# National Bank of the Republic of Macedonia



ANNUAL REPORT 2015

Skopje, April 2016

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#### **Governor's foreword**

In 2015, the Macedonian economy registered solid macroeconomic performance, despite the present risks and uncertainty throughout the year. Against the backdrop of external environment risks present during the times of global crisis and post-crisis recovery of the global economy, and pronounced geopolitical risks, this year the strengthened foundations of the Macedonian economy based on structural changes, again came to the fore and enabled constant solid economic growth. On the other hand, 2015 was marked by specific risks associated with the internal political situation, which despite bringing an extra dose of uncertainty, are estimated to have had limited impact on the economy. However, this situation posed additional challenges to the monetary policy that have been addressed by appropriate changes aimed at achieving the legislative objectives.

Amidst low inflation, solid balance of payments position and consequently, stable foreign exchange market developments, the interest rate on the main monetary instrument in 2015 remained unchanged. Additional easing of monetary policy in the euro area, as anchor economy, during the year has contributed to retaining unchanged setup of domestic monetary policy, given the implicitly increased attractiveness of domestic interest rates. On the other hand, as early as in the first quarter of the year there were indications of room for retaining accommodative monetary policy by further reducing the interest rates on deposit facilities and creating prerequisites for greater allocation of banks' funds to lending to the private sector. Also, in 2015, a non-standard measure for release from reserve requirement was applied to loans to the export and energy sectors, and given the positive effects on lending, the validity of this measure was extended for another two years.

In 2015, the Macedonian economy preserved the solid growth (3.7%), proving its vitality, despite the risks from the external and internal environment. The growth mainly resulted from domestic consumption and exports. In this light, one should note the contribution of new facilities with foreign capital to the exports, the robust infrastructure projects of the public sector and the further decline in unemployment that positively affect consumer spending. Inflation was slightly negative (-0.3%) in 2015, influenced by supply factors, mainly lower fuel prices on world markets, which also had major effects on the inflation globally. However, average core inflation was moderately positive (0.5%), indicating solid domestic demand. The current account deficit, albeit slightly expanded, has been ranging around 2% of GDP for six years in a row. More importantly, 2015 witnessed narrowing of the trade deficit, mainly due to the contribution of new facilities in the free economic zones, as well as the positive price effect on energy imports, with relatively stable private transfers. The financial account registered specific movements such as moderate inflow of foreign direct investment, outflow from the repayment of external government liabilities, and outflows from the private sector, partly reflecting the complex global environment. Against such backdrop, foreign reserves registered a moderate decline, but remained at an adequate level.

Although the economy in general, soundly overcame the exogenous challenges, still, the present uncertainty clouding the domestic political situation and the outburst of the Greek crisis mostly spilled over through the expectations channel, particularly affecting the propensity of households to save. Consequently, given the uncertainty and declining interest rate spread between the denar and foreign currency deposits, total deposits growth slowed down moderately and the multiyear trend of denarization of savings stabilized in 2015. In such circumstances, banks were released from the reserve requirement on denar deposits over one year, in order to support long-term savings in domestic currency. Credit

movements slowed down moderately in the heat of the political crisis, but at the end of the year, they accelerated again, with the annual growth of 9.5% being similar to last year, while outperforming that of most countries of the region.

In an extremely complex mix of domestic and external factors, the banking system of the Republic of Macedonia again showed its sound foundations and stability. Amid stable capital and liquidity position, the share of non-performing loans slightly reduced. However, credit risk, given its interrelation with the banks' primary activity, remains at the core of our focus. In this context, in late 2015, we passed a set of measures to address risks arising from the approval and rapid growth of long-term consumer loans to households as well as measures that facilitate access to finance, especially for small and medium-sized firms. The measure related to the write-off of non-performing loans which have been fully provisioned for more than two years should contribute to a more realistic view of this aspect of the operations of banks. In light of the escalation of Greek crisis, and taking into account the developed trade and financial ties with this neighboring economy, in the second half of the year, temporary measures were applied to limit capital outflows to Greek non-residents. Generally speaking, in 2015, banking system regulations continued improving under the applicable standards, aimed towards further strengthening of its operations.

Against the background of high volatility in international financial markets, in 2015, we made enormous efforts to increase flexibility in the area of foreign reserves management. Equally valuable efforts have been made in the promotion of other activities. Special emphasis should be put on our continuous efforts to comply with the applicable standards in the field of statistics, payment systems, information infrastructure and all other segments. In 2015 we introduced an operational risk management system to strengthen the control mechanisms in all fields of work. Promoting research activity, financial education and increased openness to the public remain priority, with multiple positive effects on the economic agents in the domestic economy. It is expected that the ongoing activities in the field of further training and professional development of staff, as before, will continue strengthening the organizational capacity to address challenges in all segments.

According to macroeconomic forecasts, in 2016, we expect solid macroeconomic performance, yet again, these expectations are significantly encumbered by constant threats from the external and the domestic environment. We remain ready to respond flexibly to all challenges in order to accomplish the monetary policy objectives of price stability and stable exchange rate, financial stability and macroeconomic stability in the domestic economy.

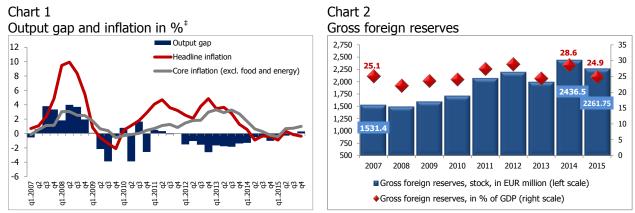
28 April 2016 Skopje Governor and President of the NBRM Council Dimitar Bogov

# I. Monetary Policy in 2015

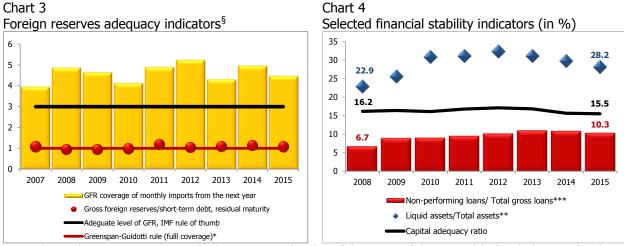
### **1.1.** Objectives of the National Bank

Maintaining price stability is the main legally defined objective of the National Bank of the Republic of Macedonia (NBRM). Another objective, which is subordinate to the main objective, is to contribute to a stable and competitive market-oriented financial system. The NBRM supports the general economic policy without jeopardizing the achievement of the primary objective and in accordance with the principle of an open market economy with free competition. From a strategic point of view, since October 1995, the NBRM has applied the strategy of stable nominal exchange rate of the Denar, first against the Deutsche mark (until 2001) and then against the Euro aimed towards accomplishing the main objective.

In 2015, the NBRM successfully achieved its legislative goals despite the extremely uncertain environment for most of the year. Aside from the almost constantly present exogenous risks, in 2015, the uncertainty further augmented due to the unfavorable domestic political context. The effects of these factors were limited and mainly appeared through the expectations channel, which partially affected the foreign exchange market. In 2015, the NBRM intervened with a moderate amount of net sale of foreign currency, thus maintaining the stability of the nominal exchange rate against the euro. On the other hand, the new companies with foreign capital that registered sound export performance, as well as the lower oil prices had a favorable effect on the foreign exchange market. The foreign reserves have reduced, on the backdrop of net repayments of government liabilities to abroad, but remained at a solid level, with all indicators on the adequacy of the reserves being consistently favorable, indicating a sufficient level to absorb any adverse shocks. In terms of price stability, in 2015, the price level moderately declined, entirely as a result of supply factors or lower import prices of energy. On the other hand, core inflation, on average, remained positive, which corresponds with the recovery of domestic demand and the gradual closing of the negative output gap at the end of the year. Hence, it was assessed that this is temporary downward adjustment of the general price level that does not create risks of prolonged deflation and incorporation of the fall of prices in the inflationary expectations of the economic entities.



\*The productivity gap is an indicator of the cyclical position of the economy and it is calculated as the deviation of the actual from the potential level of GDP relative to the potential level of GDP ( $GDP_a = \frac{GDP_a - GDP_p}{GDP_p}$ ). Average annual rate of inflation and core inflation for the quarter is presented.



§ According to the Greenspan-Guidotti rule, the country needs to keep full coverage of short-term debt (residual maturity) with foreign reserves.

\* Repo transactions are not included in the short-term debt.

\*\* Liquid assets consist of highly liquid assets and short-term deposits with foreign banks. Total assets do not include assets with domestic banks.

\*\*\* The indicator relates to loans to the financial and non-financial sector. Source: NBRM and SSO.

### 1.2. Monetary policy setup

During 2015, the NBRM maintained its policy rate at a historic low of 3.25%, thus continuing to implement accommodative monetary policy<sup>1</sup>. Also, during the 2015, measures were applied aimed at supporting lending to the corporate sector that stimulate corporate lending, whilst mitigating potential risks in the external sector. The appropriateness of monetary setup was reconsidered regularly taking into account expectations embedded in the regular macroeconomic forecast, the latest economic and financial conditions in the light of forecasts, as well as the balance of risks and the possibility to materialize. Given the uncertain external and domestic environment in 2015, which had some effect on the expectations of the entities and their preferences in terms of volume and currency structure of savings, changes were also made in the reserve requirement during the year. These changes aimed to further support the household long-term denar savings. In mid-2015, the NBRM also introduced temporary measures to prevent any capital outflows to Greece in the context of the uncertainty related to the Greek debt crisis. Furthermore, in order to prevent the growing risks to financial stability and their impact on the stability of the overall economy, macro prudential measures were applied at the end of the year to slow down the rapid growth of long-term consumer loans, fueled by measures to support corporate lending.

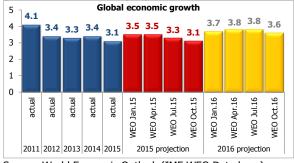
Uncertainty and volatility of movements are typical for the external environment during 2015, as well. Although the global economic recovery continued, the revisions of estimates for global economic growth were downward. Moreover, global financial conditions were also volatile during the year. This environment created a need for prudent domestic monetary policy. The ECB was steadily relaxing the monetary policy, which contributed to improving the economic and financial conditions in the euro area, but also emphasized the vulnerability and uncertainty of the future recovery. In the middle of the year, risks in the euro area were even more pronounced with the re-escalation of the debt crisis in Greece, because of the difficulties of the country to service its outstanding debts to international

<sup>&</sup>lt;sup>1</sup> In March 2015, the NBRM reduced the interest rate on overnight deposit facility from 0.50% to 0.25% and on seven-day deposit facility from 1.00% to 0.50%. The cut was made to allocate excess liquidity of banks to the private sector and to use deposit facilities to manage short-term excess liquidity within the reserve requirement period.

creditors. They mitigated once Greece reached an agreement with its European partners for a third program for financial assistance through the European Stability Mechanism, in early July, but these developments however underlined the structural problems and the constant possibility of occurrence of adverse shocks. During this period, the slower growth of Chinese economy was also considered to be a global risk factor, whose adverse effects on the domestic economy were estimated to spill over through indirect channels. Slower economic growth in China is a risk factor for the growth of the euro area, especially the growth of Germany, which is the most exposed European export economy, thus creating indirect risks for the Macedonian economy through this channel. Also, the slower growth of the Chinese economy has its effect on the market of commodities, especially metals, which unfavorably affects the terms of trade of the Macedonian economy. In fact, the constant changes in the expectations for the prices of primary commodities that affect the domestic inflation and the terms of trade are an additional feature of the environment in 2015. During the year, the forecasts of international prices of oil, metals and food were repeatedly adjusted downward, thus increasing the uncertainty and changing the assumptions underlying the expectations for the domestic economy.

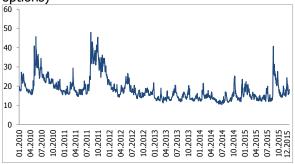


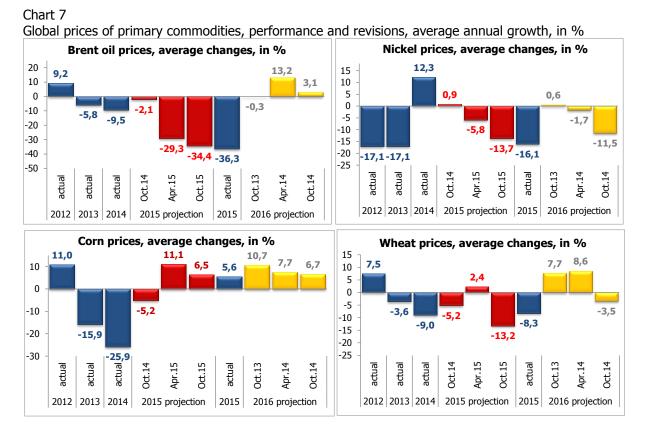
Performance and revisions of the global economic growth, annual change (in%)



Source: World Economic Outlook (IMF WEO Data base).

Chart 6 VIX Index (implied volatility of S&P500 index options)





The setup of fiscal policy, as an important component of the monetary policy environment was generally regarded as relatively prudential in 2015, but with inherent risks. During the year, there were no signals of greater deviation from the planned path of fiscal consolidation, as confirmed by the budget revision in June and the performance in 2015. Although the deficit envisaged by the budget revision and the actual deficit are greater than the original deficit, the deviation is lower than in the previous years, with signals of annual narrowing of the fiscal deficit. However, there was risk for the dynamics of further fiscal consolidation. In addition, during the year, there was also uncertainty about the structure of sources of financing the budget deficit, due to changes in assumptions for the share of external sources and financing through domestic market of securities in gross sources of funding. Given the comfort level of foreign reserves, high liquidity of the banking system and robust lending activity, these changes in the assumptions for the government funding did not have much effect on monetary policy, yet they increased the uncertainty of the environment throughout the year.

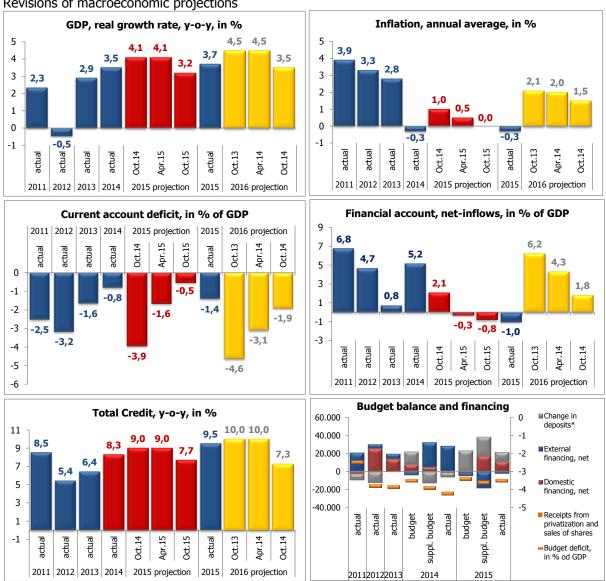


Chart 8 Revisions of macroeconomic projections

Projections for all indicators are macroeconomic projections of the NBRM, except for the budget deficit and its financing, which was projected by the Ministry of Finance. Source: NBRM, SSO and MF

Despite the uncertain and still insufficiently stimulating external environment, as well as the changes of some assumptions underlying the forecasts for the domestic economy, the movements of domestic economic indicators were relatively favorable, and the size and nature of deviations from the forecasts did not required changes in the monetary setup through the policy rate. Regular reassessment of monetary policy showed that the level of interest rate of 3.25% is appropriate, given the sound economic fundamentals, absence of major imbalances, and increasing risks. In 2015, the foreign reserves, as an important indicator of the capacity to defend against shocks, decreased, mainly due to the deleveraging of the government abroad, and to a lesser extent, to the NBRM interventions on the foreign exchange market. However, all foreign reserves adequacy indicators are constantly maintained at the appropriate level. Furthermore, 2015 was also marked by constant revision of the current account deficit, more precisely its improvement, in circumstances where the performance of new foreign facilities was above expectations and pointed to structural improvements in the external sector. Strong positive effect on the current account was also made by the fall in oil prices, which was much sharper than initially

expected. On the other hand, the revisions in the financial account were unfavorable. One of the key factors of these changes were the short-term flows (currencies and deposits), which gave signals for increased preference of the households to hold cash foreign currency, amid increasing exogenous risks and increased domestic political risks. However, these effects were mild, and affected the foreign exchange market with greater intensity during June and July, when both the Greek crisis and domestic risks broke out. In these two months, the NBRM intervened with a higher amount of net sale of foreign currency, while the cumulative interventions in the remaining months suggested a net purchase of foreign currency. The total net sale of foreign currency throughout the year was around Euro 34 million, which is a very small percentage of the total available foreign reserves, and therefore, demonstration of the limited nature of the effects of risks, but also of the solid amount of foreign currency in the banking system, sufficient to cover the needs for foreign currency in the economy.

The developments on the foreign exchange market in 2015 proved the stable exchange rate expectations, and in that context, the stable inflation expectations. The general price level continued to decline moderately in the course of 2015 (average annual decline of 0.3%), entirely as a result of lower energy prices. During the year, amid weaker performances and constant downward correction of expectations for import prices, the NBRM also revised the inflation forecast downwards. Certain downward adjustment during the year was typical for inflation expectations, mainly due to the decrease in prices of primary commodities. In such circumstances, when the dynamics of inflation and inflation expectations were affected by changing prices, it was estimated that the adjustments are temporary. This is also confirmed by the estimates for closure of the output gap at the end of the year and by the changes in core inflation (excluding food and energy), which in 2015 tended to increase moderately to 0.5% on average.

Despite the stable expectations for exchange rate and inflation, risks caused by the Greek debt crisis and domestic political context had a certain effect on the volume of household savings and its maturity and currency structure. The savings were growing throughout the year, but the growth of household deposits within the banking system was lower than last year. The response of domestic entities to the increased uncertainty related to the debt crisis in Greece and the domestic political environment was also noticeable through the more pronounced propensity of households to hold liquid assets in transaction accounts, and the new savings in the form of deposits<sup>2</sup> was mostly in foreign currency. However, the degree of euroisation, measured by the share of deposits with foreign currency component in total deposits remained relatively stable and at the end of the year was 40.3%. A positive feature was the fact that new savings in the form of time deposits were deposited in longer term so that the share of household long-term deposits in total deposits increased in 2015 on average.

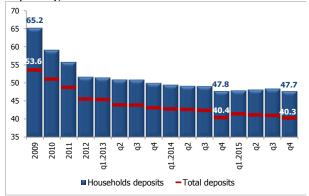
To mitigate some of the risks present in the scope and structure of savings, in August, the NBRM made changes in the reserve requirement setup<sup>3</sup>. The changes aimed to ensure stable sources of funding for banks and further support of the denarization as the process that reduces any pressure on foreign reserves. Also, in the middle of the year, to strengthen the resilience of the financial system from the impact of external factors, and thus to stabilize the expectations of economic agents, the NBRM applied preventive

<sup>&</sup>lt;sup>2</sup> Contrary to the above factors, the growth of savings in foreign currency in the first month of the year is explained as an effect of the measure of the Central Bank of Switzerland to leave the lower limit of the exchange rate (of 1.2 Swiss francs to one euro) in January 2015.

<sup>&</sup>lt;sup>3</sup> With these amendments, the NBRM reduced the reserve requirement rate for the bank liabilities to natural persons in domestic currency with maturity over one year from 8% to 0%, with these liabilities obtaining the same treatment as the liabilities with maturity over two years that has been given 0% rate since 2012. For more details on the changes in reserve requirements, see *Monetary Instruments* herein.

Chart 9

Euroization level, share of foreign currency deposits in total deposits (including demand deposits), in %



Source: NBRM.

measures to manage capital flows, valid until the end of the year<sup>4</sup>. The measures have applied to prevent the threat of any significant outflows of capital from the domestic economy to Greece and thereby prevent significant disturbance to the equilibrium in the balance of payments and the stability of the financial system.

Despite the present risks to the economy, the absence of inflationary pressures and favorable developments in the external sector, as well as the fiscal support for growth through investments in infrastructure projects provided a favorable environment for further solid growth. Economic activity grew at a solid

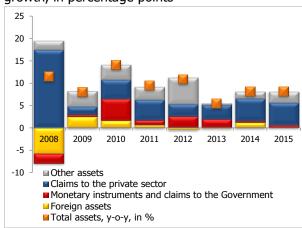
pace in 2015, with more modest performance than expected. In terms of monetary policy, the pace and structure of economic growth did not contribute to the creation of internal and external imbalances in the domestic economy. The economic recovery in 2015 was also supported by bank lending. Credit market activity grew, supported by easing of credit standards and increase in demand for loans. However, during the year, against the backdrop of increased risks of domestic environment and slower growth of the principal source of funding for banks, lending to the private sector slowed down and was below expectations from the April forecast. This slowdown was temporary, and at the end of the year, the credit market experienced extremely high activity, which contributed to higher flows than expected in the forecasts. Also, positive developments were observed in the structure of credit growth at the yearend - an increased lending to the corporate sector. In this context, in 2015, the NBRM continued to provide support to the corporate lending with the extension of the non-standard measure aimed at supporting lending to net exporters and producers of electricity<sup>5</sup>. Due to the continuation of this trend, the set of macro prudential measures adopted by the NBRM in December to protect against any future risks for the financial stability and prevent future macroeconomic imbalances, includes measures to ease financing conditions for the corporate sector<sup>6</sup>.

<sup>&</sup>lt;sup>4</sup> After the period of validity, in December 2015, the measures were lifted.

<sup>&</sup>lt;sup>5</sup> This measure allows a reduction of the reserve requirement base of banks for the amount of newly approved loans to net exporters and domestic producers of electricity and banks' investments in debt securities denominated in national currency without currency clause issued by net exporters and domestic producers of electricity. The measure was introduced in late 2012, and has applied since 2013. Since the introduction of the measure, its application has been extended twice, i.e. until the end of 2017.

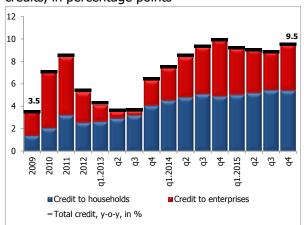
<sup>&</sup>lt;sup>6</sup> For more details on the macro-prudential measures of the NBRM, see section 10.1 of this report or Box 3: Review of the latest set of measures adopted by the NBRM in December 2015, NBRM Quarterly Report, February 2016.

