

National Bank of the Republic of Macedonia



ANNUAL REPORT 2016

Skopje, April 2017

Contents

| | |
|--|----|
| Governor's foreword..... | 5 |
| I. Monetary Policy in 2016..... | 7 |
| 1.1. Monetary policy objectives..... | 7 |
| 1.2. Monetary policy setup..... | 8 |
| II. International environment..... | 16 |
| III. Macroeconomic developments in 2016..... | 20 |
| 3.1. GDP and inflation..... | 20 |
| 3.2. Labor market..... | 22 |
| 3.3. Public finances..... | 24 |
| 3.4. Balance of payments, IIP and external debt..... | 28 |
| 3.5. Monetary and credit aggregates..... | 33 |
| IV. Macroeconomic environment and monetary policy in 2017 and 2018..... | 38 |
| V. Monetary instruments..... | 41 |
| 5.1. Factors of change in the liquidity of the banks..... | 41 |
| 5.2. Monetary instruments..... | 43 |
| 5.2.1. CB bills..... | 43 |
| 5.2.2. Standing facilities with the NBRM..... | 44 |
| 5.2.3. Repo operations for liquidity creation in the banking system..... | 45 |
| 5.2.4. Foreign currency deposit with the National Bank..... | 45 |
| 5.2.5. Reserve requirement..... | 46 |
| Box 1. Developments in the money markets..... | 48 |
| VI. Foreign Reserves Management and Investment..... | 49 |
| 6.1. Key guidelines for managing foreign reserves..... | 49 |
| 6.2. Investment conditions at the international financial markets in 2016..... | 50 |
| 6.3. Foreign reserves investment..... | 52 |
| 6.3.1. Distribution of investments by tranche..... | 52 |
| 6.3.2. Credit exposure and instruments..... | 54 |
| 6.3.3. Currency structure..... | 56 |
| 6.3.4. Exposure to interest rate risk and results from foreign reserves investment..... | 57 |
| Box 2. Activities related to improving the institutional capacity building in the foreign reserves management..... | 59 |
| VII. Activities and developments in the payment systems..... | 60 |
| 7.1. Total payment operations in the country..... | 61 |
| 7.2. Payment instruments..... | 61 |
| 7.3. Payment infrastructure..... | 63 |

| | | |
|-------|---|----|
| VIII. | Issuance and management of the banknotes and coins of the Republic of Macedonia – vault operations..... | 65 |
| 8.1. | Currency in circulation | 65 |
| 8.2. | Supplying banks and cash centers with banknotes and coins..... | 66 |
| 8.3. | Processing and destroying banknotes and coins..... | 67 |
| 8.4. | Expertise of suspicious / counterfeit money | 67 |
| 8.5. | Issuance of collector coins | 68 |
| IX. | Statistics..... | 69 |
| X. | Supervisory and regulatory function of the NBRM..... | 72 |
| 10.1. | Performing supervision and oversight | 72 |
| 10.2. | On-site risk controls | 73 |
| 10.3. | On-site controls of compliance with regulations..... | 74 |
| 10.4. | Licensing of banks and savings houses in 2016 | 74 |
| XI. | Internal audit..... | 76 |
| XII. | Improving the institutional capacity of the NBRM | 77 |
| 12.1. | Strategic planning..... | 77 |
| 12.2. | Managing operational risks..... | 77 |
| 12.3. | Ensuring business continuity..... | 77 |
| 12.4. | Human resources management..... | 78 |
| 12.5. | Research activity..... | 79 |
| 12.6. | IT development | 80 |
| XIII. | Other activities | 82 |
| 13.1. | International cooperation | 82 |
| 13.2. | Public relations | 83 |
| 13.3. | Financial education | 83 |
| 13.4. | Activities of the Museum, Library and Archive of the NBRM..... | 85 |

Governor's foreword

In 2016, the National Bank of the Republic of Macedonia (NBRM) faced a series of challenges. The macroeconomic environment of the domestic economy last year was under the influence of the internal political instability, which, although started in 2015, continued to increase in the second quarter of 2016. In fact, taking into account the fluctuations caused by certain variables, we could say that 2016 was another "stressful" year for the Macedonian economy. The international environment, in addition to the risks to the pace of recovery of the euro area and the geopolitical risks, was also burdened with the effects of Brexit in 2016, the outcome of the US presidential election, and the uncertainty about the prices of primary commodities on the world markets. International developments had an additional impact on the movements and the uncertainty in the domestic economy, although in 2016, the greatest influence was made by the domestic non-economic factors. However, it is worth noting that the response of the economy to shocks in the last two years indicates solid vitality, supported by the structural changes in the last period, which in 2016, coupled with the rapid response of the NBRM, helped stabilize the expectations in a relatively short time and return to positive trends in the second half of the year.

