1 year      february 2014    Changes in the RR remuneration policy    on Denar liabilities to nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- with contractual maturity of over 1 year on liabilities to all nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents- with contractual maturity of over 1 years      september 2015    Further differentiation on the RR ratios may 2016      RR for denar liabilities with FX clause was increased from    on Denar liabilities to households with contractual maturity of over 1 year		Further ameren	tiation on the KK ratios		s:
FX RR ratio increased from 13% to 15%The part of the PA RV mercy was increased from 23% to 30%Financial institutions with contractual maturity of up to 1 yearDenar RR ratio decreased from 10% to 8%Denar RR ratio decreased from 10% to 8%On liabilities to nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 2 yearsfebruary 2014Changes in the RR remuneration policy -remuneration policy was abandoned domestic currentseptember 2015Further differentiation on the RR ratios -on Denar liabilities to households with contractual maturity of over 1 yearmay 2016Changes of the RR ratios -On Denar liabilities to households with contractual maturity of over 1 yearmay 2016Changes of the RR ratios -On Denar liabilities to households with contractual maturity of over 1 year				securities issued by systematically important sectors on liabilities for issued debt securities in Denar with original	
decreased from 10% to 8%    on liabilities to nonresidents- financial institutions with contractual maturity of over 1 year on liabilities to all nonresidents, with contractual maturity of over 2 years      february 2014    Changes in the RR remuneration policy      remuneration policy	september 2013	increased from	in domestic currency was	financial institutions with	
february 2014    Changes in the RR remuneration policy      february 2014    Changes in the RR remuneration policy      i    i      september 2015    Further differentiation on the RR ratios      i    i      i		decreased from		financial institutions with contractual maturity of over 1 year	
february 2014    Changes in the RR remuneration policy      february 2014    Changes in the RR remuneration policy      september 2015    Further differentiation on the RR ratios      on Denar liabilities to households    on Denar liabilities to households      with contractual maturity of over 1       may 2016    Changes of the RR ratios      RR for denar       libailities with FX       clause was       increased from				with contractual maturity of over 2	
september 2015    Further differentiation on the RR ratios      september 2015    Further differentiation on the RR ratios      on Denar liabilities to households with contractual maturity of over 1 year      may 2016    Changes of the RR ratios      RR for denar liabilities with FX clause was increased from    -	february 2014	Changes in the F	P romuneration policy		
may 2016 Changes of the RR ratios				-	remunerati policy was abandoned domestic R
may 2016  Changes of the RR ratios	september 2015	Further differen	tiation on the RR ratios		
RR for denar    Ibailities with FX      clause was    -      increased from    -		-	-	with contractual maturity of over 1	-
Ibailities with FX  -    clause was  -    increased from  -	may 2016		R ratios		
		libailities with FX clause was increased from			-

## ATTACHMENT 3 REVIEW OF INSTITUTIONS TO IMPLEMENT THE MEASURES

	Effect on reduction of:	NBRM	MF	Other competent institutions	Domestic banks
Strategic commitment to conduct s	sustainable macroe	conomic policy			
Strategic commitment to conduct sustainable macroeconomic policy	Real, transactional and financial euroization	$\checkmark$	$\checkmark$		
Prudential regulations					
Further differentiation of the reserve requirement rates from currency aspect	Financial euroization	$\checkmark$			
Re-examining the possibility of gradually reducing the limits on the net open currency position of banks	Financial euroization	$\checkmark$			
Active use of macro-prudential measures for regulating the approval of consumer loans with currency component for natural persons	Financial euroization	$\checkmark$			
Examining the possibility of changing the deposit insurance scheme	Financial euroization		$\checkmark$	√ (FOD)	$\checkmark$
Development of financial markets a	and other measures				
Financial education	Real, transactional and financial euroization	$\checkmark$	$\checkmark$		$\checkmark$
Encouraging the issuance of securities in denars	Financial euroization	$\checkmark$	$\checkmark$		
Creating infrastructure conditions for increased investments of non-residents on the domestic financial markets	Financial euroization		$\checkmark$	√ (CDHV, KHV)	
Activities to support the development of the derivatives market	Financial euroization	$\checkmark$			$\checkmark$