Chart 10 Bank assets structure - contribution to the annual growth, in percentage points

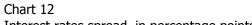


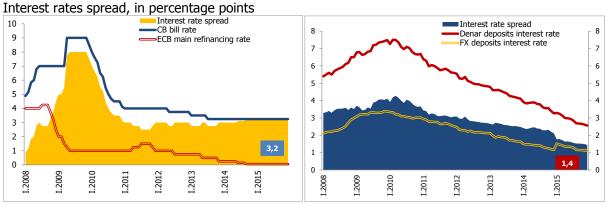


Contributions to the annual change in total credits, in percentage points



Against the background of *de facto* fixed nominal exchange rate against the euro, changes in interest rates in the euro area, as the anchor economy, play an important role in the monetary policy setup in the country. In 2015, the ECB maintained its policy rate at 0.05%, where the interest rate spread between the NBRM policy rate and the ECB policy rate remained stable in December, at 3.2 percentage points. In the domestic economy, banks continued cutting interest rates, moderately decreasing the interest rate spread between the interest rate of the Denar deposits and the interest rate on foreign currency deposits, with higher reduction in the interest rate on Denar deposits compared to the reduction of interest on foreign currency deposits<sup>7</sup>.





NBRM policy rate: Interest rate on CB bills

ECB policy rate: interest rate on ECB's main refinancing operations Source: NBRM and ECB.

Source: NBRM.

<sup>&</sup>lt;sup>7</sup> The narrowing of the interest rate spread in early 2015 was also made by the new methodology for interest rates, according to which the interest rates on demand deposits and overnight deposit facilities as of 2015 are no longer included in the calculation of interest on total deposits.

## **II.** International environment

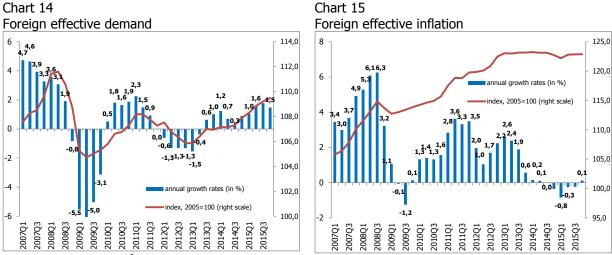
Global economy continued recovering in 2015, but at a more moderate pace compared to the previous period. Global economic growth in 2015 was 3.1%, which is moderately slower compared to the previous year, and the weakest growth since the global crisis. Slower economic growth is the consequence of further deceleration of emerging economies, largely caused by the reduced activity of countries exporting primary commodities, given the extremely unfavorable conjuncture on these markets. This particularly applies to the oil market, which in 2015 experienced a sudden sharp downward correction of prices. Also, the slower growth in China contributed to the weaker economic performance of this group of countries. Given the size and significance of the Chinese economy to the global demand, these performances and the uncertainty about future developments spilled over globally through the trade channel, lower world prices of primary products, reduced confidence and increased financial markets volatility. Pronounced geopolitical risks also adversely affected the global growth. On the other hand, in 2015 the economic growth of the group of developed economies slightly accelerated, which in part reflects the faster growth in the euro area. The economic recovery of the euro area continued in 2015, but faster and largely supported by the strengthening of private consumption. Growth in disposable income, supported by the improved performance of the labor market and falling oil prices enabled the recovery of consumption. On the other hand, investment and exports in the euro area are still regarded as sufficiently strong sources of growth. In the group of developed economies, during 2015, the US economy registered the strongest growth, with slightly improved performance compared to the previous year. Consumption was the main driver of growth of the US economy, supported by the favorable financial conditions and improving conditions in the labor market and real estate market.



Inflation continued decelerating globally, mainly reflecting the fall in world energy prices and the prices of primary food commodities. Global inflation equaled 2.6% in 2015, compared to 3.2% last year. Inflation significantly reduced in the group of developed countries, from 1.4% in 2014 to only 0.3% in 2015. This slowdown of headline inflation reflects the drop in energy and food components, while core inflation in this group of countries remains stable. In emerging economies, despite the falling world energy and food prices, inflation accelerated moderately from 5.1% last year to 5.5% in 2015. These price movements in part reflect the depreciation of currencies in the oil exporting countries, which has a second-round effect on headline inflation.

Analyzing specific quantitative indicators that reflect the external environment of the Macedonian economy, the foreign effective demand for Macedonian products in 2015 grew up by 1.5%, indicating that the recovery that started in the previous year continued in the

current year. The greatest positive contribution to the annual performance was made by the economies of Germany and Bulgaria, while other countries made positive yet moderate contribution. In line with global trends in prices, foreign effective inflation in 2015 was negative and equaled -0.3%. Analyzing individual countries, the negative movement is mostly explained by the developments in Serbia (depreciation of the dinar) and the fall in prices in Greece, Slovenia, and Bulgaria.

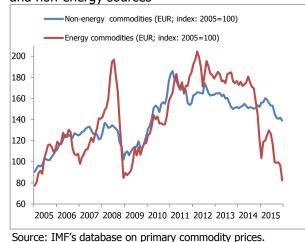


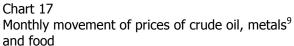
Source: NBRM calculations<sup>8</sup>.

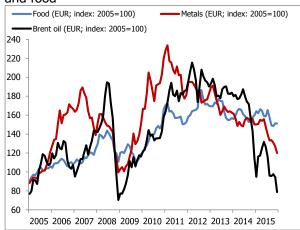
The primary commodity markets in 2015 continued registering downward trend in the prices of energy, metals and food commodities. The most significant downward correction was made in oil prices which registered a sharp decline in the second half of 2014 and decreased during 2015. The average oil price of 96 US-dollars a barrel of Brent oil in 2014 declined to an average of 51 US-dollar in 2015. This movement in oil prices was prompted by supply and demand factors. OPEC member countries have contributed to increased supply. To retain market share, they did not respond to the price decline throughout the year and maintained high level of production. Expectations for recent inclusion of Iran in the production of oil, once the United Nations lifted the sanctions on this country, also made a downward pressure on the price and the high level of inventories in the United States. On the demand side, the weaker economic growth in emerging and developing economies has reduced the price of this commodity. The annual decline in prices of metals continued at a faster pace in 2015, and stood at 21%, making in fourth consecutive year of decline in prices. This decrease is due to the weaker demand from emerging and developing economies, especially China and India amid increased demand and high inventories. In 2015, the food price index fell by 17% compared with the previous vear, which resulted from the decline in prices for wheat products, cooking oils and other food products.

<sup>&</sup>lt;sup>8</sup> Foreign effective demand is calculated as the sum of the weighted indices of the gross domestic product of the most important trading partners of the Republic of Macedonia. The index calculation includes: Germany, Greece, Italy, the Netherlands, Belgium, Spain, Serbia, Croatia, Slovenia, and Bulgaria. The weights are calculated on the basis of the share of exports to these countries in the total export. The foreign effective inflation is the weighted sum of consumer price indices of the countries that are major partners of the Republic of Macedonia in the field of import of consumer goods. The weight structure is based on the normalized shares of nominal imports from each country in the total nominal imports in the period 2010-2012. The calculation of this indicator includes: Bulgaria, Germany, Greece, France, Italy, Austria, Slovenia, Croatia, and Serbia.

Chart 16 Monthly movement of prices of primary energy and non-energy sources







In 2015, central banks of developed countries pursued divergent monetary policies. In the United States, given the solid performance of the economy, the Fed began normalizing the monetary policy and for the first time in eight years in December 2015, it increased the target for the money market interest rate by 0.25 percentage points to 0.25% -0.50%<sup>10</sup>. During the year, the Fed continued its policy of reinvesting securities, where the size of the balance sheet remained stable. In terms of future policy guidelines, in the communication with the public it was explicitly stated that monetary policy will remain accommodative despite rising interest rates, and the process of normalization will be implemented gradually, depending on the economic performance and expectations. On the other hand, the economy of the euro area recovered in 2015, but slower than the US economy and at different pace among the Member States. To support the process of economic recovery and convergence of inflation to the target level in the medium run, during 2015, the ECB continued implementing expansionary monetary policy, by providing liquidity support to financial institutions. In January, in order to stimulate lending activity, the ECB adopted a new package of incentives. With these measures, which started to be applied in March 2015, the ECB extended the scope and increased the amount of securities purchases through the existing programs (CBPP3 - Covered Bond Purchase Programme and ABSPP - Asset-Backed Securities Purchase Programme)<sup>11</sup>. At the same time the ECB cut the cost of liquidity for banks for the funds provided through TLTRO - Targeted Long Term Refinancing Operations<sup>12</sup>. In circumstances of expected slowdown in economic growth and

<sup>&</sup>lt;sup>9</sup> Metals Price Index is a composite index, which includes prices of copper, aluminum, iron ore, tin, nickel, zinc, lead, and uranium.

<sup>&</sup>lt;sup>10</sup> At the same time, the Fed also applied other tools and increased the remuneration rate of banks' reserve requirements (including the rate for excess allocated funds over reserve requirement) and the discount operations rate (from 0.75% to 1.00%). In addition to previous measures, and for the purposes of setting a lower limit for market interest rates, the Fed set the interest rate on reverse repos overnight (for withdrawing liquidity) at the level of 0.25%. With this instrument, the supply limit was abandoned (US-dollars 300 billion), and daily limit was introduced on the amount of individual participants (of US-dollars 30 billion).

<sup>&</sup>lt;sup>11</sup> The amount of securities increased from Euro 12 billion to Euro 60 billion per month. Moreover, the programs also included euro-denominated securities with a maturity of 2 to 30 years, with investment rating issued by central governments of the Member States of the euro area, agencies, and European institutions. They also allowed the purchase of securities without an investment rating, where the issuing Member State is a part of the program to support the EU/IMF. Also, the program included securities with coupon interest indexed to inflation, and securities with floating coupon interest. Securities are purchased on the secondary market, with a limit to 33% by issuer and 25% by amount of issue. In terms of risk-sharing, most of the additional purchase, i.e. 80%, is not subject to the so-called "loss share", while 20% is subject to common share of hypothetical risk in the Eurosystem (8% of the additional purchase, which will be performed by the ECB, i.e. 12% of the additional purchase, which will be performed by the performed by the national central banks).

 $<sup>^{12}</sup>$  The cut was made so that the interest rate on this instrument was set at the level of the key refinancing interest rate (0.05%), unlike earlier, when the interest rate was added 0.10 basis points.

relatively low inflation rate, later this year, the ECB reduced the interest rate on deposit operations from -0.2% to -0.3% and extended the implementation of the program of quantitative easing until mid-2017.

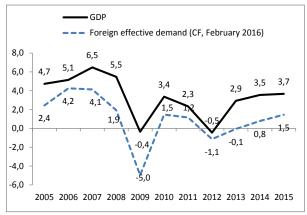
# III. Macroeconomic developments in 2015

### **3.1. GDP** and inflation

The domestic economy accelerated in 2015, when, according to estimated data, gross domestic product increased by 3.7%. Accelerated economic growth took place amid slow recovery of the economies of the major trading partners, but slightly better than the previous year. Furthermore, during 2015, there was also uncertainty about the domestic political developments and possible negative spillover effects on the economy and perceptions of domestic and foreign investors. Analyzing major drivers of growth, in 2015, substantial support for growth comes from the construction sector, which is largely related to the implementation of publicly financed infrastructure projects. Moreover, in 2015, same as previous year, the growth of domestic economy was largely attributable to the operation of new export-oriented facilities, whose activity ensured significant increase in production and exports. In such conditions, the shifts in the labor market were favorable, which also provided additional stimulus for growth of the domestic economic activity.

#### Chart 18

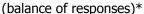
GDP and foreign effective demand (annual real growth rates, in %)

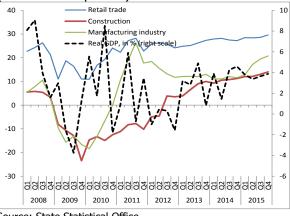


Source: State Statistical Office and Consensus Forecast, February 2016. GDP data for 2014 are preliminary, and data for 2015 are estimated.

#### Chart 19

Assessments for the current economic activity of business agents





Source: State Statistical Office.

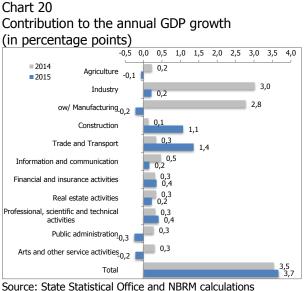
The balance represents the difference between weighted positive and negative responses, expressed as a percentage. The balance shows the movement of the observed economic indicator rather than its real value.

In 2015, growth was recorded in most economic sectors. The largest contribution to the annual growth was made by construction, trade, transport, and catering, largely in line with the short-term indicators for the shifts in these sectors. Analyzing trade<sup>13</sup>, trade data show that growth mainly reflects increased sales in the wholesale, with favorable trends in retail trade and trade in motor vehicles. Observing transport<sup>14</sup>, better performances have been seen in passenger traffic, while catering growth in 2015 reflects the increased number of tourists and overnight stays. Besides these three sectors, construction also made significant contribution to the growth of value added in 2015, which structurally speaking, derives mainly from higher construction activity in the field of civil engineering in accordance with the performance of publicly financed infrastructure projects. Favorable movements

<sup>&</sup>lt;sup>13</sup> The analysis of trends in trade uses data on the trade turnover.

<sup>&</sup>lt;sup>14</sup> The analysis of the trends in transport is based on data on transported passengers and goods.

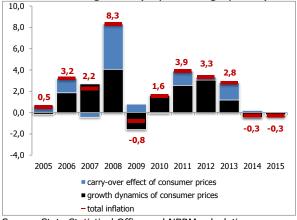
were also registered in the industrial sector, which witnessed a moderate growth of value added. In 2015, the value added of agriculture, public administration and defense, and arts, entertainment and recreation sectors also declined.



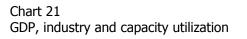
GDP data for 2014 are preliminary, and data for 2015 are estimated.

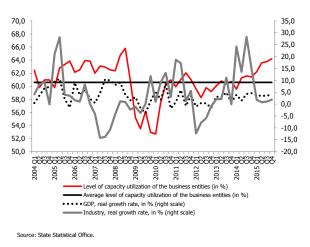
Chart 22

Average annual inflation (in %), second-round effect and new growth (in percentage points)



Source: State Statistical Office and NBRM calculations





Observing demand, domestic economic growth in 2015 is largely explained by the growth of domestic demand and export activity. Domestic demand was largely supported by growth in consumer spending, reflecting the favorable developments in the labor market, the growth of real wages during the year, and increased household lending. Public consumption also made positive, but more moderate contribution to the growth, while gross capital formation remained at a level almost identical to the previous year. However, given the favorable movements of almost all high frequency indicative categories for investments in fixed assets, such movement in gross capital formation

is probably explained by the reduction of inventories. Besides domestic demand, the substantial support to growth in 2015 also comes from the export sector, where, as in previous year, improved performance in this area is mainly attributable to the operation of the new production facilities. Such developments in domestic demand and exports led to imports growth which was still lower than the exports growth, and therefore, the contribution of net exports for the entire 2015 is slightly positive.

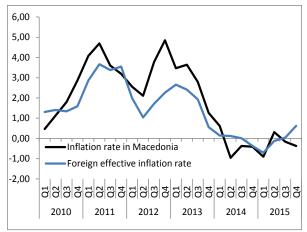
Global environment of generally low prices of primary products, along with lower prices of imported products were the main factors that determined the movement of domestic consumer prices in 2015. Thus, in the absence of major pressures from domestic demand, the downward price movements in the external environment reduced the domestic prices in 2015, with negative inflation of -0.3%, same as in 2014. Analyzing the dynamics,

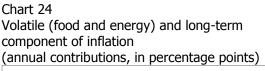
consumer prices remained in the negative zone for most of the year, with the exception of the second quarter of slight growth.

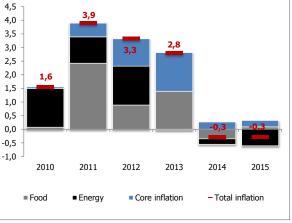
Considering the major components within the index, falling consumer prices are fully explained by the developments within the energy component, while in 2015, the reduction of domestic prices of oil products accelerated, reflecting the downward trend in the price of oil on world markets. Thus, energy prices declined by 4.1% in 2015 (contribution of -0.6 percentage points to the headline inflation). Despite the fall in energy prices, core inflation and food prices in aggregate for the whole 2015 increased, but in the absence of pressures from the demand and the fall of prices of imported products for personal consumption, the growth was very weak. After the fall in 2014, the domestic food prices increased by merely 0.2% in 2015 (contribution 0.1 percentage point to total inflation). A small growth of 0.5% was also registered in the prices of commodities within the core inflation (contribution 0.2 percentage points).



Domestic inflation and foreign effective inflation, annual growth rates (in %)







Source: State Statistical Office, Eurostat and NBRM calculations.

#### **3.2.** Labor market

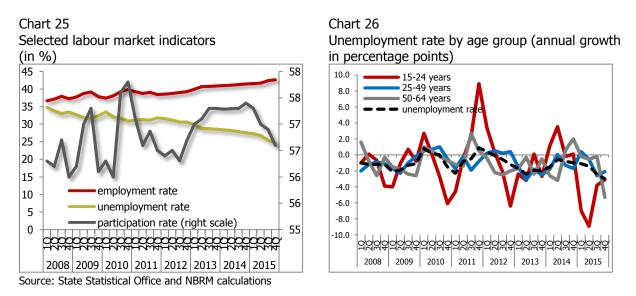
Labor market indicators point to further positive trends in 2015. Improved performance of this economic segment corresponds with the favorable results in most economic sectors. Furthermore, additional support to the increase of employment, as in previous year, was made by the activity of the new facilities in the Technological Industrial Development Zones, as well as the fiscal policy through active employment measures<sup>15</sup>, publicly funded infrastructure projects, policies of subsidizing agricultural production, and credit lines provided by the European Investment Bank for small and medium enterprises.

The number of employees increased by 2.3% in 2015, which is a faster growth compared to last year. Analyzed by sector, employment growth was mostly associated with *services*, in particular retail and wholesale trade, with strong individual contribution to the growth made by the increasing number of employees in public administration, defense and

<sup>&</sup>lt;sup>15</sup> Also, in 2015, the Government of the Republic of Macedonia, through the Ministry of Labor and Social Affairs and the Employment Agency continued implementing active measures and programs designed to increase employment, such as self-employment programs that were expanded to include youth up to 29 years, financial support to micro and small enterprises and craftsmen for opening new jobs, subsidized employment programs, work-readiness programs, community service programs, etc.

compulsory social insurance. The growth of employment in the *industry* continued in 2015, again mainly driven by the manufacturing industry and construction. Employment in *agriculture* slightly decreased, making negative contribution to total employment, despite the strong growth in 2013 and stagnation in 2014.

Despite the growth in labor demand, in 2015, there was a slight downward adjustment of labor supply. The total active population decreased by 0.4%, and the simultaneous increase in the inactive population of 1% resulted in downward movement of 0.3 percentage points of the rate of activity to 57%. The growth of demand, amid lower supply of labor, reduced unemployment. Consequently, in 2015, the average unemployment rate fell by 2 percentage points and reduced to 26.1%, while the employment rate increased in 2015 (by 0.9 percentage points) and stood at 42.1% on average. Analyzing age groups, a major part of the reduction of the overall unemployment rate is attributed to the lower unemployment among young population aged 15 to 24 years, as well as among population aged 25 to 49 years.



2015 registered faster nominal growth of average wages than last year. Also, wages increased in real terms for the second consecutive year. Thus, the nominal net and gross wages<sup>16</sup> registered an annual growth of 2.4% and 2.7%, respectively, with an upward correction being observed in all sectors. Lower wages were paid only in agriculture, transport and storage, real estate activities and in the so-called professional, scientific, and technical services. Given the downward adjustment in the general level of consumer prices of 0.3%, net and gross wages registered a real growth of 2.7% and 3%, respectively. Competitiveness indicators also improved in  $2015^{17}$ . This year, there was a continuation of the positive trends in labor productivity which, given the stronger growth in economic activity than the employment growth, increased by 2.3% in 2015. In 2015, unit labor costs remained relatively stable (a small increase of 0.4%), with similar trends in productivity and wages.

<sup>&</sup>lt;sup>16</sup> Total gross wages paid include: net wages paid for the reporting month, paid income tax, and paid contributions (pension and disability insurance, health insurance, employment, occupational disease and water supply). The data relate to wages paid. <sup>17</sup> Productivity and unit labor costs for the overall economy are calculated on the basis of GDP data, for the total number of employees, according to the Labor Survey of the State Statistical Office and the data on average gross wages.

Chart 27 Average gross and net wages (annual growth, in %)

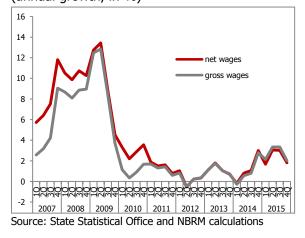
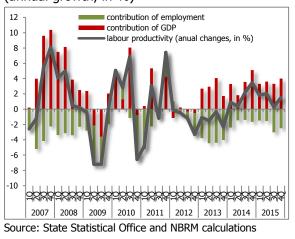
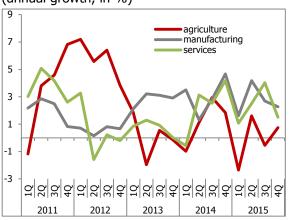


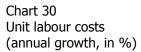
Chart 29 Labour productivity (annual growth, in %)

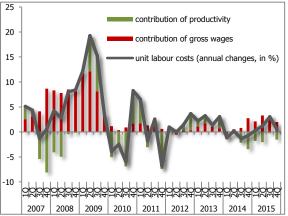


**3.3.** Public finance

In 2015, public finances were characterized by moderate fiscal consolidation, which reduced the central government debt, while public debt to GDP ratio recorded a slight growth. In 2015, the budget deficit was 3.5% of GDP which is by 0.7 percentage points lower compared with the previous year. Deficit narrowed partly due to the improvement of the cyclical component, but a significant portion of the downward correction is due to the improvement of the structural component. Structural improvement in the budget deficit is consistent with the amendments to the profit tax, which repealed the anti-crisis measures for release of undistributed profits of companies from taxation since the beginning of 2015<sup>18</sup>. This shift has led to a significant growth in profit tax revenues and at the same time, a better performance of budgetary revenues than planned in the first half of the year. This performance, along with the need for certain adjustments to the expenditure side, was the main reason for the Budget Revision for 2015<sup>19</sup>. With the budget revision, there was an



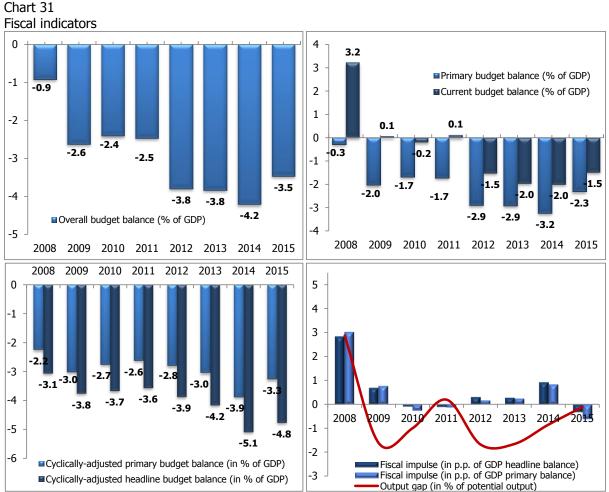




<sup>&</sup>lt;sup>18</sup> Also, in early 2015, amendments to the Value Added Tax (Official Gazette of the Republic of Macedonia No. 130/2014) came into force, reducing the threshold for registration of natural persons and legal entities from Denar 2,000,000 to Denar 1,000,000. Also, on 1 January 2015, amendments to the Law on Excise (Official Gazette of the Republic of Macedonia No. 188/2014) came into force, increasing excise taxes on cigarettes.