The escalation of the domestic political situation in April 2016 and the speculation about the stability of the exchange rate and the banking system destabilized the expectations of the population. Consequences were mainly felt in the currency exchange market and household deposits in banks, i.e. outflow of deposits and increased preference for foreign currency. In the period April-May, the NBRM intervened by selling foreign currency and increased the policy rate from 3.25% to 4% at the beginning of May, while reducing the offer of CB bills in line with the liquidity needs of banks. In addition, the NBRM increased the reserve requirement for denar deposits with FX clause and reactivated the auctions for foreign currency deposits of banks with the NBRM. All these measures, along with the intensive public communications, enabled a relatively quick reconciliation of expectations, which created conditions for gradual growth of household deposits as early as June as well as net purchase of foreign currency on the foreign exchange market which completely exceeded the outflow in the acute phase of the crisis. The foreign reserves in 2016 increased mainly due to the inflow from the new government Eurobond. The indicators for their adequacy were maintained at a solid level throughout the year. Increased propensity for foreign currency in this period posed risks to the several-year trend of deeuroization, but as the expectations rapidly calmed down it only caused a modest increase in the share of foreign currency in total deposits, thus preserving most of the benefits from previous years.

Despite the uncertainty caused by the internal political situation and speculative pressures, with the exception of the psychological influences mainly on the population, the Macedonian economy proved to be quite vital, once again confirming its sound fundamentals. In 2016, the real GDP growth was 2.4%, which is solid considering the environment, and significantly above the initial expectations with the alternative scenario of the NBRM of May 2016 (1.6%). Yet, the growth was slower, compared to the previous year (3.8%), and clearly indicates the impact of the uncertainty to the investors' decisions. Thus, gross investments declined, and the main generators of growth were the net exports, mainly driven by the new companies with foreign capital and the favorable price effect of the oil imports, as well as the private consumption, amid favorable labor market trends and wages. In this context, we should mention the further downtrend of the unemployment rate, which at the end of the year reduced to 23.1%. Additionally, net foreign direct investment grew to 3.6% of GDP, and the current account of the balance of payments registered a moderate deficit of 3.1% of GDP, given the improving trade balance in goods and services. The

average inflation was -0.2% in 2016, due to the lower import prices of food and energy, while core inflation (without food and energy) averaged 1.4%.

Given the stabilization of the movements in the second half of the year, the sound economic fundamentals, and the fiscal consolidation at the end of the year, in October, the NBRM abolished the auctions of foreign currency deposits, and in December, started to gradually normalize the monetary policy. The policy rate was cut on three occasions by 0.25 percentage points, reducing it to the pre-crisis level (in February 2017).

The banking system successfully surpassed this crisis chapter and retained its stability. Only the liquidity indicators varied moderately in the acute phase, but remained satisfactory, and got back on track in the third quarter. At the end of 2016, total deposits with the banking system increased by 6%, which was above the expectations of the October forecast. The credit growth, since June, has been influenced by the prudent measure of write-off of non-performing loans fully covered by impairment, whereby the adjustments for this effect kept it at a solid level, i.e. 6.5% at the end of the year. However, the credit growth was mainly driven by lending to households, despite the moderate increase in corporate loans. This prudent measure reduced the non-performing loans to total banks' placements ratio from 10.3% at the end of 2015 to 6.3% at the end of 2016.

Considering the dynamic international environment and the international financial market developments, in 2016, there was an active and advanced management and investment of foreign reserves, which ensured flexibility and successful management of changes in the foreign reserves amid fluctuations in the markets. In 2016, the upgrade of the NBRM Macedonian Interbank Payment System – MIPS for making payments in euros (besides in denars) was completed, thereby switching to a dual currency payment system by establishing a corresponding link with the payment system of the Eurosystem. This project is the second generation of reforms in the payment infrastructure, after the first major payment operations reform in 2001. The ultimate goal of this project is faster, safer and less expensive cross-border payments in euros for domestic companies. In 2016, we continued with further improvement and adoption of the standards in the field of payment systems, statistics, and information technology. At the same time, we continued harmonizing the banking regulations with the Basel requirements. In mid-December 2016, we put into circulation 200 and 2000 denar banknotes, which increases the variety of denominations available in cash transactions, and ensures balance in the demand for denominations. In 2016, we continued upgrading and improving the knowledge of employees, stimulating research work, organizing international conferences and other events for exchange of experiences from various work areas, open to the domestic professionals. Additionally, in order to get closer to the public, in 2016, the NBRM made its debut on the social networks presenting content and information from its domain.

In 2016, the NBRM marked 70 years of central banking in the Republic of Macedonia through a series of events. Strong emphasis was put on financial education of the population, as one of the major functions of the modern central banks, and for raising the level of awareness of the citizens about the significance and the role of the NBRM in the Macedonian society. In this context, the Program for financial education of primary school pupils in the Republic of Macedonia was conducted during the year, through their visit to the NBRM. Also, the NBRM organized a Caravan that visited several primary schools throughout the country. In addition, the NBRM produced and launched two educational films and two bibliographic collections of research papers and organized a sports event – humanitarian race. The Program ended with a celebration marking this great anniversary on 19 October 2016, where the President of the Republic of Macedonia awarded the NBRM the Order of

Merit for Macedonia. This Order of Merit was awarded for outstanding achievements in the central banking operations to the NBRM, as an independent bank of issue, and main generator and pillar of macroeconomic stability of the sovereign and independent Republic of Macedonia. The Order of Merit is acknowledgment of the overall achievements and high professionalism of the institution and consequently, a pride for its employees.

In 2016, we came to grips with, and successfully managed major challenges in the conduct of the monetary policy and maintained the exchange rate and price stability, while the banking system preserved its soundness. The continued uncertainty about the domestic political situation, as well as the continuing global uncertainty, creates the need for further careful monitoring of the domestic and international movements. As before, the NBRM is ready to undertake appropriate measures to maintain price and financial stability, as legally defined goals.

27 April 2017
Skopje

Dimitar Bogov
Governor
President of the NBRM Council

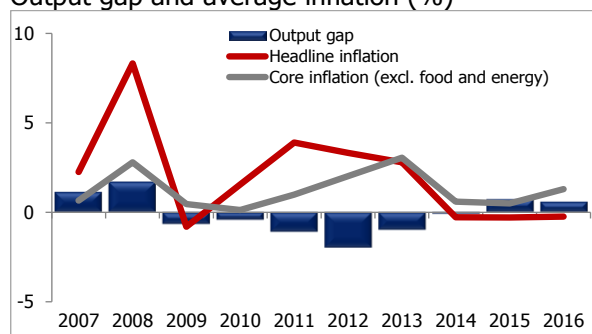
I. Monetary Policy in 2016

1.1. Monetary policy objectives

Maintaining price stability is the primary legally defined objective of the monetary policy of the National Bank of the Republic of Macedonia (NBRM). Another objective of the NBRM, 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 primary objective, and in accordance with the principle of open market economy with free competition. From a strategic point of view, since October 1995, the NBRM has been applying the strategy of maintaining stable nominal exchange rate of the Denar, first against the Deutsche mark (until 2001) and then against the Euro.

In 2016, the NBRM successfully achieved its legal objectives. The exchange rate remained stable and the foreign reserves adequacy indicators remained in the comfortable zone. In terms of price stability, in 2016, there was a small and slightly negative change in domestic prices, entirely reflecting lower import prices of food and energy, i.e. supply factors. On the other hand, core inflation (without food and energy) remained moderate in the positive zone, which corresponds to the permanent recovery of the domestic demand and slightly positive output gap. Moreover, financial stability was successfully maintained as additional support to the primary objectives that were achieved in an extremely uncertain environment and partial materialization of non-economic risks arising from the domestic political turmoil present in the economy since 2015. Namely, in mid-April 2016, the further deterioration of the political situation and speculations about the stability of the Denar and the domestic banking system caused withdrawal of deposits from the banking system, their conversion into foreign currencies and significant pressures on the currency exchange and foreign exchange market. In order to maintain the stability of the domestic currency and stabilize the expectations and confidence of the economic agents, the NBRM intervened by selling foreign currency from the foreign reserves and undertook multiple monetary stabilization measures. The undertaken measures and the clear communication of its commitment to maintain monetary policy objectives rapidly stabilized the confidence of the economic agents, with the first signals of normalization noticed in early June, and by the end of the year, the negative effects on the foreign exchange market and the deposits in the banking system were exhausted. In such circumstances, at the end of the year, conditions for normalization of the monetary policy were created, through gradual reduction of the policy rate and withdrawal of some of the additional measures.