<sup>&</sup>lt;sup>19</sup> Official Gazette of the Republic of Macedonia No. 144/2015 of 24 August 2014.

upward correction on the revenue side (by 2.2%), and simultaneous upward adjustment of expenditures (by 2.9%), mostly in current costs. The stronger upward adjustment of expenditures than revenues increased deficit to 3.6% of GDP, versus the 3.4% in the initial budget for 2015. The annual improvement of total budget deficit also had an effect on the primary budget deficit<sup>20</sup>, which decreased by 0.9 percentage points of GDP to 2.3% of GDP. The current budget balance also improved<sup>21</sup>. This change resulted from the higher growth in current income, compared to the growth of the expenditure components, leading to current account deficit reduction to 1.5% of GDP.



Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

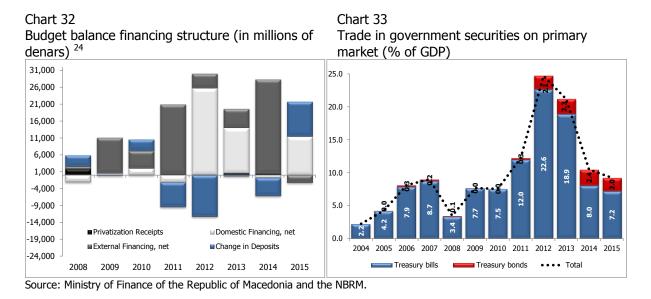
The total structural deficit<sup>22</sup> in 2015 decreased by 0.3 percentage points of GDP compared with the previous year and amounted to 4.8% of GDP. At the same time, the primary structural deficit also improved i.e. decreased from 3.9% of GDP in 2014 to 3.3% in 2015. The analysis of these indicators on the fiscal policy stance shows slightly negative

<sup>&</sup>lt;sup>20</sup> Primary budget balance is the difference between total budget revenues and total budget expenses, less the repayment of current loan (interest) liabilities. This fiscal indicator is considered more appropriate for the analysis of the current policy course, due to the fact that it does not include fiscal costs related to past conduct of fiscal policy relative to the public debt.

<sup>&</sup>lt;sup>21</sup> Current budget balance is the difference between current revenues (tax revenues and non-tax revenues) and current budget expenses (for wages and fees, goods and services, transfers and interests).

<sup>&</sup>lt;sup>22</sup> The total structural deficit is obtained when the cyclical budget component is removed from the actual budget deficit. It is calculated as the difference between the actual budget revenues adjusted for the effect of the deviation of the potential from the actual GDP with elasticity of 1 and actual budget expenditures adjusted for the effect of the deviation of the potential from the actual GDP with elasticity of 0. The structural primary deficit is equal to the total structural deficit reduced by the effect of the interest expenses.

fiscal impulse<sup>23</sup> in 2015, despite its positive contribution the previous year. Given the narrowing of the negative output gap in 2015, a negative fiscal impulse indicates counter-cyclical nature of fiscal policy.

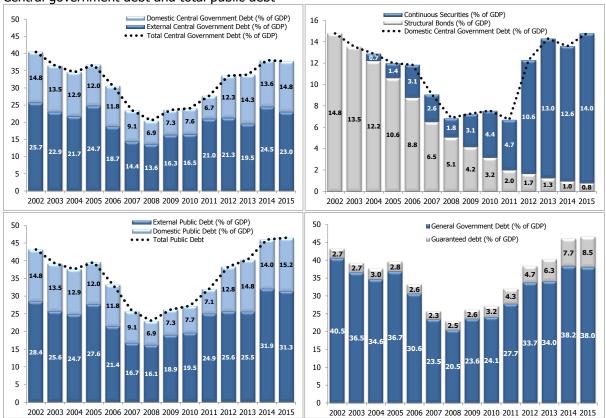


In 2015, the budget deficit was funded through domestic net borrowing and government deposits with the NBRM. The first half of the year was marked by funding through deposits, given that in mid-2014 the government used the favorable conditions in international financial markets to borrow and provide funding for the commitments in 2015, which increased government deposits with the NBRM. Also, a portion of the funds were provided by mobilizing resources in the domestic financial market. Net external borrowing was negative, given the regular repayment of government liabilities but also for the early repayment of the PCL-based debt to the IMF. In the second half of 2015, foreign debt was the main source of funding the budget deficit, coupled with more moderate withdrawal from domestic financial markets, with simultaneous growth of deposits. Net external borrowing in the second half of the year was mainly due to the issuance of the fourth Eurobond in December 2015 in the amount of Euro 270 million. In this month, the accrued Eurobond in the amount of Euro 150 million issued in 2005 was also repaid. In terms of activity on the domestic market, sales of government securities in the primary market in 2015 amounted to 9.2% of GDP, which is a decrease of 1.2 percentage points compared with the previous year. However, in 2015, the stock of government securities increased significantly. About half of the growth is explained by the government long-term borrowing, by issuing longerterm government bonds, and unlike the previous year, in 2015, shorter-term borrowing played a significant role in the total funding.

<sup>&</sup>lt;sup>23</sup> The fiscal impulse is defined as the difference between the cyclically adjusted balance in the previous and in the current year.
<sup>24</sup> In the figure, net domestic financing is the difference between total inflows of continuous and structural securities (treasury)

<sup>&</sup>lt;sup>24</sup> In the figure, net domestic financing is the difference between total inflows of continuous and structural securities (treasury bills and bonds) and total outflows from domestic debt repayment. The negative change in government deposits implies that they have been deposited on the account with the NBRM.

Chart 34 Central government debt and total public debt



Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

The central government debt<sup>25</sup> reached Euro 3,433.2 million in 2015, which is a moderate increase of 5.8% compared to the previous year. Central government debt to GDP ratio was 37.8%, which is a slight decline of 0.3 percentage points compared to 2014, which resulted solely from the external debt of the central government as a result of deleveraging to foreign lenders, with a simultaneous increase in the domestic component. On the other hand, total public debt<sup>26</sup> also increased on an annual basis (by 7.7%), but more moderately compared to the last six years. At the end of 2015, the public debt was Euro 4224.8 million, or 46.5% of GDP. The increase of 0.5 percentage points of GDP was largely due to the growth of external guaranteed debt of public enterprises and joint stock companies in state ownership as a result of increased borrowing intended for infrastructure projects, as opposed to the lower government debt<sup>27</sup> compared to the previous year. The analysis of the share of these two components in the total public debt suggests further reduction of the share of government debt (to 81.7% compared to 83.2% in 2014), despite the increasingly higher share of guaranteed debt (from 16.8% to 18.3%). The annual change in the public debt, from the aspect of residential structure arises from the domestic component, with an estimated growth of 1.2 percentage points of GDP compared to 2014. On the other hand, the external debt decreased by 0.7 percentage points of GDP, but still has the largest share in the total public debt (of 67.3%).

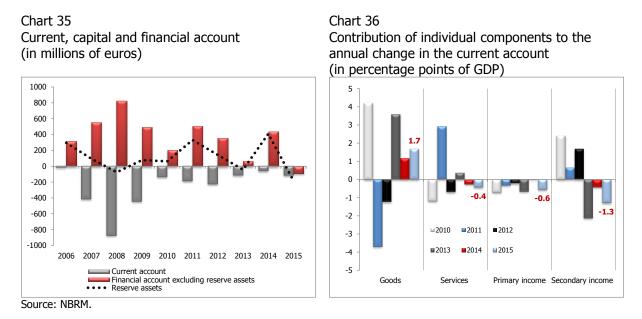
<sup>&</sup>lt;sup>25</sup> Refers to the debt of the central government including public funds, excluding municipalities.

<sup>&</sup>lt;sup>26</sup> The public debt is defined under the Law on Public Debt (Official Gazette of the Republic of Macedonia No. 165/14), according to which it is the sum of the government debt and the debt of public enterprises established by the state or municipalities, municipalities within the city of Skopje and the city of Skopje, and companies that are entirely or predominantly owned by the state or by the municipalities, the municipalities within the city of Skopje and the city of Skopje and the city of Skopje, for which the Government has issued a state quarantee.

<sup>&</sup>lt;sup>27</sup> Government debt is defined as a sum of debt of the central and the local government.

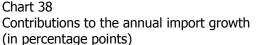
#### 3.4. Balance of payments, IIP and external debt

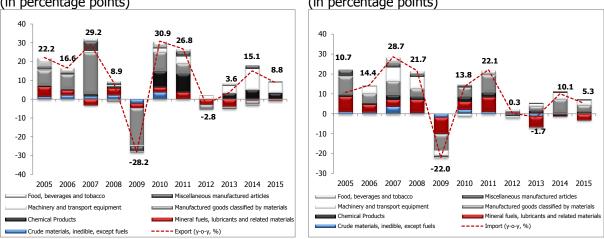
The deficit on the balance of payments' current account remained moderate in 2015, as well, not indicating larger imbalance in the external sector. However, in comparison with the previous year, the gap in the current account moderately increased by 0.6 p.p. of GDP and reached 1.4% of GDP. Deterioration was registered in all current account components, with the exception of trade deficit. The trade balance in goods improved given the growing net exports of new facilities in the economy and reducing imports of energy, amid a sharp decline in world oil prices. Also, during this year, there were no major pressures on the import from domestic demand. In 2015, the financial account registered net outflows of 1% of GDP, mainly due to short-term flows - currency and deposits, partly reflecting increased demand for foreign currency, given the inherent risks in the domestic environment. On the other hand, direct investment and external borrowing were sources of additional capital inflows. Given these changes in the current and financial account, part of the needs for external funding were covered by foreign exchange reserves, which declined on an annual basis, but remain adequate.



The analysis of foreign trade indicates an increase in both components, with faster growth in exports compared to the increase of import of goods. The main driver of positive performance in exports was the export activity of new industrial facilities in foreign ownership. On the other hand, most traditional exporting sectors, particularly metal manufacturing and textile industry, continued to register weaker results. The exports performance influenced imports, so the raw materials for the new foreign facilities were the most important factor for import growth. Investment imports made additional contribution to import growth. On the other hand, energy imports were significantly reduced, mainly due to lower import of oil products, caused by the significant decline in world stock prices of oil.

Chart 37 Contributions to the annual export growth (in percentage points)



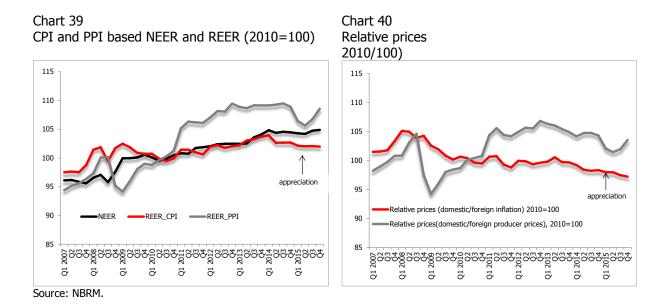


Source: NBRM.

With regard to the other current account components, in 2015, the surplus of services decreased by 0.4 percentage points of GDP. The deterioration of the services balance was mainly due to increased net outflows in the category of other business services and to a lesser extent, to lower net inflows from travel. On the other hand, the balance of transport services recorded a higher surplus, corresponding to the positive performance of trade in goods. The expansion of the deficit in primary income (of 0.6 percentage points of GDP) is mainly due to higher net outflows based on income from direct investment, largely reflecting higher estimated reinvested earnings. The surplus of secondary income registered an annual decline (of 1.3 percentage points of GDP), mainly due to lower net inflows of private transfers remained relatively stable.

The analysis of price competitiveness indicators of the Macedonian economy<sup>29</sup> indicates improvement compared to the previous year. REER deflated by consumer prices depreciated by 0.9%, while REER deflated by producer prices depreciated by 2%. Such annual changes stem from favorable movements in domestic prices relative to foreign prices, amid neutral influence of the change in the nominal effective exchange rate (NEER).

<sup>&</sup>lt;sup>28</sup> Lower government transfers are due to the high base in 2014, when net inflows of government transfers hit a record high.
<sup>29</sup> The analysis of indicators of price competitiveness is based on REER indices, calculated using weights based on the foreign trade without primary commodities. Primary products that are not included in the calculation are: oil and oil derivatives, iron and steel, ores and imported raw materials for the new industrial facilities in the free economic zones.

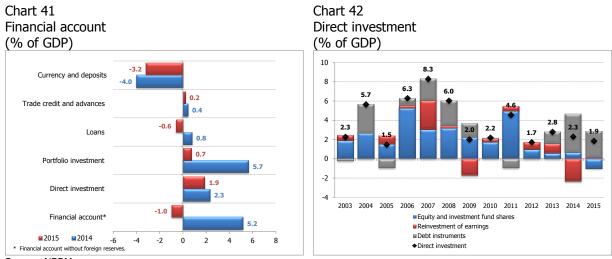


The financial account of the balance of payments in 2015 was characterized by net outflows of 1% of GDP. Considering the structure, the main source of outflows are shortterm flows in currency and deposits of other sectors, which this year is partly attributable to the present risks in the country and the propensity of economic agents to hold foreign currency cash. The effect of government external borrowing in 2015 on the financial account was positive, but small, unlike the previous year when it was a major factor in creating financial inflows<sup>30</sup>. Although at the end of 2015 a new Eurobond was issued in the amount of Euro 270 million, during the year, there was repayment of a relatively large amount of liabilities on the basis of PCL to the IMF and payment of the first issued Eurobond. Net debt of other sectors<sup>31</sup> in the form of long-term loans amounted to 0.5% of GDP, almost entirely derived from borrowing of public enterprises, to support construction of road infrastructure. In 2015, foreign direct investment provided additional inflows in the financial account of 1.9% of GDP, mostly in the form of intercompany debt, but was moderately lower compared to the previous year. Analyzing by sectors, direct investments of foreign investors were mostly made in the services sector<sup>32</sup>, manufacture of food products, beverages and tobacco, metal and mechanical products.

<sup>&</sup>lt;sup>30</sup> In 2014, the government borrowed on the international financial markets by issuing the third Eurobond in the amount of Euro 500 million, for the purposes of financing government needs in the period 2014-2015. In December 2015, the fourth Eurobond was issued in the amount of Euro 270 million. The funds from eurobonds during 2015 were used for early repayment of liabilities based on PCL to the IMF, i.e. repayment of accrued Eurobond, issued in 2005, worth Euro 150 million.

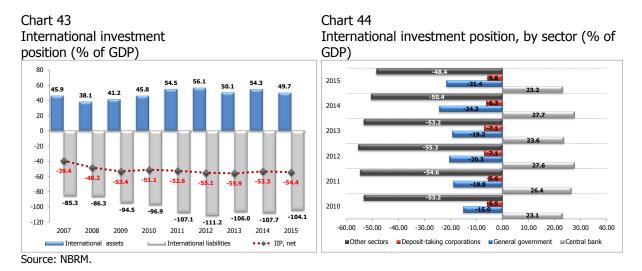
<sup>&</sup>lt;sup>31</sup> Other sectors category includes banks and non-banking corporate sector.

<sup>&</sup>lt;sup>32</sup> Part of the flows of foreign investments classified in the service sector relates to a facility subject to ownership transformation. The activity of this facility is actually part of the industrial production sector.



Source: NBRM.

At the end of 2015, the international investment position (IIP) remained negative and amounted to Euro -4,945.3 million or -54.4% of GDP, maintaining at the average level of the last few years. In the recent period, the stability in IIP is due to the equal rate of growth of both international assets and international liabilities, showing the improving financial integration of the Macedonian economy. Analyzing the structure of international liabilities, in 2015, it was dominated by foreign direct investment as a source of funding that increases the productivity of the economy, but does not increase its external vulnerability.



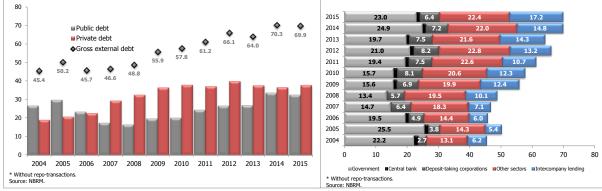
Compared to the end of 2014, net liabilities to the rest of the world slightly rose by 1.1 percentage points of GDP, given the faster decrease in international assets than that of international liabilities (4.6 percentage points and 3.5 percentage points of GDP, respectively)<sup>33</sup>. *The sector-by-sector analysis* of the international investment position of the economy shows that such changes are due to changes in the central bank position. Thus, the net assets of central bank have decreased as a result of the fall in international reserves. The decline in reserves follows their significant increase in the previous year, and the fluctuations during this period were mainly due to the cycle of external government borrowing and deleveraging. Thus, unlike the previous year, in 2015, the net external position of the state sector improved annually, reflecting the deleveraging to external

<sup>&</sup>lt;sup>33</sup> The analysis in absolute amounts shows deterioration of the international investment position compared to the end of 2014 as a result of the stronger increase of international liabilities compared to that of international assets.

creditors<sup>34</sup>. In 2015, the deleveraging process was also typical for depository institutions, leading to a reduction in their net liabilities based on long-term loans. The net position of other sectors improved as a result of the decline in net liabilities to foreign direct investors.

At the end of 2015, *the gross external debt* amounted to Euro 6,353.7 million, or 69.9% of GDP, which is a decrease of 0.4 percentage points of GDP, compared with the end of 2014. The fall in gross external debt is mainly a result of the decline in public debt, despite the higher level of private sector debt<sup>35</sup>. The reduction of the public debt is due to the reduction in long-term liabilities of the central government on the basis of long-term loans, primarily due to the repayment of the PCL to the IMF in February 2015, in the amount of Euro 153.4 million. At the same time, the debt of public enterprises has further increased due to the growing long-term debt to support road infrastructure. Observing private sector debt, there was a slight annual increase in the debt of the banking and non-banking private sector.





Gross external debt, by debtor and institutional sector (% of GDP)

In general, the external indebtedness indicators of the national economy generally show that the gross external debt is in the safe zone. At the end of 2015, the only indicator which classifies the economy in the group of highly indebted countries is the gross external debt to GDP ratio. The analysis of the dynamics of external debt indicates favorable movements in almost all solvency indicators compared to the end of 2014, with the exception of the debt servicing to export of goods and services and other inflows ratio which has been deteriorating. On the other hand, liquidity indicators suggest a slight deterioration (of 0.2 percentage points) of the external position, through the foreign reserves and shortterm debt ratio. However, the changes are small, and the coverage of liabilities based on short-term debt with the residual maturity of foreign reserves remains above one.

At the end of 2015, net external debt, as an additional indicator of the external position of the economy, amounted to Euro 2.363.7 million or 26% of GDP, which is an increase of 4.4 percentage points of GDP compared to the end of 2014. The increase in net external debt is a result of the growth of both public external net debt and net private debt.

Source: NBRM.

<sup>&</sup>lt;sup>34</sup> In 2015, the government made two major repayments - repayment of PCL to the IMF and full repayment of the principal on the first issued Eurobond. These repayments were made using part of the assets of the large government borrowing in 2014, which was intended to finance the budgetary needs for 2014 and 2015 and part of the new Eurobond issued in late 2015. <sup>35</sup> The analysis in nominal amounts shows that the decline of the gross debt was entirely due to lower public debt despite the growth of private sector debt.

Table 1			
External	debt	indicators	5

		Solver	ncy		Liquidity			
	Interest payments/ Export of goods and services and other inflows	Gross debt/ Export of goods and services and other inflows	Gross debt/ GDP	Debt servicing/ Export of goods and services and other inflows	5	Foreign reserves/ Short-term debt, with residual maturity*	Short-term debt/ Overall debt	
		in %	6		ratio	ratio	in %	
31.12.2004	2.41	129.3	49.3	12.4	1.14	0.89	30.3	
31.12.2005	2.66	147.0	56.3	11.06	1.67	1.04	26.7	
31.12.2006	3.44	131.3	51.8	21.7	1.95	1.34	29.0	
31.12.2007	2.78	119.3	51.3	19.4	1.35	1.08	39.8	
31.12.2008	2.66	116.9	54.1	10.2	1.29	0.95	35.2	
31.12.2009	2.43	131.0	57.8	11.8	1.29	0.94	32.9	
31.12.2010	3.22	140.4	59.7	13.9	1.49	0.99	27.9	
31.12.2011	3.12	148.4	64.6	16.8	1.78	1.18	25.2	
31.12.2012	2.92	142.1	67.6	13.1	1.64	1.03	26.7	
31.12.2013	2.51	137.3	67.3	15.8	1.64	1.08	23.3	
31.12.2014	3.02	149.4	74.1	17.3	1.82	1.13	22.3	
31.12.2015	2.68	146.1	74.0	20.1	1.62	1.10	22.0	
Moderate indebtedness criterion	12 - 20%	165 - 275%	30 - 50%	18 - 30%		1.00		

\* The moderate indebtedness criterion is according to the World Bank's methodology of calculating indebtedness indicators, which implies 3-year moving averages of GDP and exports of goods and services in the calculation of the indicators.

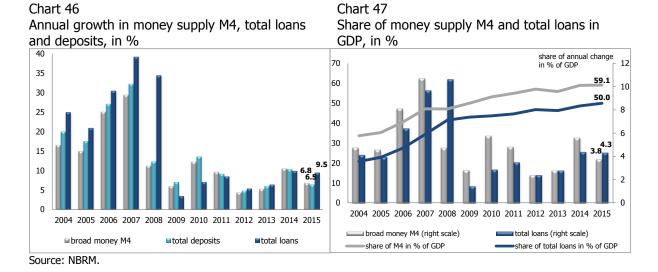
In compliance with "External debt statistics: Guide for compilers and users," published by the IMF.

According to the "Greenspan-Guidotti rule", a country should maintain full coverage of short-term debt at remaining maturity with gross foreign reserves.