Chart 1
Output gap and average inflation (%)[‡]



[‡]The output 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 (output gap = (actual GDP - potential GDP)/potential GDP). Headline and core inflation represent an average annual growth.

Chart 2
Gross Foreign Reserves

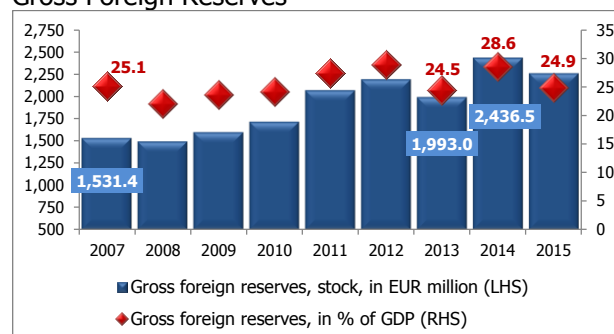


Chart 3
Foreign reserves adequacy indicators

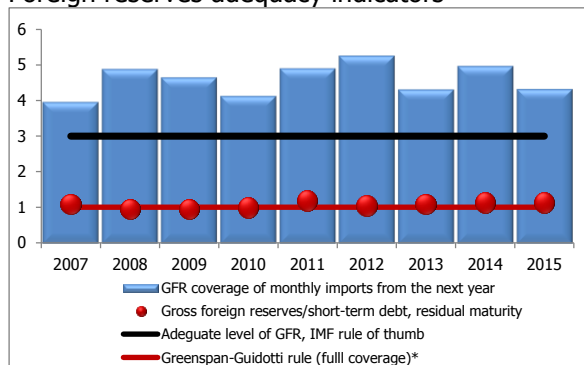
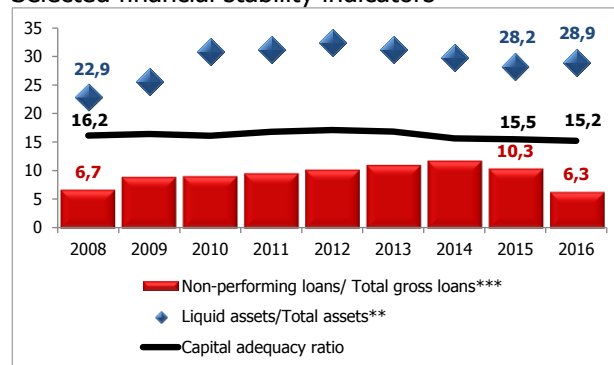


Chart 4
Selected financial stability indicators



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

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

*** The indicator refers to loans to the financial and non-financial sector, with data for 2016 including effects arising from regulatory changes.

Source: NBRM and SSO.

1.2. Monetary policy setup

In the course of 2016, one of the main risk factors in the domestic economy was the unstable political environment in the country. The negative effects of this risk were pronounced in the middle of April when, given the escalation of the political crisis, there was significant withdrawal of household deposits from the banking system and conversion of Denar deposits into foreign currency deposits, which increased the demand for foreign currency on the currency exchange and foreign exchange market. Against such backdrop, the NBRM intervened on the foreign exchange market by selling foreign currency, and in early May 2016, it tightened the monetary policy by increasing the policy rate by 0.75 percentage points, i.e. from 3.25% to 4.00%¹. The signal for switch in the monetary policy was strengthened with the increase in the reserve requirement rate for banks' liabilities with FX clause, and the reintroduction of the foreign currency deposits auctions, as an additional measure. The NBRM measures stabilized the expectations and confidence of economic agents in a relatively short time. The first signs of normalization were seen in early June in the two points where the political crisis directly hit – household deposits in the banking system and foreign exchange market. Favorable movements continued by the end of the year, seen through the continuous growth of household deposits and the NBRM purchase of foreign currency, whereby the fall in foreign reserves due to the sale of foreign currency in the period April-June was fully compensated by the end of the year. These movements created room for gradual normalization of monetary policy by the end of the year. The possibility given to banks to place foreign currency deposits with the NBRM was dismissed at the end of October, and in early December, the NBRM cut the policy rate by 0.25 percentage points, from 4.00% to 3.75%².

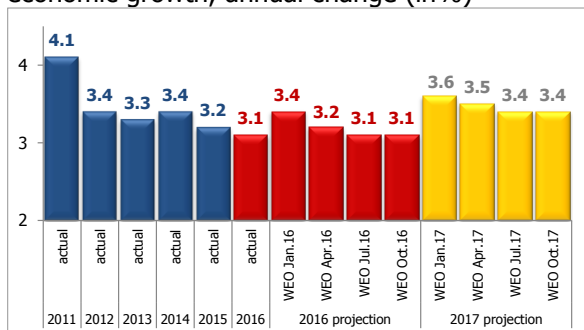
The external surrounding of the Macedonian economy and monetary policy in 2016 was marked by uncertainty and volatility. The global economy continued recovering, yet, a number of external factors created a need for prudent pursuit of the domestic monetary

¹ The interest rates in the Annual Report are presented per annum.

² Given the further stabilization of the expectations and confidence of the economic agents, in the period January-February 2017, the NBRM cut the interest rate by 0.50 percentage points, reversing the CB bill interest rate to the pre-crisis level of 3.25%.

policy. The ECB conducted expansionary monetary policy, which improved the economic and financial conditions in the euro area, but also brought to the fore the vulnerability and uncertainty of the future recovery. Uncertainty of the external environment further intensified in mid-June, with the Brexit. Nevertheless, the potential direct effects of the Brexit to the domestic economy were assessed as small, given the insignificant connection between the Macedonian and the British economy, while the indirect risks arise from the effects on the European Union, as our most important trading partner. The Fed's monetary policy remained unchanged until the end of the year, when after a year, it raised the interest rate. In fact, changeability of prices of primary commodities that affect domestic inflation and terms of trade were yet another feature of the environment in 2016. During the year, the forecasts for international prices of oil, metals and food were corrected in various directions, thus increasing the uncertainty and changing the assumptions that underlie the expectations for the domestic economy.

Chart 5
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)

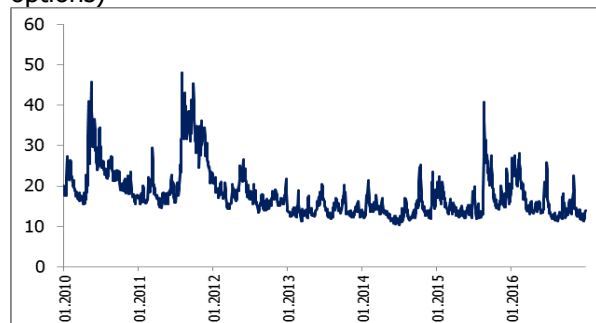
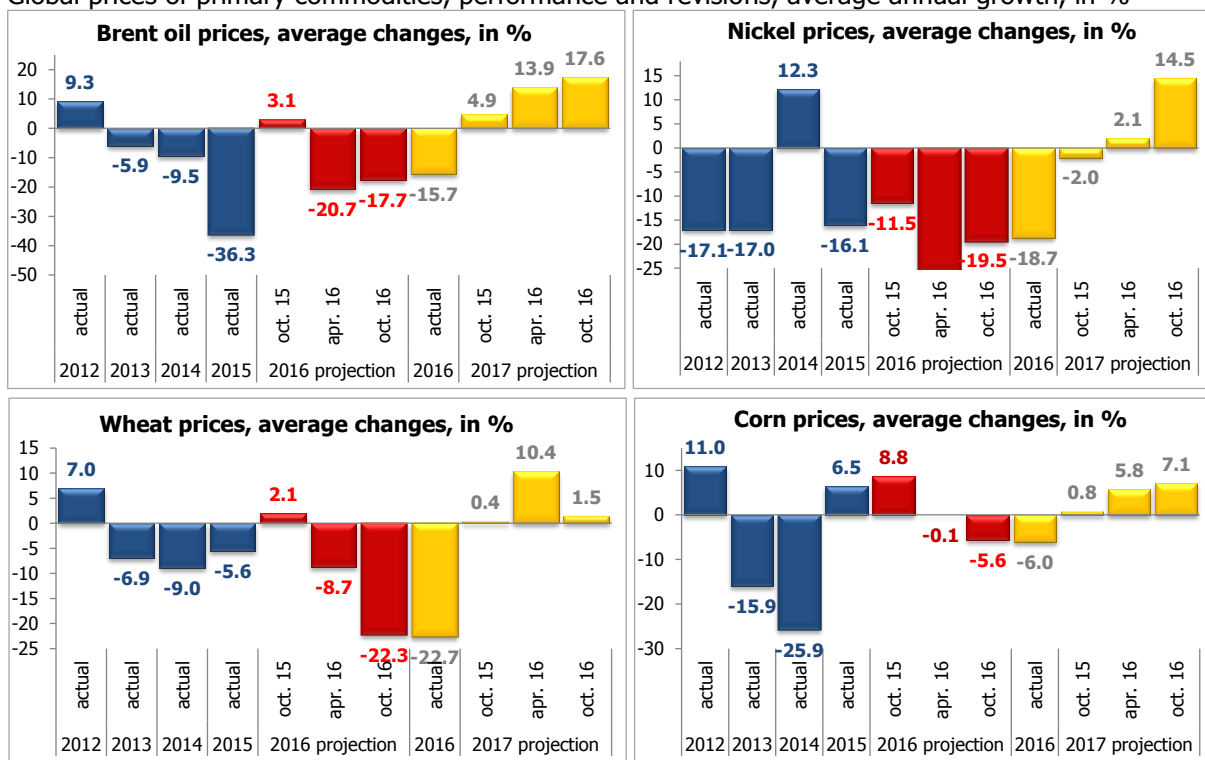