#### Source: NBRM.

### 3.5. Monetary and credit aggregates

The increase in the money supply and the credit activity of the banks also continued in 2015. Amid further solid economic recovery, favorable developments in the labor market, and relatively high inflows based on private transfers in 2015, solid increase in the money supply M4 and the deposit base of the banking system has been registered. Such performance was additionally underpinned by intensified credit activity. However, in spite of the favorable macroeconomic environment, the deposit performance during the year was volatile. This is mainly associated with the uncertainty related to domestic political context and escalating economic and political developments in Greece, factors that affected the total volume of savings within the banking system. In such circumstances, the realized deposit growth for the entire 2015 equals about 70% of the increase registered in 2014. On the other hand, despite the oscillations during the year, the total credit activity of the banks for the entire 2015 preserved the last year growth pace. The total increase in the loans extended to the private sector during the year is slightly higher than the annual increase in the previous year. This performance in the credit market mirrors not only the growth in the supply, but also the higher demand, amid stable banks' perceptions of the riskiness to lend to the private sector and some improvement in the quality of the loan portfolio. Credit activity was also supported by the relaxed monetary policy and targeted measures taken by monetary authorities to support lending.



The broadest money supply M4 was growing also in 2015, but slower compared to the previous year, because of which at the end of December the annual growth decelerated and reduced to 6.8%, from 10.5% at the end of 2014. Apart from the slower movement, additional characteristic of the monetary growth in 2015 is the structure of the sources of growth. Namely, in 2015, there is significant decrease in the share of term deposits in the money supply growth at the expense of the growing contribution of highly liquid instruments - demand deposits and currency in circulation. Such developments, in part, can be related to the present risks caused by the uncertainty about domestic political developments, as well as the re-escalation of the crisis in Greece by mid-year, which increased the preferences of economic agents to dispose of liquid assets. However, the effects of these shocks were assessed as relatively limited and by the end of the year their gradual reduction was registered.

Table 2						Chart 48		
Money supply components - balance and changes							Money supply components - dynamics	
	Ba	Balanace as of Annual chang			nual chan	ge	annual change of M4,	35
	2013	2014	2015	2013	2014	2015		30
	in mi	illions of de	enars		in %		25 -	
Currency in circulation	20,706	23,221	26,300	2.9	12.1	13.3		25
Demand money	49,299	62,326	74,982	7.6	26.4	20.3		20
М1	70,005	85,548	101,282	6.2	22.2	18.4		
Short term denar deposits	57,112	57,151	53,554	-0.7	0.1	-6.3	3 10 -	15
Short term foreign currency	90,949	90,980	96,514	-3.5	0.0	6.1		10
M2	218,066	233,678	251,350	0.2	7.2	7.6		-
Long term denar deposits	41,509	51,673	53,517	31.0	24.5	3.6	0 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	5
Long term foreign currency	20,788	24,527	26,140	23.1	18.0	6.6	-5	0
Total deposits*	210,358	224,330	229,725	5.0	6.6	2.4	Currency in circulation     demand money     short term deposits     long term deposits	
M4	280,363	309,878	331,007	5.3	10.5	6.8		
* Without demand money								

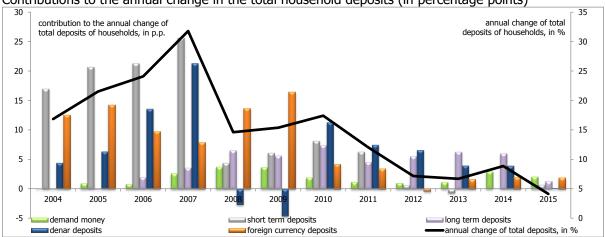
\* Without demand money Source: NBRM.

Taking into account the increased preference for liquidity, in 2015 more than two thirds of the growth in the total deposit potential of banks resulted from the increased funds in transaction accounts. Such a behavior was also registered in the corporate sector, which is not unusual having in mind the need for funds for current operating. However, the retention of funds on the current accounts was high also in the sector "households", signaling some prudence, given the inherent risks. The analysis of the savings in the banking system without demand deposits shows that in fact the annual growth is mainly due to the increase in household deposits, while corporate deposits registered moderate growth. Analyzed within the sector "households", the majority of the realized growth continues to result from the increased saving in the long run, but at significantly lower volume compared

with the performance in the past few years. On the other hand, after two years of annual drop, the short-term deposits in 2015 increased, which is an additional indicator of the increased propensity of households to deposit their funds in shorter maturities. In parallel with changes in the maturity structure, this period was also characterized with the change in the currency structure of the realized annual growth. Thus, after a long period of time, in 2015, certain increase in the propensity of households to save in foreign currency was registered, which makes them the main growth generator, given small positive contribution by the denar deposits. Regarding the corporate sector, the realized annual increase also arises from the short-term deposits and foreign currency deposits. Despite the slight increase in the propensity of save in foreign currency, however, the degree of euroisation (measured by the share of foreign currency deposits in total deposits) continued to decrease moderately, and in 2015 stood at 41%, on average, compared to 42, 4% on average in 2014.

Taking into account such developments in the structure of the annual growth of the deposit base from the viewpoint of maturity and currency, in August 2015, the NBRM Council adopted a Decision amending the Decision on reserve requirement<sup>36</sup>. The purpose of this measure is to encourage households to save in the banking system in the long term and in denars, which will contribute to more stable sources of funding for banks, as well as additional support to the "denarization" of the economy, a process that facilitates the reduction of the potential pressures on the foreign reserves, as well.

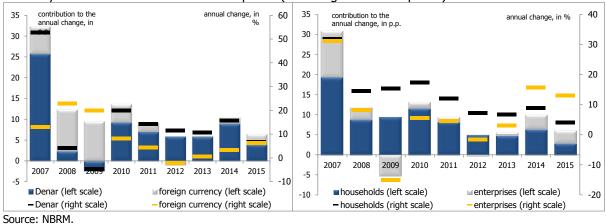




Contributions to the annual change in the total household deposits (in percentage points)

Source: NBRM.

<sup>&</sup>lt;sup>36</sup> Pursuant to the Decision on amending the Decision on reserve requirements the reserve requirement rate for the bank liabilities to natural persons in domestic currency with contractual maturity of over one year from 8% to 0% has been reduced, with these liabilities obtaining the same treatment as the liabilities with maturity over two years, for which rate of 0% since 2012 has been applied.

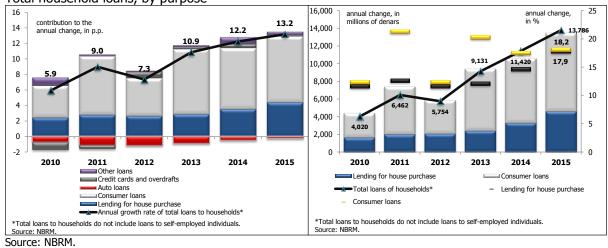




In 2015, amid further rise in the supply of and demand for credits, the activity on the credit market was sound. The annual increase in the banks' lending activity equaled 9.5%, similar to the dynamics registered in the previous year. The growth of credit supply was supported by favorable liquidity and solvency position of banks, stable expectations, present competition in the credit market, and the tendency to increase profitability. At the same time, the economic recovery has contributed for improvement of the creditworthiness of economic agents and simultaneous increase in their propensity to borrow from banks. The results of the lending surveys also support this statement. Namely, during the year, there was a constant increase in the demand for total loans, which is still more pronounced in the sector "households", mainly through the increased demand for housing and consumer loans. Consequently to these developments, credit flows directed to the sector "households" during the year have been constantly in the positive zone and at the end of the year they have accounted for the majority of the extended loans (about 57%). Within the individual types of loans, the annual growth is mostly due to the further increase in consumer loans, amid a simultaneous increase in housing loans. Moreover, in the last two years the consumer loans have been registering a very high growth rates, which could pose a risk to the further stability of the financial system. In order to act preventively on such signals for possible future growing risks from these loans, in December 2015, the NBRM Council adopted measures to slow down the high rise in the long-term consumer loans<sup>37</sup>.

<sup>&</sup>lt;sup>37</sup> For more details on the measures of the NBRM adopted in December 2015, see section 10.1. of this Report or as part of the Quarterly Report, February 2016, page 51.

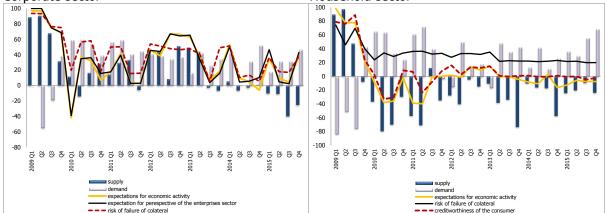
Chart 51 Total household loans, by purpose



In terms of corporate lending, the total loans of enterprises account for about 43% of the reported annual growth in 2015, which is slightly weaker performance than last year, when credit growth was almost equally divided between the two most important sectors of the economy. Considering these developments and in order to further stimulate lending to the corporate sector, the NBRM decided to extend the implementation of non-standard measures to encourage lending to net exporters and producers of electricity. In addition, with the Decision on amending the Decision on the methodology for determining the capital adequacy, the NBRM created conditions to facilitate access of enterprises (including small and medium-size enterprises) to the bank financial services.

#### Chart 52

Supply, demand of credits and banks' risk perception<sup>38</sup> (net percentage) Corporate sector Household sector



Source: Lending Survey, NBRM.

From the viewpoint of the maturity and currency structure of the reported annual growth, in 2015 a notable increase in the contribution of long-term lending to the

<sup>&</sup>lt;sup>38</sup> Explanation: the supply refers to the change in the lending terms (if the net percentage is positive, then the lending terms are tightened, while if it is negative, they are eased); the credit demand (if the net percentage is positive, the demand is higher, if it is negative, the demand is lower), the risk factors influencing the lending terms (if the net percentage is positive, then they aim towards lending terms tightening, while if it is negative, they act towards easing the lending terms). The chart pertaining to households presents the average of the net percentage of the risk factors influencing the lending terms when extend the housing loans and those having influence on the consumer loans. For more details on the lending surveys, please visit the NBRM website.

enterprises, and the sector "households" in the overall growth was registered, given the simultaneous maintenance of the preferences for borrowing in denars.

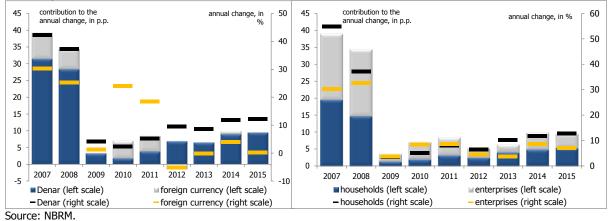
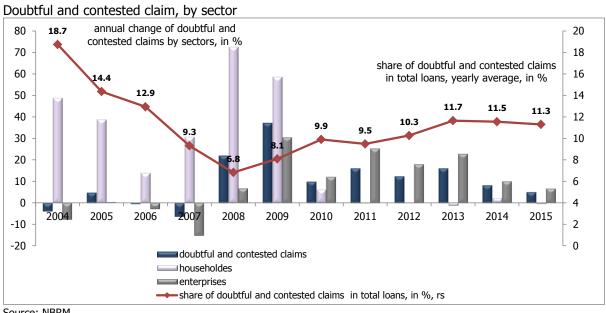


Chart 53 Currency and sector structure of total loans

Parallel with solid credit growth and favorable terms of maturity and currency structure, 2015 was characterized by slight improvement in the quality of the loan portfolio, which is evident also from the slower growth of nonperforming loans. Thus, the share of doubtful and contested claims in total loans, on average, amounted to 11.3%, which is a slight decrease compared to the average share in 2014 and 2013 when it equaled 11.5% and 11.7%, respectively.





Source: NBRM.

# IV. Macroeconomic environment and monetary policy in 2016 and 2017<sup>39</sup>

In accordance with the statutory provisions, the maintenance of the price stability as the basic monetary objective will continue to be the main goal of the NBRM monetary policy also in the following period. The NBRM will pursue its efforts towards maintenance of stable and competitive banking sector and support of the general economic policies without jeopardizing the achievement of the primary goal. Analyzing the monetary strategy, the NBRM will continue implementing the strategy of targeting a stable nominal exchange rate against the euro. The role of the exchange rate as a nominal anchor derives from the characteristics of the domestic economy, as a small and open economy that is highly dependent on the import of primary commodities. Such environment increases the importance of the exchange rate for maintaining price stability and stable inflation expectations of economic agents. The operational framework of the monetary policy, as before, will be placed on a flexible basis and it will enable efficient management of liquidity in the banking system and maintenance of the balance on the foreign exchange market. Thus, the monetary policy will continue to contribute to overall macroeconomic stability, as a key factor in creating a favorable environment for sustainable economic growth.

According to the NBRM projections in October 2015, relatively stable environment for monetary policy conduct in 2016 and 2017 is expected, but with further presence of external and internal risks. The latest NBRM projections in October 2015 foresee rapid growth of the economy, mainly influenced by exports and investments, with a positive effect being also expected from private consumption. The banking sector would further support economic growth through increased lending activity. It is expected that the external sector developments will be favorable in the next two years, despite the assessments for moderate expansion of the current account deficit in line with the strengthening of economic activity. The projected path of foreign reserves still indicates that the reserve adequacy indicators are in a safe zone. Inflation will be moderate and move within controlled frames, equaling approximately 2%, on average. Amid expectations for favorable economic conditions, in the following period, the NBRM will be mainly focused on monitoring the achievement of the projected foreign reserves levels and foreign exchange market developments, as well as the monitoring of all inherent risks, and will adjust the monetary policy accordingly.

The implementation of the projected macroeconomic framework is accompanied by risks stemming mainly from the external, as well as uncertain domestic environment. The risks that could spill over into the domestic economy through various channels mainly relate to the dynamics of recovery of global economic growth, and movements in the prices of primary commodities in world markets. This is especially true for the euro area, as our major trading partner, where the economic recovery is relatively weak and suggests recovery prolongation. The slowdown of China's economy and volatility in the financial markets are also additional risk factors that increase the uncertainty in the environment. In terms of domestic risks, they mainly arise from the volatile political environment whose economic effects were relatively limited, but there is still the risk of delayed effects in the following period due to possible greater restraint of domestic and foreign investors. Any materialization of the aforementioned risks will mean change in the environment for the monetary policy conduct, in comparison with the main expectations.

<sup>&</sup>lt;sup>39</sup> Based on the NBRM forecasts from October 2015.

In the following period, gradual acceleration in inflation is expected, which according to the October projections, will range from 1.5% in 2016 to 1.6% in 2017. The growth in prices in 2016 is in line with movements in import prices, amid the expected increase in inflation of our trading partners, while in the second half of 2016 larger pressures in food and energy prices are expected, as well, in line with the expectations for increase in world prices of oil and wheat. Risks associated with the inflation for 2016 are related to the volatility of world prices of primary products and uncertainty about their future movements. In 2017, inflation stabilization is expected, given the further recovery of the domestic demand, growth in foreign effective inflation and a slight increase in import food and energy prices. The inflation projection is accompanied by risks, mainly related to the movements in the world prices of primary products. In terms of domestic factors, the risks with respect to these projections are usually associated with variability in terms of weather conditions in the following period.

It is expected that favorable economic trends typical for 2015 will continue in the next two years, with a gradual acceleration of the rate of economic growth. Namely, the largest contribution to the growth is expected from the exports and investments, with positive effect being also anticipated from the private consumption. It is expected that increased utilization of the current export-oriented capacities as well as the assumptions for entry of new investments in this sector, combined with the expected recovery of the foreign effective demand, will support the export growth. The intensified exports and announcements of foreign investments in new facilities, together with fiscal stimulus in infrastructure will contribute to investment growth in the next two years. It is expected that these developments will have a positive effect on the labor market, which will contribute to the growth of household consumption. Additional support to domestic demand is also expected from lending activity. Under such circumstances, the GDP growth in 2016 would equal 3.5%, while in 2017 it would speed up even more and reach 4%. Given the high openness of the economy, the risks to the projected growth still arise from the global environment and developments in the external environment.

In conditions of solid liquidity and solvency of banks, it is expected that the economic recovery, the stabilized environment, the increase in banks' deposit potential, as well as the measures already taken by the monetary authority will contribute to greater financial support to the domestic economy through the banking sector. The total credit growth in 2016 is projected at 7.3%, while until the end of 2017, it is estimated to accelerate and reach 8.3%. The projected credit growth reflects the factors on the sides of both demand and supply. Namely, the positive outturns and expectations for the continuation of favorable trends in the labor market, and the projected solid growth in investment activity will contribute to a stable demand for loans in the following two years. On the supply side, support from the increase in the deposit base is still expected, as well as from the banks' stable risk perceptions. In the following two years, amid further economic growth and stabilization of the expectations, an intensified deposit growth has been expected. Downward risks around the projection of the credit and deposit growth are still present. The possible weaker economic recovery than anticipated, as well as the enduring uncertainty related to the domestic risk factors, could lead to a greater restraint in saving, limit the sources of funding of banks, aggravate risk perceptions, and reduce the willingness for private sector borrowing.

Projections for 2016 and 2017 show an external position that will ensure adequate level of foreign reserves. The current account deficit is expected to expand to 1.9% of GDP in 2016 and 2.4% of GDP in 2017. These estimates are based on assumptions about a small deepening of the deficit in the balance of goods and services. It is expected that the

increased trade deficit primarily result from further import of raw materials for the new facilities, as well as from investment imports. A substantial part of this deficit will further be funded by the secondary income, which is expected to remain at a relatively high level. It is expected that any further deepening of the current account deficit in 2017 will result from the further permanent reduction in surplus in secondary income and the increase in the deficit of primary income. In contrast, narrowing of the balance of goods and services, in terms of improvement of the global environment and expected further favorable effects of export-oriented capacities, is expected. In terms of financing, in the following period, most of the financing of the current account is expected to be provided through foreign direct investment and long-term external borrowing of public sector. Direct investment is expected to gradually increase up to 2.8% of GDP in 2016 and 3% of GDP in 2017. In terms of foreign reserves, in the following two years the transactions in the balance of payments are expected to lead towards further increase in foreign reserves and further maintenance of the indicators for the adequacy of foreign reserves in the safe zone. The main risks to the external position of the economy in this period still come from the global recovery pace and the trends on the developments of the world prices, and thus the domestic economic growth and their impact on the perceptions of investors.

Prudent fiscal policy, with gradual consolidation of the budget deficit and relatively stable level of public debt is expected in the next two years<sup>40</sup>. Fiscal policy is an important factor that affects the monetary policy setup, with the policy nexus being a key factor for achieving sustainability of the external position of the country and maintaining macroeconomic stability. In the coming period, the budget deficit is expected to narrow gradually. The public investments remain the priority goal of the fiscal policy. Namely, in the following period, realization of grand investment projects in road and railway infrastructure, as well as in local infrastructure and energy sector, agriculture, is projected. As anticipated, the deficit is going to be funded from external and domestic sources. Moreover, within the domestic sources, use of part of the accumulated government deposits with the NBRM, as well as issuance of government securities has been envisaged. This fiscal framework envisages moderate increase in the government debt in the following period, which will not ieopardize the sustainability of the public finance. The fiscal policy setup is accompanied by risks, same as the monetary policy, mainly arising from the external environment and its impact on domestic economic activity, as well as the accessibility to foreign financial markets.

The NBRM regularly monitors the current trends, presents risks and accordingly assesses the monetary policy, while remaining ready to take appropriate measures and actions aimed at maintaining price and financial stability in the economy.

<sup>&</sup>lt;sup>40</sup> The projections in the area of fiscal policy are based on the Draft Budget for 2016 and the Fiscal Strategy of the Republic of Macedonia 2015-2017. In line with the inclusion of the assumption of borrowing through Eurobond in 2015, some changes in the structure of financing the budget deficit for 2016 have been made by presuming the use of government deposits to cover budget needs, at the expense of smaller external borrowing compared to the Draft Budget.

# V. Monetary instruments

The environment for conducting monetary policy in 2015 was marked by numerous challenges from the external setting and unstable domestic political scene, which contributed in high uncertainty in most of the year. These circumstances created a need for appropriate changes in the monetary instruments by the NBRM, which were mainly directed towards efficient liquidity management of the banking sector, further support of lending activity and strengthen the stability of the banks' deposit base. In this regard changes to the mechanism for setting bank bids on the CB bills auctions were introduced, as well as in the setup of the reserve requirement system. These changes were aimed at keeping the trend of de-euriozation and stimulate long-term savings of households in domestic currency, given that developments in the banking sector indicate restraint of households because of the uncertain environment. The amendments allow the banks, through lower costs, to develop new deposit products that create greater stability of the deposit base. Shortly after their adoption (in August 2015), in the fourth guarter the initial positive effects of the new measures were visible, when intensified growth in households' long-term denar savings was registered. In the absence of inflationary pressures and pressures on the exchange rate, the key interest rate on the CB bills remained unchanged, at the historically lowest level of 3.25%, and therefore the NBRM continued to implement a policy of low interest rates and support lending activity. Despite the challenges in 2015, the macroeconomic stability was preserved, while the adverse effects of external and domestic shocks were neutralized, indicating appropriate reaction and monetary instruments setup.

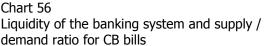
## 5.1. CB bills

In 2015, in the absence of price pressures and pressures on the exchange rate, the NBRM continued to apply accommodative monetary policy in order to maintain low interest rates in the economy, thus providing stronger credit support to the private sector. The interest rate on the main instrument remained at historically lowest level of  $3.25\%^{41}$ , while on the auctions, conducted by using volume tender<sup>42</sup>, the offered amount remained unchanged, i.e. equals Denar 25,500 million. However, in light of certain risks and need for their minimization, the mechanism of setting the banks' bids at CB bills auction has been changed twice during the year.

<sup>&</sup>lt;sup>41</sup> The last change in the interest rate on CB bills was made in July 2013

<sup>&</sup>lt;sup>42</sup> At the auctions of CB bills, which are held on the first day of the periods of reserve requirement (Decision on CB bills, "Official Gazette of RM" no. 166/13) volume tender was used (restricted bid amount and fixed interest rate).

Chart 55 CB bills stock and interest rate



2.5

2.0

1.5

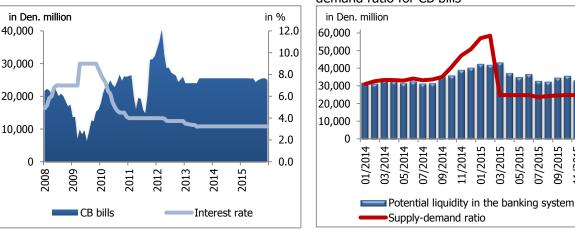
1.0

0.5

0.0

11/2015

9/2015



Source: NBRM.

The first change in the manner of setting the banks' bids at the CB bills auctions was made in March 2015. It was conditioned by the need to cease the trend of excessive demand at the auctions by banks, over their liquidity potential, but also to stimulate the growth of the banks' deposit base. Namely, the banks' bids began to be determined according to their *percentage share in the reserve requirement in denars*<sup>43</sup>. The change in the manner of setting banks' bids at the auction allowed reduction of demand at the level of the offered amount. In conditions of slower trend of saving in the domestic currency, the mechanism of setting banks' bids at the auction was re-examined in August 2015. Thus, in order to influence the bank motivation to attract deposits in domestic currency, the distribution of the amount offered at the auctions was connected with the adequate participation, which each bank has in total liabilities in domestic currency, without currency clause, on the system level. These changes were a complementary to the measures that were simultaneously introduced in the reserve requirements, to support the process of deeurization and stimulate long-term denar saving in the economy. Until the end of the year, the demand for CB bills was maintained on a relatively stable level (Denar 25,246 million, on average<sup>44</sup>).

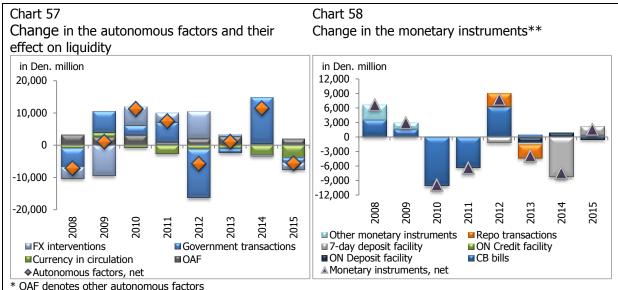
#### Annex 1. Review of the flows of creating and withdrawing liquidity in 2015

In 2015, the autonomous factors contributed to the decrease in liquidity in the banking system by Denar 5608 million, with the largest contribution of currency in circulation (of Denar 3868 million)<sup>45</sup>. The growth of currency in circulation was mostly caused by the higher disposable income of households, which resulted from the increase in pensions, salaries, and subsidies for agriculture.

<sup>&</sup>lt;sup>43</sup> The reserve requirement in denars is determined by applying the rates for different categories of denar liabilities in the banks' balance sheets, also including part (30%) of the amount of specified foreign liabilities at rates which apply to reserve requirement in foreign exchange.

<sup>&</sup>lt;sup>44</sup> Lower average level of CB bills compared to the fixed supply is explained by lower demand from one bank, which provided part of the necessary liquid assets through this instrument.

 $<sup>^{5}</sup>$  The liquidity withdrawal from the banking system was also influenced by the government transactions (by Denar 1,528 million) and foreign currency transactions of NBRM with supporters of net sale of foreign currency (about Denar 2.119 million). On the other hand, the liquidity growth was caused only by the other autonomous factors, with an effect of Denar 1,908 million.



\*\* Positive change means reduced liquid assets in certain instrument and increased liquidity in the banking system and vice versa

Source: NBRM.

Liquidity recorded significant growth in the first two months of the year, while the rest of the year the autonomous factors caused a reduced liquidity. In such circumstances, the banks have reduced the amount in monetary instruments by Denar 1,660 million, mainly in the placed deposit facilities with the NBRM (by Denar 1,235 million).

## 5.2. Deposit and credit facilities<sup>46</sup> with the NBRM

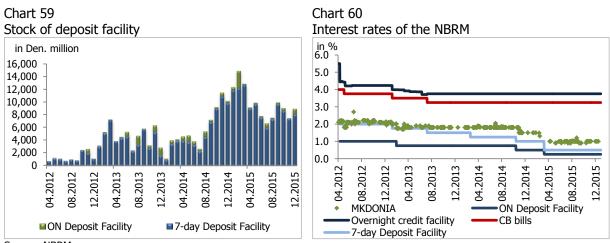
In 2015, when managed liquidity, the banks have been actively using the deposit facilities with the NBRM<sup>47</sup>. Earlier this year, amid increased liquidity position, banks were inclined to place excess liquid assets in the deposit facility. Banks mostly used the seven day deposit facility, which registered a steady growth, and in mid-February 2015 the stock of place funds reached Denar 23,085 million, the highest level since the introduction of the instrument. This increase was linked to the method of auctioning CB bills, applied until March 2015, when banks were obliged to allocate funds in deposit facilities with maturity of seven days without interest, if their demand on the auction was higher than their available liquidity.

Stable and long-term maintenance of high amount of funds in this instrument by certain banks, as well as the increasing trend of 7-day deposit stocks at the system level, were signal to lower interest rates on this instrument. Thus, in March, the NBRM reduced the interest rate on seven-day deposits from 1.0% to 0.5% and on overnight deposits from 0.5% to 0.25%. This move indicates that the main function of the deposit facility is placing the banks' short-term excess liquidity, rather than their maintenance on the accounts with the central bank for a longer period. Additionally, with the introduction of the new way of setting of the banks' bids at the CB bills auctions, from March 2015 the requirement for allocating seven-day deposits at the beginning of the reserve requirement period was canceled. The combined effect of the changes in the interest rates, the method of auctioning of CB bills, the impact of autonomous factors for reducing the excess liquidity, as

<sup>&</sup>lt;sup>46</sup> In 2015, while retaining liquidity at a relatively high level, the banks did not use overnight credit facilities. The interest rate on this instrument in 2015 remained unchanged at 3.75%.

<sup>&</sup>lt;sup>47</sup> Placing liquid assets in deposit facilities with the NBRM is on the initiative of banks. The overnight deposit facilities are available to the banks every day, while the possibility of placing liquid assets in deposits with maturity of seven days is available to banks once a week, i.e. every Wednesday.

well as the relatively stable credit growth by the end of the year contributed to the change in the dynamics of usage of seven-day deposits and reducing the amount of funds placed in this instrument to a level of Denar 8.016 million.



Source: NBRM.

In daily managing excess liquidity, the banks were using the overnight deposit facilities. In respect of dynamics of the usage of this instrument, in 2015 there were no significant changes and banks continue to use the possibility to place funds overnight more frequently towards the end of the reserve requirement periods.

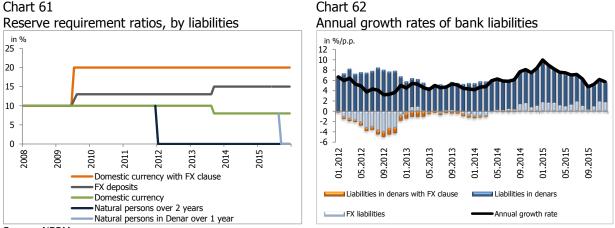
#### 5.3. Reserve requirement

During 2015, as in previous years, the reserve requirement instrument was used for attaining certain macro prudent goals as well. Thus, beside the basic function, money supply management and stabilization of the short-term interest rates on the money markets, the changes in the reserve requirement system in 2015 were aimed at minimizing certain risks in the banks' balance sheets. Namely, the changes were designed to further support the process of denarization, i.e. to give incentive for long-term savings in domestic currency and higher lending to the corporate sector.

Uncertainty related to developments on the domestic political scene, coupled with the escalation of the Greek crisis reflected negatively on the expectations of economic agents. The annual deposit growth slowed down and had negative impact on savings in domestic currency. In such circumstances, in August 2015 the NBRM reduced the reserve requirement ratio for banks' liabilities to natural persons in domestic currency with contractual maturity over one year, from 8% to 0%. This change enabled to extend the use of 0% reserve requirements ratios, first introduced in 2012, in order to boost stability of banks' deposit base, primarily in domestic currency.

Initial favorable effects of the new measure have been seen in October 2015 with the stabilization of the movement of the denar deposits, especially for the maturities over a year, with the annual growth of denar deposits of natural persons over two years being additionally intensified. Consequently, these changes contributed to a further significant contribution of denar deposits in the annual growth of total liabilities of the banking system, whose relative share in total liabilities<sup>48</sup> of the banks at the end of 2015 reached 55.7%.

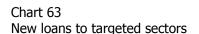
<sup>&</sup>lt;sup>48</sup> The analysis of the bank's liabilities trends is made on the basis of data on the banks' liabilities included in the basis for calculating the reserve requirement.

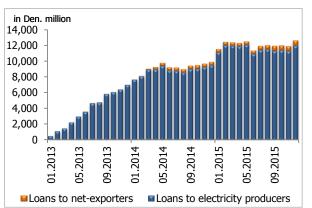


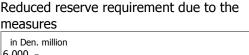
Source: NBRM.

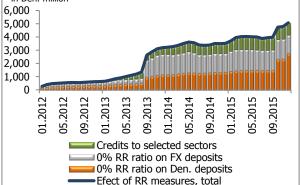
The use of aforementioned 0% ratios enabled increasing liquid assets in the banking system in the amount of Denar 1 371 million that can be used for further support of the credit growth. In addition, the NBRM continue with the implementation of the non-standard measure<sup>49</sup>, directed towards enhanced lending to the systematically important sectors for the domestic economy - net exporters and domestic electricity producers. This measure instigated introduction of favourabilities for the companies from these sectors such as applying lower interest rates and costs for commissions, collateralization facilities, increased availability, and creation of new credit products. In 2015, most of the growth of these loans, of Denar 2.740 million or a quarter of the annual growth of loans to the corporate sector was directed to net exporters. In the second half of the year, certain intensification was registered also in the loans extended to producers of electricity. Given the positive benefits of this measure for private sector crediting, in late 2015 the NBRM prolonged its validity until the end of 2017.

Chart 64









The reduction of the reserve requirement due to applied measures fully exceeded the contribution of the liabilities growth in determining the denar reserve requirement, so that reserve requirement level decreased by Denar 225 million, annually and amounted to Denar 17,297 million. The euro reserve requirement in denar equivalent amounted to Denar

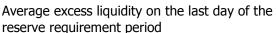
Source: NBRM.

<sup>&</sup>lt;sup>49</sup> The measure enables a reduction in the reserve requirement base of banks for the amount of new loans and investments in debt securities in domestic currency without currency clause issued by net exporters and domestic producers of electricity. This measure was introduced in late 2012 and its implementation began from 2013.

13,262 million and on annual basis it was higher by Denar 638 million, mainly explained by the moderate increase in the banks' foreign liabilities.

In terms of the reserve requirement fulfillment dynamics, in 2015 the banks again applied the so-called frontloading strategy, which differed in terms of 2014, when because of the increase in the purchased CB bills, they have lowered liquidity and applied the so-called backloading strategy<sup>50</sup>. The largest contribution to these changes had the enforcement of the new mechanism of setting the banks' bids at the CB bills auctions, and in this regard the abolition of the obligation for placing funds in seven-day deposits at the beginning of the reserve requirement period. The application of various strategies for liquidity management was efficient, while the average excess liquidity over the reserve requirement in 2015 remains low.





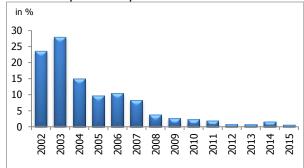
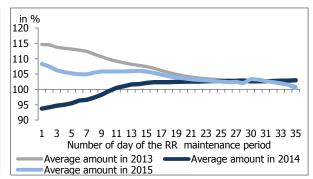


Chart 66 Dynamics of fulfilment of the reserve requirement



Source: NBRM.

#### 5.4. Repo operations for liquidity creation in the banking system

In 2015, the NBRM has been conducting regular weekly repo transactions auctions in order to provide short-term liquidity support to the banks.<sup>51</sup>. However, on the backdrop of excess liquidity, the banks showed no interest in using this instrument. The offer amounted to 517 million, on average, and the banks demanded liquidity at only two auctions, at which liquid assets totaling Euro 1,400 million were approved.

#### 5.5. Lender of last resort

In 2015, the NBRM has revised the framework of the credit of last resort in accordance with the most developed practices of placement of this instrument. Thus, in order to enhance the flexibility and reliability for the banks to obtain the necessary liquidity in case of crisis, when using this instrument, the banks along with the use of pledge of debt securities, foreign exchange and claims at the NBRM, it was enabled that banks can use pledge of claims on customers as collateral for obtaining liquidity through this instrument. In 2015, given the solid liquidity position, the banks were in no need to use this instrument.

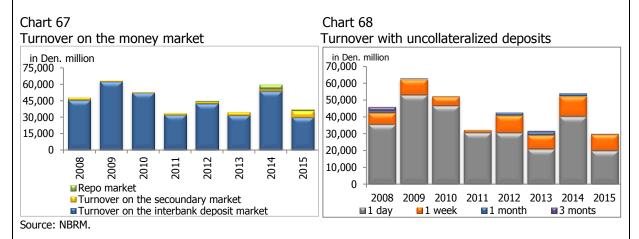
<sup>&</sup>lt;sup>50</sup> In backloading strategy of meeting reserve requirement, the banks begin the fulfillment period with a lower level of liquidity in terms of reserve requirements and by the end of the period, increase the liquid assets. In contrast, in the so-called frontloading strategy, the banks begin the period with a surplus over the reserve requirement and the average execution until the end of the period registers a downward trend.

<sup>&</sup>lt;sup>51</sup> Auctions for providing seven-day liquidity are conducted once a week, i.e. every Friday.

#### Annex 2. Developments on the money markets<sup>52</sup>

The regulatory changes related to CB bills auctions had a significant impact on the bank activity on the money markets in 2015, in terms of trading by market segments, volume and the maturity of transactions. The decrease in the interest rates on deposit facilities was transmitted on the market interest rates, which registered moderate downward movement.

In 2015, the trade volume on the money markets in the Republic of Macedonia decreased by 38% on an annual basis. The annual decrease is explained with the reduced trading on the interbank money market of uncollateralized overnight deposits compared to the previous year, when in conditions of implementation of the so-called "mandatory" seven-day deposits, the banks traded intensively on this market segment. In 2015, the MKDONIA interest rate equaled 0.99%, on average, and it was lower by 0.8 p.p. annually, same as the average decline of quoted SKIBOR interest rates, along the entire yield curve.



On the other hand, the secondary trading with securities increased primarily related to enhanced trading with CB bills in the second half of the year, in terms of implementation of the new auctioning manner. Furthermore, the diversification of the ownership structure and the extension of the average maturity of government securities contributed to the growth in trade with these securities, of about 42%. Banks provided a small part of the necessary liquidity also on the repo market.

<sup>&</sup>lt;sup>52</sup> The money market in Macedonia includes the following segments: the uncollateralized deposit market, secondary market of short- and long-term securities, secured deposits market (repo market).

# VI. Foreign Reserves Management and Investment

The management of the foreign reserves of the Republic of Macedonia (hereinafter referred to as: foreign reserves) is exceptionally responsible task of the NBRM. It is performed in line with the main goals: protection of assets, i.e. ensure security of placements and investments, providing liquidity for the purposes of maintaining stability of the denar exchange rate and for smooth execution of the foreign payments, and finally, ensuring return on investment, which increases the value of the foreign reserves.

The foreign reserves investment has faced with challenges of maintaining the value and income of the invested funds also in 2015. Namely, in 2015, the European Central Bank continued to boost the liquidity on the financial markets in order to stimulate economic activity, leading to a further decrease in yields on the safest financial instruments, and in some countries yields entered the negative zone, up to medium maturities. In such circumstances, the investment framework was broadened with additional investment opportunities that have still been providing positive returns and low credit risk. Also, within the envisaged limits for interest rate risk management, investing in longer maturities from the yield curve for euro investments was enhanced. At the same time, investment strategy continued to be focused on moderate increase of exposure towards the currencies with prospects for higher relative yields and exchange rate values against the euro. For this purpose, in expectation for normalization of the monetary conditions in the US, the investments in financial instruments denominated in US dollars increased. Investments in other currencies have been actively monitored and re-examined in terms of expectations regarding the movement of their relative values and yields, which led to the abandonment of investments in Norwegian krone at the end of the year, while increasing investments in British pounds. The total rate of return on foreign reserves in 2015 amounted to 0.74%, annually.

#### **6.1.** Changes in the foreign reserves management framework

In managing foreign reserves, the NBRM applies prudential approach based on the key investment objectives: safety, liquidity and profitability. The fulfilment of these multiple objectives, given the divergent monetary policies of globally influential central banks, volatile movements on the international financial markets, low or negative yields and extremely volatile exchange rate movements has been a great challenge since the crisis, so there is a need for continuously review of the investment strategies.

In 2015, the biggest challenge was the investment of portfolio in euros, as the most significant part of the foreign reserves, which is in function of the applied monetary strategy of denar exchange rate targeting. The adverse movements in the euro area markets prompted a review and change of investment strategy and risk management framework, i.e. moderate acceptance of higher price and exchange rate changes in the financial instruments value, in order to obtain positive investment performance. Therefore:

- The maximum maturity by type of securities, as well as minimum credit rating of the instruments was revised;
- The countries where the foreign reserves can be invested were re-examined and the allowed levels of maximum exposure for certain countries in the euro area were increased, and at the same time was enabled to invest in financial instruments euro bonds issued by countries in the European Union;

- The scope of investment instruments in US Dollars was expanded, by introducing debt securities issued by US agencies with an expected state support. In addition, within the investment portfolio managed in the RAMP Program (see Annex 3) was enabled to invest in debt securities with a variable interest rate and debt securities indexed to the inflation rate;
- The modified duration of the investment portfolio in euro has been adjusted tactically during the year, thus creating space for investments with positive results on the longer part of the yield curve;
- The central bank activities were monitored regularly, as well as the market reactions, in
  order to open long active positions in currencies where there were expectations for
  higher yields and appreciation trends. On the other hand, given the downward trend in
  raw material prices, the justification of investments in currencies that depend on these
  market movements were also re-examined.

# Annex 3. Activities related to the improvement of the institutional capacity in the foreign reserves management

One of the main legally prescribed tasks of the NBRM is management of the foreign reserves of the Republic of Macedonia. This function is extremely responsible given that incorporates management of national assets, which beside certain purposes for the current functioning of the economy, have a role in ensuring financial security of future generations. The process of its implementation in the NBRM requires setting up a well-established management system. For that purpose, in mid-2014 the NBRM started cooperation with the World Bank within the RAMP - Reserves Advisory and Management Program, which specializes in providing technical assistance and exchange of experiences in the field of management and investment of foreign reserves.

In the previous period, three advisory missions with the experts from the World Bank were held. In August 2014, together with the experts the strategic asset allocation and possibilities for improvement in this initial and maybe most important stage of the investment process were reviewed. In addition, the opportunities for applying active management strategies and taking positions in order to improve the performance of invested foreign funds were elaborated. At the end of 2014 the second mission was held, whereby together with the World Bank experts it was also discussed about the opportunities for implementing the best practice in the accounting area, as well as in the area of legal support of the investment decisions and agreements. In mid-2015, the focus of discussions within the third working meeting with experts of the World Bank was in the area of back office operations and manner to increase flexibility in this segment. Beside that, in September 2015 the NBRM was the host - organizer of the international Workshop focused on issues in the area of the back office activities in the process of foreign reserves management.

Much of the knowledge gained during working meetings with the World Bank experts have been used in the operational implementation of the process of foreign reserves management process. Thus, firstly, the regulatory framework for implementing this process was revised and improved, with the process of strategic asset allocation also being enhanced. At the end of 2015 new Foreign Reserves Management and Investment Policy was adopted which sets broader and clearer definition of the fundamental role of foreign reserves, defines the guidelines for determining the currency structure of the foreign reserves, while a significant novelty was the establishing of single criterion for the lowest permissible credit rating and the definition of market risk tolerance. Also new Foreign Reserves Management and Investment Rules were passed, which incorporated the guidelines set in the Policy, with the strategic guidelines for foreign reserves management for 2016 also being adopted. In preparing the investment guidelines for the upcoming period, the model for asset allocation - Workbench, developed by the World Bank was applied.

Activities in the area of improving the foreign reserves management process continue, especially in the application of active portfolio management. To this end, operationalization of the model for monitoring the risk in the active investment position is envisaged. Additionally, the initiated training of employees in the organizational units involved in the foreign reserves management

process is planned to continue. During the the previous period of cooperation of the NBRM with the World Bank, approximately 30 employees involved in the process had the opportunity to attend workshops organized by the World Bank. This enables improvement of knowledge on a wider basis and building institutional capacity within the NBRM, which is crucial for maintaining a high level of efficiency, professionalism and quality of human resources engaged in the foreign reserves management process.

#### 6.2. Investment conditions at the international financial markets

In circumstances of expansive monetary policy implemented by the European Central Bank (hereinafter referred to as: ECB) the investors on the financial markets in the euro area increased the demand for safe instruments. The new broadening of the ECB quantitative easing through purchase<sup>53</sup> of securities from market participants caused a decrease in government bond yields to new record lows (for some governments causing even negative levels of the yields up to the middle part of the yield curve), and narrowing spreads between yields on peripheral and core euro area government bonds <sup>54</sup>. Low price pressures and weak economic growth in the euro area boosted the expectations of market participants that the ECB will take additional measures for monetary stimulation<sup>55</sup>, which contributed to maintenance of low yields level until the end of the year.

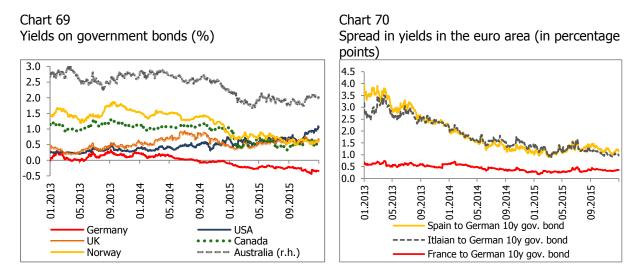
On the other hand, market participants were expecting further normalization of the FED's policy, due to the favorable performance of the US economy. However, in the first half of the year the FED has refrained from taking the first step to increase interest rates because of the volatility in global financial markets, influenced by turbulent movements in the markets in China<sup>56</sup> and in the emerging countries. Amid favorable developments in the US economy and stabilizing developments on the financial markets, at the meeting in December, the FED met the market expectations and decided to increase the target interest rate by 25 basis points to 0.25%-0.50%. The divergence in the stance of the FED and the ECB policies during the year led to a further widening of spreads between yields on US and European government bonds. This movement was more pronounced in securities with shorter maturities, which are typically influenced by monetary policy.

<sup>&</sup>lt;sup>53</sup> In March 2015 purchase of euro denominated securities with investment rating issued by central governments of the member states of the euro area, agencies and European institutions was envisaged, whereby the securities have maturity ranging from 2 to 30 years, as a supplement to Covered Bond Purchase Programme 3 and the Asset-Backed Securities Purchase Programme.