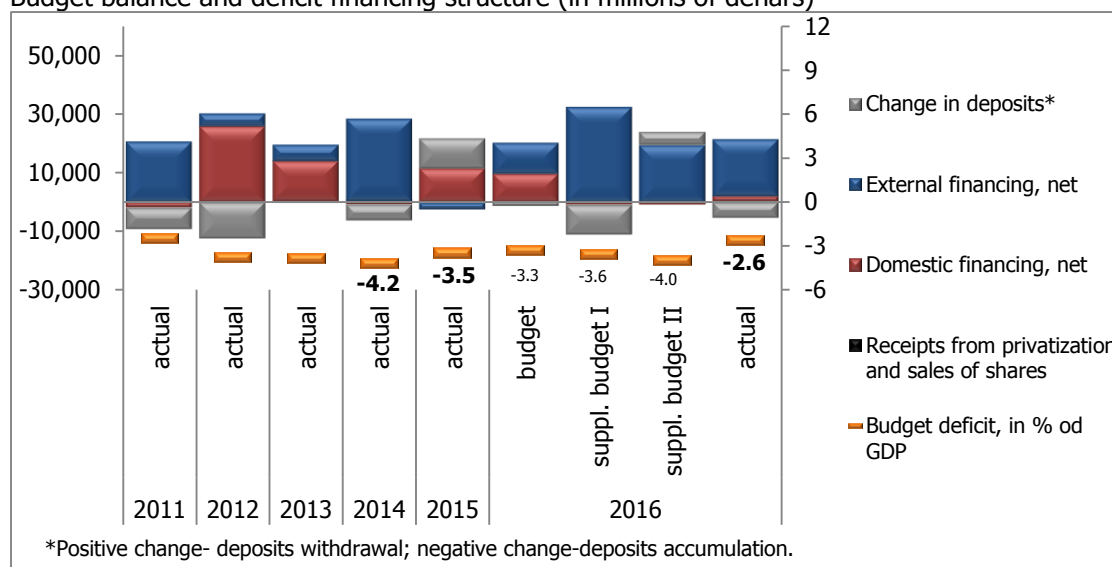
Chart 7
Global prices of primary commodities, performance and revisions, average annual growth, in %



Fiscal policy in 2016 was generally assessed as prudent, with a smaller budget deficit for the second year in a row than the previous year, thus continuing the process of fiscal consolidation. Nevertheless, the risks and uncertainty were constantly present. Thus, during the year, the budget deficit for the current year was revised upward on two occasions, within a relatively short time (from 3.3% to 3.6% of GDP in July and from 3.6% to 4.0% of GDP in August³), with changes in the sources of financing. These changes had an impact on the environment of conducting monetary policy. Thus, contrary to the original plan for combined financing of the budget deficit through domestic and external sources of financing, the first revision envisaged a significantly higher amount of external financing with an assumption of allocation of part of the funds on the account with the NBRM. With the August revision, changes were again made in both the amount of budget deficit and the structure of financing, by reducing the amount of external financing and by using funds previously provided through the external government borrowing and the reduction of government deposits with the NBRM. At the end of the year, the performances were different from the original budget and the two revisions. Namely, at the end of the year, the budget deficit was 2.6% of GDP and was lower than the initially planned one and the two revisions for 2016, when the government provided funds through external borrowing, i.e. by issuing a new Eurobond, while part of the funds were a deposit with the NBRM.