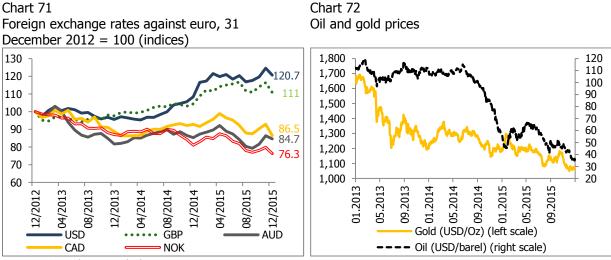
<sup>&</sup>lt;sup>54</sup> These movements in the euro area markets remained despite concerns in regard to Greece, especially with the coming to power of leftist SYRIZA party, which had greatly opposing attitude over demands from international creditors. After months of stalemate in the negotiations, in July, Greece reached an agreement with creditors, which was followed by the signing of a third financial assistance plan.

<sup>&</sup>lt;sup>55</sup> In December, the ECB decreased the deposit facility interest rate by 10 basis points at the level of -0.30% and prolonged the implementing the quantitative easing program for additional six months, i.e. until the end of 2017.

<sup>&</sup>lt;sup>56</sup> Significant turbulence in the markets was caused by unexpected devaluation of the Chinese yuan by the central bank of China in mid-August. For investors, this indicates weaker performance of the Chinese economy, which has fueled concerns about the effects globally.



The perceptions about upcoming tightening of FED monetary policy stance, despite the eased policy of other central banks on a global level<sup>57</sup>, contributed for significant US dollar appreciation against several currencies, and more substantially against the euro. Also, the value of the British pound against the euro increased during 2015, amid sound economic performance. The value of currencies connected to commodity products, such as the Canadian dollar and the Norwegian krone, dropped, mainly due to the fall in oil prices and a loosening stance of monetary policy in these countries. The Australian dollar also decreased in value, due to the lower price of iron ore and uncertain future prospects of the Chinese economy as the most important trading partner of Australia.



Source: ECB and NBRM calculations.

In 2015 additional specific was the decrease of the prices of raw materials, especially energy<sup>58</sup>, which contributed in lower inflation expectations. The price of gold did not register decrease as oil, but still has a downward trend as in the previous two years, moving very

<sup>&</sup>lt;sup>57</sup> Bank of Japan continued the purchase of considerable amount of securities. At the beginning of 2015, the Central Bank of Switzerland reduced the already negative interest rate and abandoned the target of the exchange rate of the domestic currency against the euro (1.20 francs per euro), which caused depreciation of the euro against the Swiss currency. Relaxed stance of the monetary policy was also characteristic for the central banks of Australia, Canada, and Sweden, which in two, and three occasions, respectively, cut the key interest rate.

<sup>&</sup>lt;sup>58</sup> In this context, the fall in oil price that began in the second half of the previous year continued in 2015, and decreased from US dollar 55.8 /barrel on 31 December 2014, to US dollar 35.8/barrel on 31 December 2015. The fall in oil price is due to the constantly higher levels of supply, amid relatively stable global demand. During the year, the OPEC member countries decided not to reduce the production quota and each of them strove to preserve the market share.

volatile. Having in mind the appreciation of the US dollar and absence of price pressures, at the end of 2015 the price of gold equaled US dollar 1,062.3 US, down by 11.4% compared to the previous year. During the year, the central banks' demand for gold was high, as result of diversification purposes of foreign reserves in light of economic and geopolitical risks. Namely, on a net basis the central banks purchased 588.4 tonnes, approximately the same quantity purchased in the previous year (583.9 tonnes)<sup>59</sup>.

#### 6.3. Foreign Reserves Investment

#### 6.3.1. Credit exposure

The safety of the investments of foreign reserves has high importance in determining the investment strategy of the NBRM. In accordance with the determined investment framework, the largest share of the foreign reserves or 71.3%, on average, were invested in financial instruments with the highest credit rating (from AAA to AA-), i.e. with the lowest credit risk exposure. However, this feature of the investments imposes limited investment opportunities for balancing with the value preservation principle in conditions of low and negative yields. Therefore, a portion of the foreign reserves investments was into instruments with credit rating from A + to A-, which are also distinctive for the high level of safety, but enable moderate positive return. A small part of the foreign reserves was invested in financial instruments with investment credit rating, which were mainly instruments with residual maturity of less than one year.

Chart 73

Structure of investments by credit rating, annual average

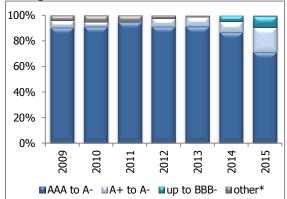
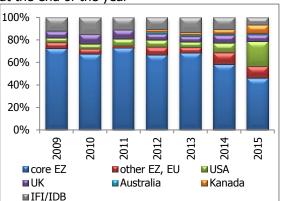


Chart 74 Geographic structure of investments at the end of the year



\* "other" category includes IMF, BIS. Source: NBRM.

\* the abbreviation IMF/MRB denotes the international financial institutions and development banks.

In terms of geographic distribution of investments, the NBRM applies the principle of diversification by country, where investments are made according to set quantitative limits<sup>60</sup>. On average, about 42.8% of investments during the year were distributed in financial instruments of the core euro area countries - Germany, France and the Netherlands, and some were directed towards other countries of the euro area, as well as the European Union countries. Significant increase was registered in the investments in financial instruments issued by US issuers, up from 8% at the end of 2014, to 22% in 2015, in line with the taking tactical active position towards this market in anticipation of upward movement of the yields and value of the US dollar in future.

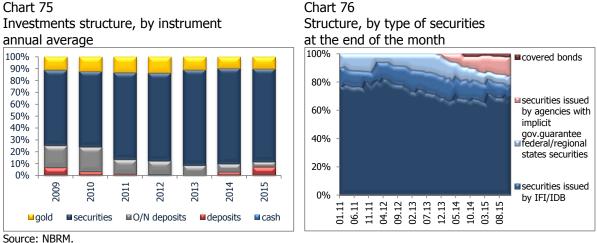
<sup>&</sup>lt;sup>59</sup> World Gold Council, Feb. 2016.

<sup>&</sup>lt;sup>60</sup> When defining the scope and the quantitative limits of the investments by country, the internal credit rating is taken into consideration, besides the high long-term credit rating given by the international rating agencies.

#### 6.3.2. Foreign Reserves Liquidity

The operational liquidity of the foreign reserves to carry out transactions on the domestic foreign exchange market and for the timely execution of obligations abroad was provided by maintaining liquidity portfolio in euros and US Dollars, placed in short-term liquid assets, current accounts, but also in liquid government securities with residual maturity up to 1 year. Funds within the liquidity portfolio during 2015 accounted for approximately 13.4% of the total foreign reserves.

The most significant part of the foreign reserves are invested within the investment portfolios (euros, US dollars and other currencies), which in 2015 accounted for 76.5% of foreign reserves, on average. Within these portfolios, the investments mainly focuses on securities, and moderate part is placed in deposits with foreign commercial banks<sup>61</sup>. Given that the securities are represented both in investment and in the liquidity portfolio, these financial instruments, with an average share of 78.4%, are predominant in the structure of foreign reserves by instruments.



The largest share of the securities, or approximately 69.1% during 2015, accounted for the highly liquid government securities and securities with government guarantee, which allows optimal compliance of the liquidity and safety principle. Investments in instruments issued by international financial institutions<sup>62</sup> also had more significant share (10.5%), which beside the high level of safety are higher yielding compared to government securities. At the same time, the investments in securities with an anticipated government support, which reached 12.3%, also increased. Certain share of investment was directed also in securities issued by regional governments of Germany, Australia and Canada, with an average share of 6.5%, and in securities covered by public debt.

Besides the regular yield from securities investments, in 2015, the NBRM continues to use the securities lending transactions, as an additional way of ensuring a certain level of income. They are performed through simultaneous conclusion of repo and reverse repo transactions with foreign commercial banks with which the NBRM has concluded master agreements.

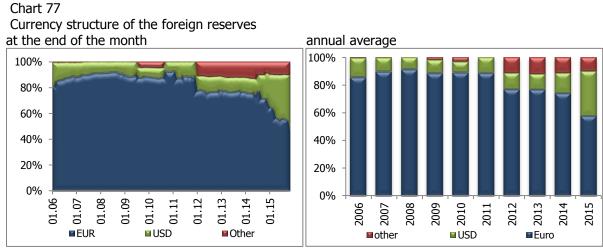
<sup>&</sup>lt;sup>61</sup> Investments in deposits within the investment portfolios are limited to maturity of up to six months.

<sup>&</sup>lt;sup>62</sup> European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), the Nordic Investment Bank (NIB).

Within the foreign reserves structure, the share of the gold recorded a moderate increase in 2015. In conditions of instability in international markets and fall of the price of the precious metal, this change in the share is due to the decreased amount of foreign reserves<sup>63</sup>, given unchanged quantity of gold. Gold, which is usually a financial instrument with lower market yield, during the year was placed in short-term deposits with first-class foreign commercial banks.

#### 6.3.3. Currency structure<sup>64</sup>

The breakdown by currency has been conducted with due respect for the basic strategic commitment for the foreign reserves' currency structure, and thus the primary function to dispose with sufficient funds for supporting the monetary strategy of targeting the exchange rate. Consequently, the funds invested in financial instruments denominated in euros are most common within the foreign reserves, with an average share of around 57.9%. However, compared to the previous year, the share of these investments dropped by 16.3 percentage points, while investments in financial instruments denominated in US dollars increased. These changes in the currency structure are part of tactical investment strategy to increase exposure to the US Dollar, as a currency with the prospect of higher yields in the following period. This active investment position provides adherence to the safety and liquidity principles, given that the US currency is a global currency in which international reserves are held worldwide, and the currency pair euro/US dollar is the most traded on the global currency markets.



Source: NBRM.

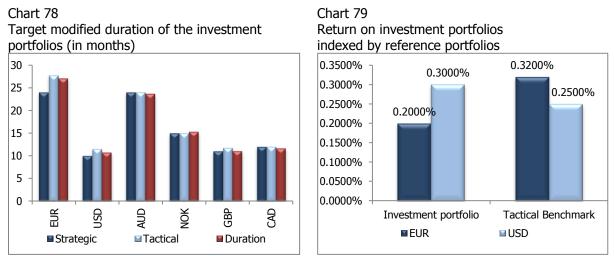
In 2015, the average annual share of other investment currencies was 9.8%, and compared with the previous year, it registered a moderate decline. This is due to the reexamination and the abandonment of investments in Norwegian krone at the end of the year in anticipation of further depreciation of the currency and unfavorable yields.

<sup>&</sup>lt;sup>63</sup> During 2015, foreign reserves decreased by Euro 174.8 million. The decrease in the foreign reserves is mostly due to a net outflow of funds for the payment of government obligations abroad, in the amount of Euro 205.2 million (substantial outflows were registered for the early repayment of liabilities to the IMF during the first half of the year, as well as on the basis of due Eurobond in December, which were only partially compensated by the inflow of new, fourth issue of euro bond). In addition, the interventions on the foreign exchange market contributed to the fall in the foreign reserves in the amount of Euro 34.2 million. On the other hand, the market value of foreign reserves increased by about Euro 45.5 million, mainly due to the appreciation of the US dollar. The foreign reserves increased their value also as a result of the income based on investment of funds.

<sup>&</sup>lt;sup>64</sup> The currency structure is analyzed in terms of the foreign reserves reduced by the amount of gold.

# 6.3.4. Interest rate risk exposure and performance of the foreign reserves investment

The placement and investment of foreign reserves was mainly in securities which carry interest income and coupons, but are also exposed to changes in their market prices or current yields. This exposure to interest rate risk is controlled by setting target modified duration, for the securities held for trading, and maintenance part of the securities as held to maturity<sup>65</sup>. Thus given the expectation of maintaining low yields on the securities and their further decrease, in the investment portfolio in euros a relatively long target modified duration was set. Moreover, in order to flexible adjust to market conditions during the year, the modified duration on a tactical level has constantly been re-examined.



Source: NBRM.

On the other hand, in expectation of normalization of monetary conditions in the US, the funds within the investment portfolio in the US currency have a relatively short modified duration of approximately one year. In respect to the other investment portfolios the modified durations were defined depending on the current level of yields and expected trends in future.

Positioning by specific financial instruments, in accordance with the framework set by the target modified duration of the investment portfolios, enabled investment performance in accordance with the market yields. The performance with the investment portfolio in euros was moderately lower compared to the return on benchmark<sup>66</sup>, having in mind that the positive contribution to the return from investments in government securities was partially neutralized with the negative contribution of the investments in government securities issued in currency different than the national (euro bonds). In the investment portfolio in US dollars, the performance was moderately higher than the return on the benchmark, which is due to the better performance of the invested financial instruments within the investment portfolio, primarily the agency securities and securities issued by international financial institutions.

 <sup>&</sup>lt;sup>65</sup> Securities held to maturity in euros and in US dollars are one third of investments in securities. At year-end, the residual maturity of the securities in euros amounted to approximately 7.8 months, while the portfolio in US dollars amounted to approximately 8.6 months.
 <sup>66</sup> Referent index of securities' prices and money market index, comprised of real financial instruments, with modified duration,

<sup>&</sup>lt;sup>66</sup> Referent index of securities' prices and money market index, comprised of real financial instruments, with modified duration, which corresponds to the target modified duration of the investment portfolio. Before the beginning of 2015, the NBRM revised the composition of the instruments within the reference portfolios, by reducing its scope only to government securities. This was done in accordance with the discussions and recommendations of the World Bank experts, and to better encompass the results and risks in active asset management.

In regard to investments of part of reserves in other currencies, this year as well confirmed that this investment decision is justified, with the return on investments in original currency ranging from 0.5% to 2.19%. The total rate of return from foreign reserves investments in 2015, which include the realized income as well unrealized price and realized exchange rate changes, equaled to 0.74% annually.

## VII. Activities and trends in the payment systems

In 2015, the value of total payment operations grew similar to the growth of the nominal GDP, amid growth of the turnover carried out through the Macedonian Interbank Payment System (MIPS) and Interbank Clearing Systems (KIBS) and a moderate decline in internal payment operations of banks. In payment instruments, the value of credit transfers increased annually, amid significant growth of electronic credit transfers. High annual growth rates were also registered in the number and value of transactions with payment cards. Also, the new era of digital payments in the Republic of Macedonia was perceived through the greater use of the Internet and mobile phones (payments which have doubledigit annual growth), and in 2015 for the first time through the use of unattended terminals. These trends are evidence that the progress of technology in the field of payments in the world is rapidly transferred to the domestic payment operations by offering new technical and technological solutions for executing payments, and thus increasing the availability of payment services for natural persons and legal entities.

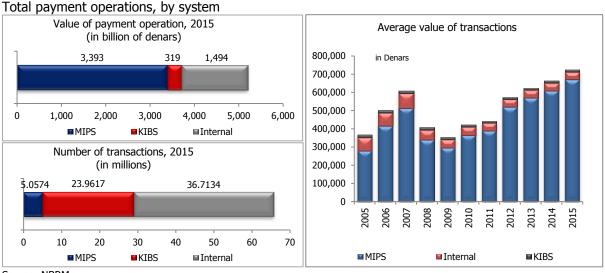
During 2015, the NBRM continued the tradition of enriching the knowledge and exchange of experience with experts from the financial sector, by organizing regular international conference on payment and securities settlement systems, as well as workshops in the field of payment systems oversight, payment statistics and instruments for financing international trade. These educational events contributed to the drafting of new by-laws from the field of payment systems oversight and payment statistics, which are aimed at harmonizing the national legislation with the legislation of the European Union.

#### 7.1. Payment systems

In 2015 the total value of payment operations amounted to Denar 5,206 billion (registering an annual growth of 6.0%), of which the majority (65%) was carried out through MIPS.<sup>67</sup> The total number of executed transactions in 2015 amounted to 65.7 million transactions, whereby the majority (56%) were executed through internal payment systems of banks. MIPS processed averagely 20,642 transactions per day and the maximum number of processed transactions per day reached 66,318. In 2015, the average value per transaction in MIPS went up by 10.1% annually, to Denar 670,868.

<sup>&</sup>lt;sup>67</sup> In 2015, MIPS operated in real time with availability of 100%. The total number of direct participants in MIPS at the end of 2015 was twenty-two: the NBRM, fourteen commercial banks, the Macedonian Bank for Development Promotion - AD Skopje, the Ministry of Finance of the Republic of Macedonia, the Health Insurance Fund of Macedonia, the Interbank Clearing Systems - AD Skopje, the Central Securities Depository - AD Skopje, International Card Systems - CASYS and MasterCard International.





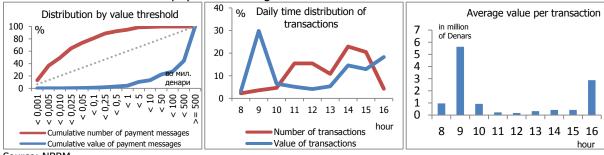
Source: NBRM.

In 2015, *the distribution of the number of payment messages* carried out by the MIPS according to the defined thresholds of the value of an individual payment message shows the largest share (23.5%) of payment messages worth Denar 1,000 to Denar 5,000, with about 95% of the total number of payment messages being worth below Denar 1 million. *The distribution of value of payment messages* carried out by MIPS shows the largest share (55.5%) of payment messages worth over Denar 500 million, with payment messages worth over Denar 1 million accounting for 96% of the total turnover carried out through MIPS.

*Daily time distribution of transactions* through MIPS shows that most of the transactions (22.9%) were settled between 14:00 and 15:00, with about 85% of transactions being settled between 11:00 and 16:00. Analyzing the value of transactions, the highest value of transactions (with an average value per transaction of Denar 5.6 million) was settled between 9:00 and 10:00 (29.9% of the total value of transactions during the day), while, the smallest value of transactions (3.2%) was settled between 8:00 and 9:00 (with an average value per transaction of Denar 0.9 million).



Indicators for distribution of payment messages and transactions in MIPS<sup>68</sup>



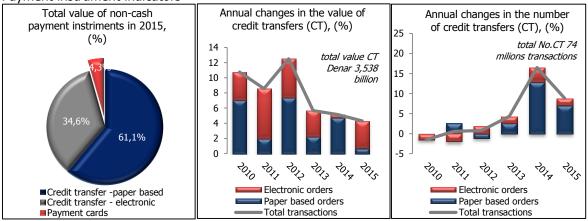
Source: NBRM.

<sup>&</sup>lt;sup>68</sup> Payment message is an electronic form of payment instrument that can contain multiple individual transactions (e.g., summary payment order PP32 that allows transfer of funds from one payer to more beneficiaries).

#### 7.2. Payment instruments

Modern technical and technological solutions in the field of payments and the use of sophisticated media and devices for executing payments had positive effects in the development of payment operations in the country. Important innovation in 2015 in credit transfers was the introduction of the system for a quick recovery, as an innovative technology that enables cash payment through terminal of various services (payment of water bills, radio broadcasting fee, cable TV, mobile telephony, insurance, tuition fees, etc.). Besides cash payments, this system offers the ability to perform non-cash payments or payments through the electronic wallet of the client, using a personal computer or mobile phone by the user of the service. In credit transfers, the trend of high annual growth in the number and value of credit transfers made by mobile phone for different types of payments by legal entities and natural persons, continued (51% and 77%, respectively). Regarding card payments, the year was marked by high rates of annual growth in the number (34%) and value (61%) of transactions made through the Internet.

In 2015, the high share of credit transfers within the non-cash payments continued (95.7%). Moreover, as a result of new technical and technological solutions for executing non-cash payments, increased share of electronic credit transfers was registered in total non-cash payments (34.6%) or increase of the share of 1.8 p.p. compared to 2014. The total value of credit transfers registered an annual growth of 4.3%, with the largest contribution of electronic credit transfers (3.6 p.p.), which indicates a change in habits for executing payments to natural persons and legal entities, specifically increasingly using the advantages of electronic banking. Despite the higher share of paper orders in carrying out credit transfers (72% in the number and 64% in the value of credit transfers), the value of electronic credit transfers registered high annual growth of 10.6%, while the number of electronic credit transfers recorded a more moderate annual growth rate of 5.9%.

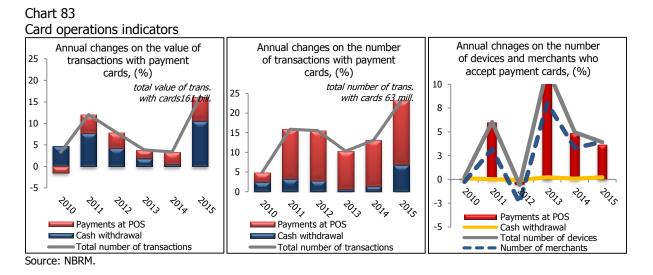




Source: NBRM.

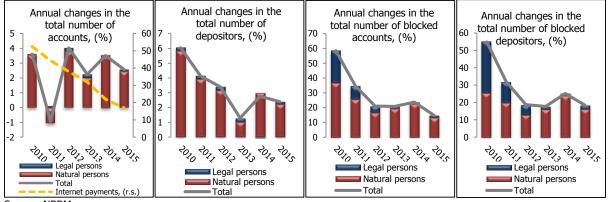
In the area of card operations, the trend of increasing non-cash payments at points of sale in trade continued, despite the considerable contribution to raising cash in the growth the value of transactions with payment cards in 2015. In 2015 the value of transactions for the payment at points of sale in trade increased by 18.5% on annual basis, with annual growth of cash withdrawal through ATMs of 11.6%, which indicates a change in the payment culture of legal entities and natural persons for mass use of payment cards at points of sale, and thus relatively reducing the use of cash. The total number of transactions with payment cards in 2015 registered rapid annual growth of 23.2%, in which the growth

of payments in trade had the largest contribution (16.4 p.p.). Positive trends in the use of the cards were also seen through the increase in the total number of issued cards in circulation in the Republic of Macedonia, which recorded an annual growth of 4.3% and at the end of 2015 was 1,670,765. At the same time, the infrastructure for using payment cards has expanded as a result of the growth in the number of devices that accept payment cards in trade and increase in the number of merchants that accept payment cards (both categories registered an annual growth of about 4%).



The total number of open accounts of natural persons and legal entities in 2015 grew by 2.6%, amid consistently high annual contribution to the number of open accounts of natural persons (2.4 p.p.), followed by appropriate growth in the number of depositors, natural persons. The digitalization of payments entails increased growth of accounts available for internet payments (17.0%), although their share is still low in the total number of open accounts (3.8%). In 2015, the downward trend in the annual growth of the number of blocked accounts (14.8%) and blocked depositors (18.4%) continued, with high contribution of natural persons with 13.3 p.p. in the number of blocked accounts and 16.1 p.p. in the number of blocked depositors. In the last three years, the growth of blocked accounts of legal entities considerably decelerated (3.8% on average, compared with 31% on average for the period 2009-2012). In 2015, compared to 2014, blocked depositors, legal persons increased share of only 1 p.p., while for the entire period 2012-2015, increase greater than 2 p.p. was not registered on an annual basis. In terms of natural persons, there was a moderate increase in the number of blocked depositors, which in 2015 accounted for 4.9% of the total number of depositors in the banking sector. The growth rate of blocked depositors, natural persons in 2015 slowed down and was 27.4%, compared to 47.6% as it was in 2014. For comparison, in the period during and after the acute phase of the crisis (2009-2010), the number of blocked depositors, natural persons grew and for once to three times on an annual basis.