Chart 8

Budget balance and deficit financing structure (in millions of denars)



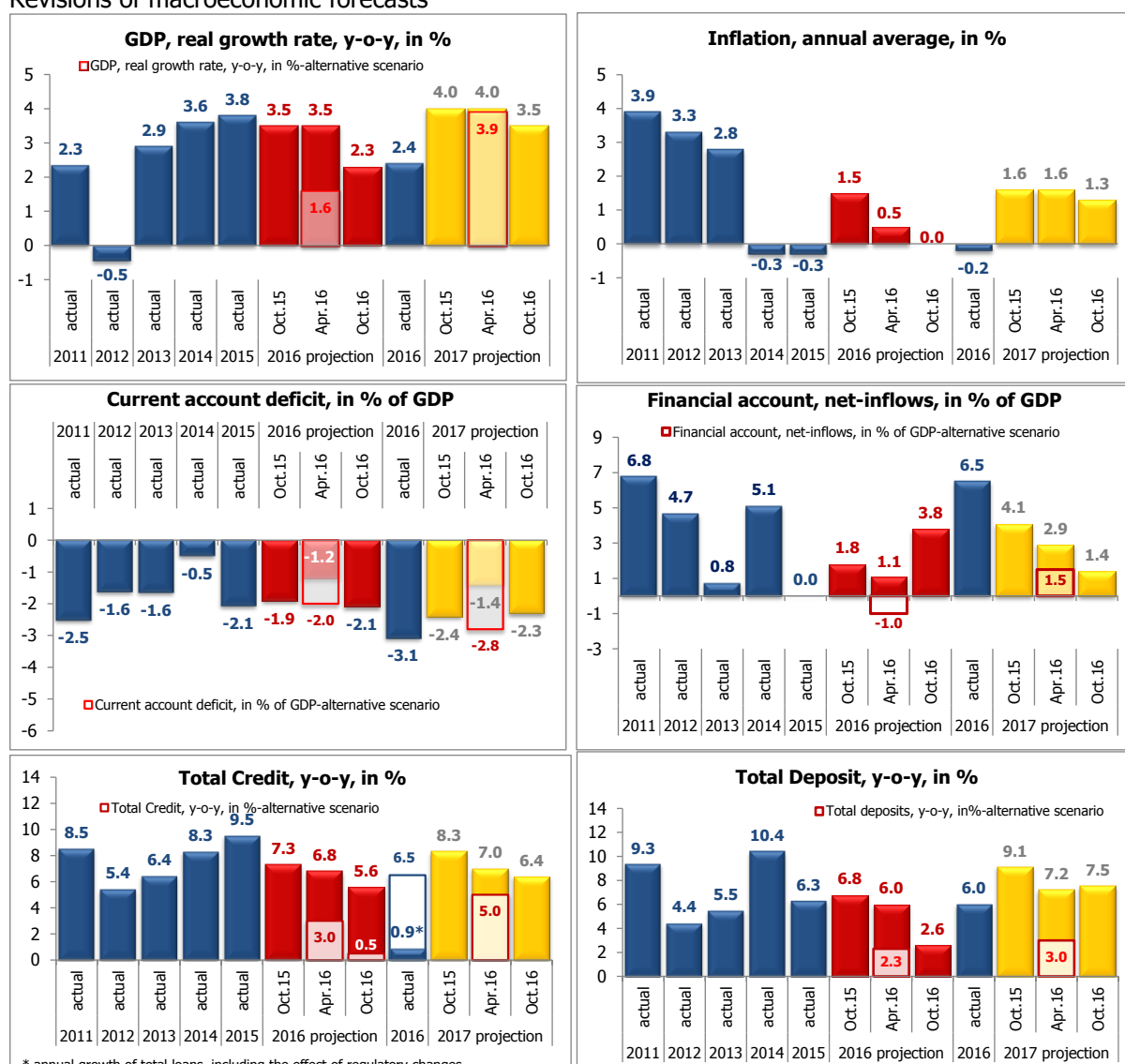
Source: Ministry of Finance.

However, the greatest risk factor and source of uncertainty for the monetary policy and the macroeconomic forecasts that underlies monetary decision-making in 2016 were the unfavorable domestic political context and the escalation of the crisis in April and May. The unstable political environment, coupled with speculation about the stability of the exchange rate and the banking system, quickly exacerbated the expectations of economic agents and created pressures on banks' deposits and demand for foreign currency. Taking into account the uncertainty about the duration of the crisis and the size of its economic effects, in April, the NBRM prepared a baseline and alternative macroeconomic scenario. The baseline macroeconomic scenario assumed a rapid stabilization of the political crisis, while the alternative scenario assumed extension of the political crisis for a certain period, where the trust and expectations of the population, as well as of the domestic and foreign investors

³ The second revision was made to include the envisaged costs in the budget expenditures, for indemnification for damages from the floods that happened in the Skopje region in summer.