Chart 84 Payment system development indicators



Source: NBRM.

#### 7.3. Overseeing payment systems

In order to strengthen the oversight role of the NBRM in the field of payment system operations during 2015, new by-laws for overseeing payment systems were developed which regulate the criteria for payment systems classification, payment system operations standards, as well as the manner and methodology for overseeing payment systems. By meeting the requirements of the new regulation by the payment systems it is expected to improve the efficiency and safety of the arrangements for executing payments, clearing and settlement and beyond will limit systemic risk, increase transparency of operations and will contribute to financial stability. The new manner and methodology of overseeing payment systems, above all, is expected to achieve strengthening of the off-site overseeing payment systems, through the submission of periodic and ad hoc reports on their operations, submitting annual plan of activities related to testing regular and backup solutions and procedures, as well as submitting annual plan for risk assessments in the payment system. This regulation is based on the new internationally accepted payment system operations standards known as "Principles for Financial Market Infrastructure"<sup>69</sup>, whereby the approach of the European Central Bank for payment systems classification is simultaneously introduced, as well as the respective obligations of individually classified payment systems in fulfilling the principles and corresponding capital requirements.

#### 7.4. Other activities in the payment systems

In terms of achieving the development and catalyst role of the NBRM in the payment systems, during 2015, the NBRM implemented a number of activities which were primarily directed towards the harmonization of national legislation in the field of payment systems with European Union regulation. Thus, the new by-laws for submitting payment operations data were discussed through several meetings and workshops with banks and other payment service providers (reporting agents). The new regulation is expected to ensure the preparation of high quality and comprehensive data on payment statistics, as well as methodological and operational readiness of payment statistics of the NBRM in accordance with the requirements of the European Central Bank.

<sup>&</sup>lt;sup>69</sup> Principles for Financial Market Infrastructure are defined by the Committee on Payment and Settlement Systems at the Bank for International Settlements and the International Organization of Securities Commissions in April 2012.

Within the IPA project for harmonization of the national legislation in the area of the free movement of capital and payment and financial services with the European Union legislation, the NBRM has undertaken a number of activities (by holding interactive meetings, discussions, workshops and study visits) aimed at transposing European Union directives related to payment services, electronic money and settlement finality in the legislation of the Republic of Macedonia. The transposition of these directives in our legislation will contribute to greater consumer protection, achieving a high level of transparency, as well as encouraging of the use of more efficient types of payments. The new law on payment services and by-laws that are in development, are expected to achieve increase in the competition in the field of payment services.

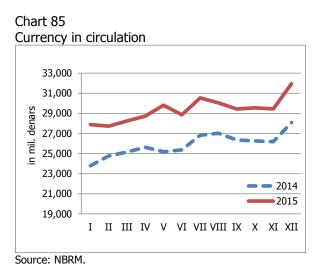
Maintaining the continuity in transferring knowledge and information to the country's financial sector for trends and developments in the field of payment systems at the international level, the NBRM, in cooperation with the central banks of the Netherlands and Portugal, in 2015 organized the Eight Conference on Payment Systems and Securities Settlement. Possibilities for the development of e-commerce and challenges in the field of payment cards and payments innovation are challenge and attractive field of interest for the Republic of Macedonia, that were discussed at the conference in terms of the further increase in non-cash payments in the country. Particular interest was dedicated to the integration processes in the field of payments in the European Union, the ongoing development of the Single Euro Payments Area (SEPA) Project and trends in systems for securities settlement and the realization of the project "TARGET2-Securities". Favorable conditions for the opening of transaction accounts, expansion of banking networks, particularly in the underdeveloped areas, new financial products and the corresponding financial education, are just some of the aspects covered by the issue of financial inclusion, at which the NBRM pays particular interest. At the conference, the smooth functioning of payment transactions, which entails the need to protect and enhance the physical availability and accessibility of payment services for consumers and businesses, as well as the need to develop the trade finance, were discussed.

In that context, in addition, the NBRM organized a training course for the government authorities for bank guarantees as an instrument for financing international trade. The training course for bank guarantees created benefits for the government authorities in terms of developing analytical knowledge, diagnostic skills and proper application of bank guarantees as an instrument of protection against risks arising from contractual relationship.

## VIII. Issuance and management of the banknotes and coins of the Republic of Macedonia - vault operations

#### 8.1. Currency in circulation

As of 31 December 2015, the currency in circulation amounted to Denar 31,948 million<sup>70</sup>, which is by Denar 3,868 million or 13.8% more compared to the end of 2014.

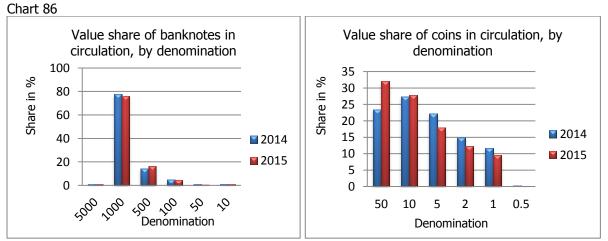


The structure of the currency in circulation suggests that at the end of the year, banknotes and coins make up 97.1% and 2.9%, respectively of the total value.

In terms of the number of pieces of currency in circulation, the share of banknotes equals 27.0% (79.6 million pieces), and the share of coins equals 73.0% (215.4 million pieces).

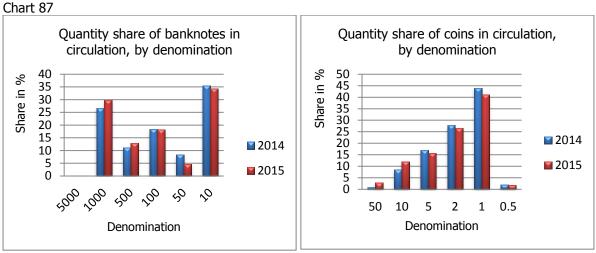
Banknotes in denomination of Denar 1000 (76.2%) and Denar 500 (16.6%) account for the most of the total value of banknotes in circulation. Other banknotes

account for 7.2% of the total value. In 2015, coins in denominations of Denar 50 (32.2%), Denar 10 (27.8%) and Denar 5 (18.0%) had the largest share in the value of coins.



Source: NBRM.

<sup>&</sup>lt;sup>70</sup> In the data presented on the currency in circulation, the quantity and value of the collector coins were not included, which were made and put into circulation by the National Bank, of artistic, cultural and promotional reasons. Collector coins are available, primarily abroad, and also in the Republic of Macedonia. The value of these coins in circulation, as of 31 December 2015, was Denar 2.9 million.



Source: NBRM.

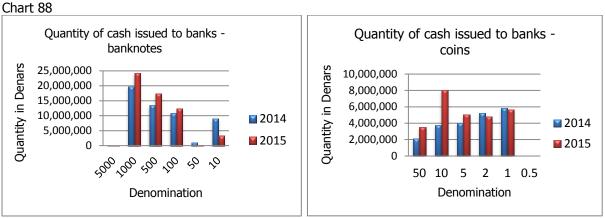
According to the number of pieces, the share of banknotes in denomination of Denar 10 (34.4%), Denar 1000 (29.7%) and Denar 100 (18.2%) was the largest. Other banknotes constitute 17.7% of the total quantity of banknotes in circulation. The coin in denomination of Denar 1 (41.2%) constitutes the most of the total coins in circulation.

In the course of 2015, efforts were made to improve the quality of currency in circulation in lower denomination structure by increasing the coins in circulation in denomination of Denar 10 and Denar 50, which circulate in parallel with banknotes of the same denomination. This effect is due to the fact that coins have a longer life, i.e. they are less damaged. Unlike them, banknotes, especially those with lower denomination value and greater frequency of use, have a shorter life and their damaging is significantly faster.

#### 8.2. Supplying banks with banknotes and coins

During 2015, the central vault of the NBRM and the five sections for handling cash outside Skopje<sup>71</sup>, distributed cash to banks amounting to Denar 34.4 billion (increase of 23.2% compared to 2014). At the same time, they received cash from banks in the amount of Denar 30.6 billion (decline of 22.9% compared to 2014). The analysis of the denomination structure of banknotes and coins suggests that, when issuing and receiving banknotes and coins, the largest banknote is the denomination of Denar 1000 with a share of 41.1% in 2015 (i.e. 36.2% in 2014) and the most common coin is the denomination of Denar 10 with a share of 26.7% in 2015 (versus 24% in 2014).

<sup>&</sup>lt;sup>71</sup> Because of unprofitable operations, the NBRM during October 2015 began the process of restructuring of cash operations by gradually reducing the Subunits for Cash Operations. As of December 2015, the Subunits for Cash Operations throughout the country stopped operating.



Source: NBRM.

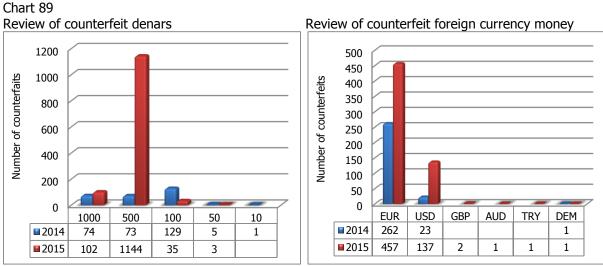
#### 8.3. Processing and destroying banknotes and coins

During 2015, the quality control process of banknotes in circulation in the central vault and in the subunits for cash operations in the country covered all received banknotes. Of the total processed banknotes, 15.8 million banknotes (13.6 million in 2014) were destroyed due to unfitness or damage. Most destroyed banknotes were denominated in Denar 1000 and Denar 100 (56.3%). In 2015, all coins in denominations of 1, 2, 5, 10 and 50 Denars that were received were processed, 170 thousand pieces of which being labeled as unfit for circulation.

## 8.4. Expertise of suspicious / counterfeit money

In 2015, the NBRM, as a single institution authorized to determine the authenticity of banknotes and coins denominated in denars or in foreign currency, continued to perform expert analysis of counterfeit money successfully. In order to strengthen the capacity for accurate detection of suspicious and counterfeit money with officers engaged in daily cash handling, in 2015, the NBRM continued with the specialized training of staff in banks. Through presentations and direct handling of authentic and counterfeit money, expertise was conveyed to participants that would be applied in their future activities.

As for the number of expert analyses committed during 2015, of the total 1415 suspicious Denar banknotes received, the expert analysis carried out found that 131 banknotes were genuine, while the remaining 1284 were counterfeit banknotes. The number of detected counterfeit banknotes detected during 2015 increased by 4.6 times compared to 2014. The banknote in denomination of Denar 500 had the largest share in the number of counterfeit banknotes, solely due to organized putting into circulation counterfeits with this denomination value. Consequently, of the total number of detected counterfeit Denar banknotes in 2015, the most common is the denomination of Denar 500 (1,144 pieces), or 89.1% of the total number of counterfeits, followed by the denomination of Denar 1000 (102 pieces), or 7.9 % of the total number of counterfeits. The total value of Denar 1000 (35 pieces), or 2.7% of the total number of counterfeits. The total value of Denar counterfeits in 2015 amounted to Denar 677,650.00, which is a negligible share compared with the total value of the currency in circulation.



Source: NBRM.

In terms of committed expert analyses of received suspicious banknotes and coins denominated in foreign currency in 2015, of total 670 analyses, 599 counterfeit and 71 original money were identified. Of the total number of counterfeit banknotes, the Euro banknotes (303 pieces) and US dollars prevailed (137 pieces).

Unlike previous years, in 2015, there were also detected counterfeit coins in foreign currency. It is a question of quantity of 154 coins, of which 152 are counterfeit coins in denomination of 2 euros and two are counterfeit coins in denomination of 1 euro.

The general conclusion is that counterfeit banknotes and coins are of relatively poor quality, allowing simple and easy identification and determination of their properties. The expert analysis of the technique of making counterfeit banknotes found that they are mostly made on a plain paper without security features, by using computer (scan and print) or color copy machine.

#### 8.5. Issuance of collector coins

Due to increased interest, during 2015, the NBRM, in addition to the existing two series of collector coins ("Icons of Saints" and "Zodiac Signs") put into circulation another series of collector coins – "Angel's Day".

The collector coins are unique, representative and of great artistic value that contributes to the promotion of the Republic of Macedonia abroad. Although the sale of collector coins is primarily intended and takes place abroad, there has been considerable interest in them and in the country. During 2015, there were sold 481 sample of collector coins.

# **IX.** Statistics

The statistical function of the NBRM is defined by the Law on the NBRM, as one of its tasks. Quality and timely statistical data are a key prerequisite for appropriate decision making in monetary policy. Furthermore, the official statistical data which are prepared by the NBRM are intended to inform the public about the financial and macroeconomic environment and trends in the economy, as well as its relations with the rest of the world. On this basis, through the Law on State Statistical system. Statistical research carried bodies of statistical surveys within the national statistical system. Statistical research carried out by the NBRM is presented in the Statistical Survey Program. Currently, the NBRM produces comprehensive data on monetary statistics and interest rates statistics, balance of payments, international investment position, direct investments, external debt and claims, foreign reserves and foreign currency liquidity, real effective exchange rate and etc.

In order to ensure international comparability of statistics and improve their quality, the NBRM, permanently undertakes activities for monitoring and compliance with international and European statistical standards, in the field of the statistical surveys it is responsible for. Therefore, there is continuous cooperation with the international institutions like the International Monetary Fund, the World Bank, the Bank for International Settlements and the European institutions, above all, the ECB and Eurostat, while at the same time, statistical data are being disseminated to these institutions on a regular basis as an additional channel for dissemination of data to users worldwide. During 2015, the NBRM continues to move in the projected path of gradually achieving the strategic goals in the area of statistics, such as: (1) continuous monitoring of international and European statistical standards, for further harmonization of the existing statistics and introducing new statistical surveys; and (2) enrichment of the scope and detail of publicly available statistical data, taking into account the reporting burden, as well as a faster and easier access to them for external users. This year has been marked by the following activities, being part of medium-term projects: the development of the financial accounts statistics and the projects for enhancing the dissemination of data in the field of external statistics. The strengthening of the cooperation with other bodies for statistical surveys should be pointed out, primarily with the SSO and the MF, which led to the creation of new sources of data for the financial accounts statistics. The progress in the field of statistical surveys was confirmed by the evaluation in the European Commission Progress Report for the Republic of Macedonia in 2015, which states that the NBRM has compiled external statistics as required by the new statistical standards.

In particular, over the past year, further progress was made in the statistics of following areas:

- in the area of external statistics, the activities for increased coverage and data quality continued, primarily with data on direct investment abroad, where within the balance of payments, compliance with international standards was achieved, by including data on reinvestment of earnings and trade credits in the direct investment abroad. Also, time series data on flows of direct investment abroad were produced and published, by type of investment, the country of the non-resident direct investment enterprise and the economic activity of the resident investors. Also, the collection of more detailed data on trade credits started, in accordance with the latest statistical requirements in this segment;
- solid progress has also been made in the project for developing a single statistical data warehouse for external statistics, which is to provide optimal management of statistical

databases in the NBRM, as well as prospective dissemination of more detailed data to the Eurostat and other international organizations and to external users;

- as part of the activities for establishing securities statistics, the reporting system for investments of residents in foreign securities markets on a security-by-security principle has started. Also, the system of data sources for investments in securities on the domestic market, by residents and non-residents, was drafted, whereby the collection of these data will begin during 2016;
- in the area of monetary statistics, the NBRM increased the scope of data within the balance and the survey of other financial institutions and the survey of financial institutions, by including the data on leasing companies and financial institutions, starting from 2014 onwards, thereby achieving almost complete coverage of the sector "other financial institutions". Furthermore, detailed data on other financial institutions, by subsector were published. The medium-term project for harmonization of the interest rates statistics with the European regulation was rounded by publishing new harmonized data. Also, following the committed analyses, the NBRM decided to introduce an integrated system of data collection for statistical and supervisory purposes. The system implementation is envisaged as a long-term project, aimed at achieving adequate coverage of the monetary statistics in accordance with ECB recommendations and new EU regulations on balance sheet statistics and investment funds statistics, as well as optimal solutions in the part of data collection;
- during 2015, in the area of financial accounts statistics a series of activities have been taken to establish new and rational use of the existing data sources for the needs of the financial accounts. Within these activities, a new data source was established by supplementing the data sets that are collected through the annual accounts of business entities. Also, the intensified cooperation with the Ministry of Finance has led to the preparation of a new survey on the stock and flow of financial assets and liabilities of the government. The NBRM, in cooperation with the State Statistical Office, organized a second cycle of training courses for reporting companies on statistical survey designed for the needs of the financial account and the flow of funds matrix continued, with constant efforts for ensuring greater consistency of the currently available data on the individual institutional sectors;
- within the strategic commitment for improving the quality of communication with reporters and users, a number of activities were taken. In order to reduce the reporting burden, a set of new by-laws on the reporting of credit transactions with nonresidents has been adopted, simplifying the reporting procedure and decreasing the scope of documentation submitted to the NBRM. In terms of communication with users, new more detailed data in the area of monetary and interest rates statistics were published within the Statistical Appendix of the Quarterly Report. In February 2015, within the activities of financial education, presentations were organized for journalists, at which among other things, the statistical function of the NBRM was introduced and the possible ways of analytical interpretation of the available data. During the year, the NBRM launched a new project on building a tool for internal data analyses and a statistical web portal for data users;
- regarding the efforts for appropriate application of international statistical classifications, the NBRM established a centralized statistical database of sectors of legal entities, in accordance with the database of institutional sectors from the SSO of the subjects from the domestic economy. Also, a "Guide for Sectorization of the Institutional Units" has been prepared for data reporters and users, in order to facilitate the implementation of the new National Classification of Institutional Sectors, according to ESA 2010.

The practice of constant improving of the capacity of the NBRM in the area of statistics, continued this year, through training courses and collaboration with the central

banks of the EU Member States, through the Instrument for Pre-Accession Assistance of candidate countries for EU membership - TAIEX, as well as collaboration with the IMF through a technical mission in the area of monetary statistics.

# X. Supervisory and regulatory function of the NBRM

#### **10.1.** Supervisory regulatory framework for 2015

Over the past year, several amendments to the supervisory regulatory framework were adopted, of which the most important are related to the operations of savings houses, the functioning of the Credit Registry, the introduction of special protective measures, the determination of connected persons, the methodology for determining the capital adequacy and the credit risk management regulation.

In order to align to the standards that apply to the operations of banks in the Republic of Macedonia, in 2015, the by-law for savings houses was amended that reinforces the operation standards for savings houses pertaining to the capital adequacy, currency risk management, the method of organization of the internal audit and the information systems security of savings houses.

The amendments to the by-laws of the Credit Registry were aimed to ensure compliance with the provisions of the Law on Personal Data Protection, by prescribing the manner of access of natural persons to their data and information in the Credit Registry, as well as the ability to correct erroneous personal data.

Taking into account the developments in Greece, in mid-2015, the NBRM introduced protective measures of a temporary character that allowed limitation of the threat of significant outflows of capital from the Republic of Macedonia to non-residents from the Republic of Greece. These protective measures were lifted after the expiration of six months from their introduction (December 2015).

The amendment in the area of determination of connected persons was made to comply with the recommendations contained in the Basel document for supervisory framework for measuring and controlling large exposures, in relation to the method of determination and monitoring of the so-called economic interdependence. Moreover, if the bank's exposure to individual person is less than 2% of its own funds, it does not have to determine the existence of economic interdependence.

At the end of the year, amendments to the methodology for determining the capital adequacy were adopted, which were aimed at "hindering" the further growth of long-term consumer loans, which is present especially in the past two years. Banks are obliged to allocate a higher amount of capital for long-term consumer loans with a term equal to or longer than eight years, and only for newly approved long-term consumer loans. At the same time, in order to create conditions for easier access of non-financial companies to financial services, the capital requirement for banks' claims backed by commercial real estate was lowered. In relation to these amendments, changes in the laws for credit risk management were adopted, which strengthened credit risk management policies and stipulated an obligation for banks to write-off of all claims which are fully impaired of more than two years.

In this period the activities for prescribing the so-called Basel 3 continued, in terms of drafting laws for applying: 1) new liquidity standard, i.e. the rate of coverage with liquidity; and 2) new requirements regarding the elements of the bank's own funds. This will

ensure further harmonization of the domestic regulation with the requirements of Basel 3 and the appropriate European Directive and Regulation.

## **10.2.** Performing supervision and oversight

During 2015, the supervisory and inspection controls were largely synchronized. In comparison with 2014, the number of on-site controls decreased. Assessment of the risk profile, as well as compliance of the operations with the regulations was performed in 6 banks and one savings house. 5 banks were subject of assessment of exposure to certain risks, while 7 banks and 2 savings houses, were subject of oversight of the compliance of their operations with the regulations. In the reporting period, a thematic control for the setup of the information systems of banks was conducted in relation to the completion of the calculations in the cash and non-cash payments and their business books. Control activities were conducted over 2 providers of fast money transfer, 40 subagents, as well as 64 of licensed exchange offices.

## **10.3.** On-site controls of risks

Banks in the Republic of Macedonia are directed towards traditional banking activities and credit risk largely determines their risk profile<sup>72</sup>. Hence, this risk, especially the quality of its management, is mostly assessed with on-site controls. In 2015, special attention was paid to the risks of the household segment, given the orientation of banks towards greater credit support to this segment. Also, certain banks were subject of assessment of the adequacy of the systems for preventing money laundering, liquidity risk, operational risk, their profitability, information security, as well as corporate governance.

Controls have shown that banks adequately manage the risks they are exposed to and they are largely responsive to the corrective measures given by the NBRM. Banks, subject to assessment of the corporate governance, established existence of an adequate organizational structure and processes for risk management, as well as internal control mechanisms in place, that were constantly strengthened.

In order to improve the established rules and practices for risk management appropriate recommendations were given, which in terms of credit risk relate to: strengthening of credit analyses of customers, strengthening of the monitoring in relation to proper usage of approved loans, improving the systems for identifying and monitoring the related parties, improving the monitoring of the creditworthiness with the customers of the household segment by monitoring their total indebtedness at the level of the system, improving the process of classification of credit exposures in terms of the impact of the creditworthiness and credit history, promoting early warning criteria in the process of monitoring of approved loans, strengthening the monitoring of loans approved with the exception, as well as recommendations for improving the internal audit in respect of this risk.

In terms of measures and actions taken by banks for preventing money laundering and financing of terrorism, the recommendations pertained to the following: strengthening the measures for identifying and verifying the identity of the beneficial owner of clients, improving the structure and contents of the analyses for clients and transactions due to more adequate determination of the level of risk of clients, i.e. the recognition of suspicious transactions, strengthening the indicators for detecting possible suspicious transactions,

<sup>&</sup>lt;sup>72</sup> The analysis of risks in the banking sector is covered in the Report on the risks in the banking sector in 2015.

improving the dynamic profiling of the risk of clients, aligning the scope of the measures and actions that were taken with the level of risk of clients and strengthening the internal audit activities.

In order to improve the liquidity risk management, recommendations were given regarding the method of designing of collection based on loans, reviewing of the scenarios after which the stress-testing and further development of plans for liquidity management in extraordinary conditions were carried out. The operational risk management will be improved by: improving the process of risk determination, improving the use of databases of adverse events, timely updating of the plans for continuity of operations in accordance with the business processes and systems in banks and increasing the scope of their testing through greater involvement of the business side, improvement of controls in treasury premises, strengthening the role of the Risk Management Department in relation to this risk. In order to increase the information security, recommendations were made to: improve the process of risk analysis, reinforce the control measures, improve the systems of audit trail, improve the activities in the development and upgrade and improve the protection of communication with users of e-banking.

#### **10.4.** On-site controls of compliance with regulations

On-site control activities, through which the operations of banks and savings houses was controlled in terms of implementation of the regulations, included verification of compliance with: the Law on the NBRM, the Law on Foreign Exchange Operations, the Law on Consumer Protection in Consumer Loan Agreements, the Law on Fast Money Transfer and Payment Operations Law. It was determined that all controlled subjects operated in accordance with the regulations. Certain findings regarding the Law on Consumer Protection in Consumer Loan Agreements and the Law on Foreign Exchange Operations, in terms of the content of the pre-contractual information form, the compulsory elements of consumer loan agreements and the elements of contracts for foreign exchange lending to residents were exceeded during the controls. The banks were given guidelines for further definition of the method of informing consumers in cases of rejected loan applications. The verification of the compliance of the operations with the Law on the NBRM, in terms of calculation and fulfillment of the reserve requirement, most banks were pointed to the need for regular check on the fulfillment of the requirement prescribed by the regulation<sup>73</sup> regarding the amount of interest rate that will be paid in premature withdrawal of term deposits. Regarding the laws which regulate foreign exchange operations, several banks were indicated to the changes in the laws in terms of regulation the entry of foreign currency from non-residents.

On-site controls of non-banking financial institutions, i.e. licensed exchange offices, providers of fast money transfer and their subagents aimed to assess the compliance of their operations with the Law on Foreign Exchange Operations, the Law on Fast Money Transfer and the Law on Prevention of Money Laundering and Terrorist Financing. The controls determined certain irregularities in the licensed exchange offices regarding the manner of conducting currency exchange operations.

<sup>&</sup>lt;sup>73</sup> Given the changes in the Decision on reserve requirement (Official Gazette of the Republic of Macedonia No. 153/12, 98/13, 166/13, 143/14, 30/15, 35/15, 148/15 and 223/15), from August 2015, which regulate the reserve requirement rate from 0% for certain categories liabilities, and particularly for deposits over one and two years and contractual terms are prescribed with them.

#### **10.5.** Licensing of banks and savings houses in 2015

Within the regular activities in the area of licensing of banks and savings houses in accordance with the Banking Law, during 2015 the NBRM conducted 69 procedures for issuing approvals. Procedures conducted during the year are shown in the table below.

Table 3

Licensing procedures conducted in 2015

Type of license/approval (banks)	issued	rejected	halted
Approval for start of conduct of financial activity	3	/	1
Approval for statute amendment	9	/	/
Approval for appointment of a Supervisory Board member	39	/	/
Approval for appointment of a Management Board	16	/	/
member			
Type of license/approval (savings hoses)	issued	rejected	halted
Approval for acquiring over 50% of the share in the	1	/	/
savings house			
Total	68	1	1

The NBRM conducted one licensing procedure under the Law on Payment Operations, after which an approval for conducting micropayments was issued.

# XI. Internal audit

In 2015, the Internal Audit Department (DVR) fully implemented its work program. Through a systematic evaluation and giving recommendations for improvement of the risk management process, adequacy and effectiveness of internal controls and governance processes, the internal audit exercised its primary objectives by giving assurance on:

- 1. Efficient and economical use of resources;
- 2. Safeguarding of assets;
- 3. Reliability and integrity of financial and other information, and
- 4. Compliance of operations with laws and regulations, internal policies and working procedures.

In 2015, 22 regular audits and one extraordinary audit were carried out for 28 working processes, giving 53 recommendations to improve the internal control system. The recommendations were followed up on a regular quarterly basis and was concluded that the recommendations are mainly observed and implemented within the given deadlines. In 2015, 96% of the recommendations were implemented.

In addition to regular audits, IAD carried out additional activities aimed to improve the quality and efficiency of its own operations. From this perspective, during 2015, periodic internal self-assessment of the operation of the IAD was performed, Guideline for operation of the IAD was revised, the Program for quality assurance and improvement of the operation was applied, as well as other activities of educational character.

The operation of the Internal Audit Department was closely supervised by the Audit Committee, which held five meetings during 2015.

# XII. Improving the institutional capacity of the NBRM

## **12.1.** Strategic planning

According to the established practice, during the year the Strategic Plan of the NBRM for 2016 - 2018 was adopted. Based on the Strategic Plan, the Guidelines and the Plan of Activities for 2016 were adopted which is a detailed elaboration of the established objectives and targets for the next period, in terms of the responsible units, the deadlines and the status of their implementation. The Strategic Plan reflects the commitment to the successful achievement of the legal established objectives translated in the mission of the NBRM. The commitment to keeping low and stable inflation through the strategy of maintaining a stable exchange rate of the denar against the euro, as well as maintaining the financial stability as an integral element of macroeconomic stability and a prerequisite for achieving economic growth and prosperity, are the major pillar of the activities of the NBRM. In addition, the Strategic Plan is a continuation of previously established strategic objectives in the area of establishment and implementation of monetary policy and support of financial markets, management of foreign reserves, financial stability maintenance, issuance and management of banknotes and coins, payment systems, statistics and research. In this respect, the NBRM will continue to develop the corporate governance and deepen the system of values, will support the building of a modern and competent human capital, the establishment of the latest technological innovations in business processes and the development of cooperation with domestic and foreign institutions.

#### **12.2.** Managing operational risks

In January 2015, the NBRM Council adopted the Operational Risks Management Policy, which is further elaboration and clarification of the risk management system established in the NBRM. The main objective of the Operational Risk Management Policy is to establish a system of coordinated, comprehensive and systematic operational risk management in order to determine events that may affect the functioning of the National Bank, to ensure maintenance of the exposure to risks within acceptable limits and to ensure effective accomplishment of the objectives of the NBRM.

The established framework for operational risk management starts from the established strategic objectives and tasks and includes the following steps: registration of the working processes and projects and determining their degree of criticality, identification, recording and assessment of risks in the implementation of the working processes and projects, determining a strategy and action plan with mitigation measures, reporting and monitoring.

In order to operationalize such a methodological framework, a proper organization and precise division of tasks and responsibilities in risk management was established. The process of managing operational risks in the NBRM is set on a centralized basis, in terms of the application of methodologies and reporting system, but is dispersed in terms of its implementation. The competence for managing is divided between the NBRM Council, the Governor and the Risk Management Committee, the Chief Risk Officer, the heads of organizational units, the risk management officers in the organizational units, the Internal Audit Department and in general, all employees in the NBRM.

During 2015, special attention was paid to the working processes and projects, the identification of their connection with the strategic objectives and a functional connection of

the working processes and projects was made, implemented by several organizational units in the NBRM. Based on the analysis of the activity in all organizational units, 131 working process and 7 projects were selected. Then, using some extreme scenarios, critical working processes and projects were selected, whose operation is of great importance to the operation, financial results and reputation of the NBRM.

The next step in the risk management, the determination of the main operational risks in the working processes and projects should be completed by mid-2016, which will create conditions for preparing the first risk assessment in accordance with the new framework for operational risk management.

## **12.3.** Ensuring business continuity

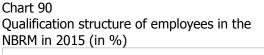
The NBRM conducts a structured and regular process of planning, updating and testing of measures necessary to ensure continuity of business processes in a crisis situation.

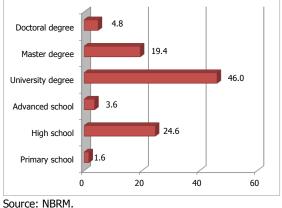
During 2015, the organizational units made updating of the Plans for ensuring continuity of business processes, which included a total of 137 processes. Furthermore, to confirm the feasibility of business continuity plans of critical business processes, during 2015, activities were conducted for preparation of necessary documentation, staff training and testing business continuity plans of ten critical business processes amid predefined crisis scenarios and scope of testing. Detailed reports with corresponding action plans were made for the results of the tests and for the implementation of the identified measures for improvement of the business continuity plans.

The Crisis Center of the NBRM held a session and reviewed the Report on the implementation of the Business Continuity Policy of the NBRM for 2015 and also adopted conclusions according to which the Business Continuity Plan of the NBRM was updated.

## **12.4.** Human resources management

The NBRM is an institution that has been taking care and investing in its employees,





competencies and increase their expert knowledge for the purposes of creating highly educated staff that will fight off any challenge encountered while achieving its goals. During 2015, the Human Resources Management Department took numerous actions to improve the human resources management processes. The analytical and reporting functions of human resources management have been largely promoted by developing comprehensive annual reports that summarize of all the analyses human resources management processes.

in order to strengthen their skills and

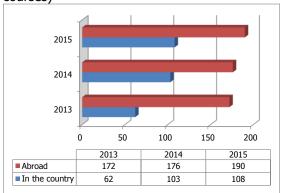
In 2015, relative to 2014, the number of employees remained the same (439). In 2015, the NBRM gender and age structure have not undergone any change compared to previous years, i.e. 59% females, and 41% males.

In terms of age structure, the median age of employees was 44.6 years in 2015, despite the median age of 44.8 years in 2014. Analyzing the qualification structure, the number of employees with secondary education has significantly decreased from 26.45% to 24.6%, the number of employees with master's degrees has increased from 16.6% to 19.4%, while the number of employees with doctoral degree has considerably increased from 2.9% to 4.8%. The number of employees with university degree has decreased proportionately (from 48.9% to 46.0%).

Professional development, employee evaluation and remuneration are processes that affect career development of the NBRM employees. Last year, departments were given a

#### Chart 91

Professional training held in the country and abroad (number of professional training courses)



Source: NBRM.

professional advice to improve the evaluation process in order to ensure impartial application and provide feedback to employees about their performance. This system established in the NBRM has been used as a tool for greater engagement, productivity and utilization of the creative potential in the institution. As every year, these processes require intensive development of management skills of all managers in the institution.

During 2015, 298 professional training courses were organized in the country and abroad. Compared to 2014 and 2013, the number of professional training courses increased by 6.8% and 27.3%, respectively.

This suggests that the NBRM has been constantly investing in the professional training and development of all employees in order to fulfill its strategic objectives, mission and vision. Compared to the previous year, the number of employees who attended professional training courses has increased by 9.6%, compared to 1.2% in 2014.

Main international institutions that organize professional training courses include the International Monetary Fund and the central banks of the European Union who are the NBRM's major partners in the mutual cooperation programs, while the professional training courses in the country are primarily hosted by domestic education centers that provide training on data protection and amendments to legislation in the area of NBRM operations.

The NBRM has been following the trends in the human resources management, stimulating continuous education and development of employees, especially young professionals. For this purpose, the NBRM has been hosting ongoing internal training courses for strengthening the soft skills of its employees and management, as well as specialized (targeted) training courses, in cooperation with foreign experts.

In 2015, seven team-building events were organized at sector level to improve professional communication and networking of the NBRM staff members. The team-building events aim to develop team spirit, provide synergy and culture of knowledge sharing in the work processes, as an important organizational asset of the institution.

#### **12.5.** Research activity

In 2015, the NBRM's research activities were directed towards areas important for achieving its basic goals and further strengthening institutional capacity. The conducted research projects supported the decision-making process in the NBRM and contributed to timely consideration of future challenges. During 2015, seven research projects were carried out, that were related to: finalization of the new version of the main policy analysis model - MAKPAM, the importance of the sector structure of lending for economic activity and exchange rate, concentration and structural features of non-performing loans, financial markets infrastructure and comparative analysis of payment systems in the region, as well as three papers in the field of numismatics. In addition, during 2015, ten research projects were developed, whose realization is in progress, in the following areas: short-term forecasting, macroeconomic modeling, communication and transparency in the area of monetary policy, interactions between basic macroeconomic sectors, financial stability, research for the needs of statistics, numismatics and information technologies. The research program for the period 2016-2018, adopted in mid-2015, pointed to further activities in terms of the ongoing research projects and it was supplemented with several new projects.

On 23 April 2015, on the occasion of celebrating the anniversary of the monetary independence of the Republic of Macedonia, the Fourth Research Conference was organized: "Addressing Structural Rigidities in View of Monetary Policy Transmission Effectiveness". The Conference was organized in four sessions covering important topics for the central banks, academic and research institutions, including the panel of Governors of the challenges of central banks. At the Conference, research papers of representatives of central banks and academic institutions in the region and the EU were presented. At this event, the NBRM awarded the regular Annual award for the best paper in the field of macroeconomics and banks and banking systems written by a young researcher.

In 2015, the Researchers' Club continued operating as a part of the activities to support the development of research and analytical activity, through four quarterly sessions. At these sessions, several research papers were presented and reviewed that addressed the following research topics: setting wages and prices, cyclical movement and determinants of fiscal policy, the impact of fiscal policy on the current account, the effects of external shocks on the sustainability of external and public debt, the connection between taxes and inequality, the link between loans and economic growth, convergence towards the EU and the importance of the shocks in the supply of loans. During the year, the NBRM organized separate lectures by distinguished international experts on current topics in the central-banking operations. During 2015, for achieving further development of research activity, the NBRM realized technical cooperation with Deutsche Bundesbank. Employees of the NBRM participated in many conferences and international events with their papers and presentations.

## **12.6.** IT development

Within the activities undertaken to achieve the Annual Plan of Activities of the NBRM, during 2015 in the area of information technology more than 6,000 working cases were processed. The majority of them or 62% are requests for IT services from the Service Catalog (that counts around 50 IT services), 28% relate to resolving incidents and assisting employees in using of information technology, while 10% are for regular maintenance of IT infrastructure and its improvement.

The IT Department maintains more than 170 applications (software solutions) that employees use on daily bases. During 2015, in accordance with the established plan of activities, the IT Department implemented 16 requests for developing new applications and 215 requests for changes in existing applications (adding new functionalities, reports, modules and other types of improvements and changes).

During 2015, the project for unifying the private communication network among banks and financial institutions was completed, thus enabling capacity increase, connecting the backup locations of banks and participation of multiple communication operators. Also, several projects for regular maintenance were completed, such as: replacement of more than 200 personal computers, upgrade of the system for authentication and user access rights (Active Directory), upgrade of the tools for control of databases and more. Additionally, several medium-term projects were started, such as: introduction of backup and archiving system, introduction of business intelligence system, introduction of software for code review, as well as upgrade of the real-time payment system, and these projects will be developed in the forthcoming period.

From 2nd to 4th of June 2015, the IT Department organized IT forum: "Data Warehouse and Business Intelligence Solutions in Central Banks". The IT Forum was attended by 26 guests from 19 countries and 19 presentations were presented. The IT Forum provided an excellent opportunity to learn more about data management and analysis, through conversations, discussions, exchange of experiences and presentations on how central banks manage and use their data.

# XIII. Other activities

During 2015, the NBRM continued to maintain and promote international cooperation, on both multilateral and bilateral basis.

Within the multilateral cooperation, representatives of the International Monetary Fund (IMF) paid a regular visit to the NBRM, in connection with consultations under Article IV of the IMF's Articles of Agreement. During 2015, the technical cooperation with the IMF in the area of monetary and financial statistics continued, specifically aiming at its improvement. Also, the Governor and Vice-Governors of the NBRM participated in the Spring Meetings and the Annual Meeting of the IMF and World Bank Group, as well as the meeting of the Dutch Constituency, of which the Republic of Macedonia is part. Within the cooperation with the World Bank, multiple meetings were held with representatives of this institution related to the current arrangements, development of regular reports and publications of the World Bank. During 2015, the NBRM took part in the regular meetings of the Bank for International Settlements in Basel and in the meetings of the Central Bank Governors' Club of the Black Sea Region, the Balkan Countries and Central Asia.

Within the bilateral cooperation, the NBRM continued the technical cooperation with the most important strategic partners, De Nederlandsche Bank, Deutsche Bundesbank, the National Bank of Poland, as well as other central banks of the EU and the countries in the region. The cooperation with the European Central Bank was carried out within the established regional approach for cooperation between the ECB and the central banks of the Western Balkans countries.

During 2015, the NBRM continued to participate in the process of accession of the Republic of Macedonia to the European Union by participating in the fulfillment of the obligations arising from the Stabilization and Association Agreement (SAA), in the development and implementation of the Annual National Programme for the Adoption of the Acquis (NPAA), and in the development of the Economic Reforms Programme (ERP).

The NBRM was involved in the Project "Further Harmonization with EU Acquis in the Field of Movement of Capital and Payments and Financial Services - Securities Markets and Investment Services" in the section that refers to compliance with the Payment Services Directive, as well as in the twinning-project "Further Strengthening of Institutional and Organizational Capacities in the Process of European Integration," in the chapters "Free Movement of Capital and Payments" and "Economic and Monetary Policy." Also, financial support was provided within the IPA Multi-beneficiary Statistical Co-operation Programme for participation of representatives from the NBRM in the regular meetings of Eurostat in the field of balance of payments statistics and financial accounts statistics, as well as participation in training courses in the field of statistics on international trade in services and government finance statistics. Within the EU-funded TAIEX instrument, during the year, eight projects were successfully completed in various areas of central-banking operations.

#### **13.1.** Public relations

In 2015, the NBRM continued to conduct a transparent policy of timely informing the general public about its work. The NBRM regularly communicated with the media, by issuing press releases, answering journalists' questions, organizing interviews, press conferences, and publishing content on the website (www.nbrm.mk). The opening page on the website is updated with the regular communications from the sessions of the NBRM Council and the

Operational Monetary Policy Committee of the NBRM, as well as information on the application of the monetary policy instruments in both Macedonian and English language. At the same time, there was an increase in the number of other communications with various content, which are related to the operations of the Bank. During 2015, the Governor and the Vice-Governors of the NBRM took part in numerous events in the country and abroad with their presentations and speeches.

The NBRM communicates directly with the public through electronic mail info@nbrm.mk posted on the website of the NBRM. Also, on the website a link is posted leading to free access to public information, as well as the addresses contact.statistika@nbrm.mk and supervizija@nbrm.mk for questions and answers from the relevant field.

During 2015, the content of the website in Macedonian and in English was regularly updated.

The NBRM communicated with the public also through the "Annual Report for 2014", which is an annual publication on the operations of the NBRM in printed form. This, and other annual, quarterly, monthly and other reports on the Bank's operations are published in an electronic form on the website of the NBRM, in Macedonian and in English. Starting from 2015, annual and quarterly reports on the Bank's operations are being translated into Albanian, whereby translated reports are published on the website of the NBRM.

## **13.2.** Financial education

Within the project "Financial Education" in 2015, several activities were conducted aimed at familiarization of the population in the Republic of Macedonia with finance and economics, and also events of national and international character were organized.

On 27 and 28 February 2015, the NBRM and other regulators of the financial system, in cooperation with the European Fund for Southeast Europe - EFSE, organized a workshop for journalists from economic editorial boards of print, television and electronic media.

During the Global Money Week from 9 to 17 March 2015, and also during the year, visits to primary and secondary schools were organized throughout the country, within which interactive classes were held so that students will be closely introduced to money, its meaning, exchange, saving, inflation, monetary policy. During the year, visits to the NBRM were organized for students of primary and secondary schools and students from universities throughout the country.

The NBRM has established cooperation with several renowned international organizations and institutions in the field of financial inclusion, such as: Child and Youth Finance International, Aflatoun, Alliance for Financial Inclusion and the Organization for Economic Cooperation and Development. The NBRM, as a partner institution of these international organizations, implements initiatives, organizes activities and participates in various international events. In particular, in cooperation with the Alliance for Financial Inclusion (AFI), with support from the Federal Ministry for Economic Cooperation and Development of Germany (BMZ) and the State Secretariat of Economic Affairs of Switzerland (SECO), it organized a public event: the AFI Network's first Eastern Europe and Central Asia (ECA) Regional Forum on Financial Inclusion Policy from 26-28 October 2015 in Skopje. The event's high point saw participants from 17 policymaking institutions from the ECA region for: digital financial services (DFS), small and medium enterprise (SME) finance, consumer

education and market conduct (CEMC) and financial inclusion data (FID) to endorse the Skopje Consensus as a platform for further cooperation with the AFI network.

On 2 November 2015, the Development Facility of the European Fund for Southeast Europe (EFSE DF), in cooperation with the NBRM, promoted an educational brochure, "Buying a Home with a Housing Loan" in Macedonian and in Albanian, as well as a promotional video in Macedonian. The brochure, which is intended primarily for households in the country, provides information about the risks that should be considered before taking up long-term loans to help borrowers to make sound financial decisions.

On the occasion of the World Savings Day on 31 October, the NBRM, the Ministry of Finance and the Agency for Insurance Supervision announced a competition for children and youth for literary and art works, on the following topics: "I can save, too" and "What does insurance of home and family mean to me." The competition is part of the activities for raising the level and general awareness of financial literacy, inclusion and education of the population, especially the youth. According to organizers, the three institutions, those are creative and innovative ideas of children associated with savings and insurance. The twelve most successful received diplomas and money prizes, and certificates were given to the schools that participated in the competition.

#### **13.3.** Museum, Library and Archives

In terms of research activities as part of the operations of the Museum of the National Bank, during 2015, three separate research projects were made, whose results were presented at the XV International Numismatic Congress, held in September in Italy. Also, the finalization of the research project for extensive numismatic material discovered on Samuel's Fortress in Ohrid continued, which will be published as a co-publishing venture with the Museum and the Institute for Protection of Cultural Monuments in Ohrid.

Besides these activities, a Guide for children through the museum exhibition of the National Bank was published, which caused a significant increase in attendance of the Museum, of which most were school children, according to its purpose.

With regard to research activities as part of the operations of the Library and Archive of the National Bank, last year, preliminary research activities were taken for selecting the archival material relevant to the central-banking operations in the country, located in the National Bank of Serbia.