and creditors, were pointed to be the main channels for transfer of the crisis. Amid escalation of the political crisis and estimates of likelihood of materialization of the risks from the alternative scenario, in the period April-May, the NBRM took measures to stabilize the flows. Thus, along with the interventions on the foreign exchange market with the sale of foreign currencies, the NBRM made changes in the monetary instruments. First, at the regular meeting held on 3 May 2016, the NBRM Operational Monetary Policy Committee decided to increase CB bill interest rate by 0.75 percentage points, from 3.25% to 4%. The increase in the policy rate was a clear signal of the willingness to maintain exchange rate stability and to increase the demand for domestic currency. One of the important expected channels of transmission of this measure were the deposit interest rates of the banks. The increase in the yield of savings products was expected to retain and/or increase savings of the households who withdrew their deposits in that period. Besides the change in the policy rate, the NBRM also cut the offer of CB bills, which along with the flexible setup of deposit facilities and other monetary instruments, additionally supported the banks' solid liquidity position, helping them to address the situation.

Chart 9
Revisions of macroeconomic forecasts

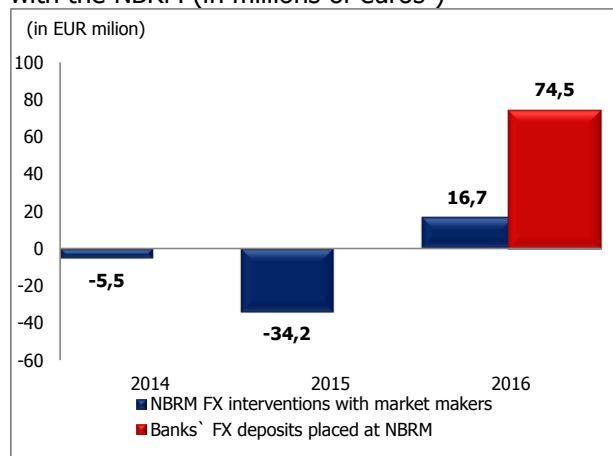


Source: NBRM and SSO. The forecasts for all indicators refer to the macroeconomic forecasts of the NBRM.

In order to support the denarization and to stop conversion into foreign currency, changes were made to the reserve requirement. Thus, the reserve requirement rate for banks' liabilities in denars with FX clause was increased from 20% to 50%. Furthermore, the NBRM created conditions for maintaining and increasing the foreign currency deposits of the banks in the domestic economy. Namely, since 13 May 2016, banks are allowed to place foreign currency deposits in the central bank at more favorable and positive interest rates as opposed to the negative interest rates currently prevailing in the international financial markets. This measure was expected to increase domestic banks' income and accordingly, to rise deposit interest rates of their clients.

The monetary measures and the clear communication regarding the readiness to maintain stability of domestic currency relatively quickly stabilized the confidence of economic agents, seen through the continuous growth of household deposits that started in June 2016 and through the NBRM's purchase of foreign currencies that started in July 2016. The rapid stabilization of expectations, the limited character of the crisis and the favorable movements were incorporated in the October macroeconomic forecasts, which pointed to solid economic and credit growth, gradual strengthening of the deposit potential, absence of price pressures and balance of payments position that ensures further growth of foreign reserves. The constant favorable movements and macroeconomic forecasts created room for easing the monetary policy at the end of the year. Thus, on 25 October, the NBRM Operational and Monetary Policy Committee (OMPC) decided to cease auctions of foreign currency deposits that banks would place in the NBRM, while at the December session, the OMPC decided to cut the CB bill interest rate from 4.00% to 3.75%, as a first step of its gradual normalization⁴.

Chart 10
NBRM interventions on the foreign exchange market and banks' foreign currency deposits placed with the NBRM (in millions of euros⁵)



Source: NBRM

Foreign exchange reserves, as an important indicator of the capacity for defending the national currency against shocks, were constantly maintained within a comfortable zone in 2016, and their level at the end of the year was higher compared to the end of the previous year. The increase in reserves exceeded the expectations within the October forecasts, which is entirely due to the higher flows in the financial account. Observed by factor, government foreign currency deposits with the NBRM were the key category that in 2016 increased the foreign reserves (in line with the inflow of the Eurobond). Additional reserves growth was also provided through the NBRM's auctions of foreign currency deposits of banks, an

instrument activated for dealing with the increased risks of the crisis. However, it is important to emphasize that despite the pressures during the year, the foreign reserves moderately grew due to the NBRM interventions on the foreign exchange market. Namely, from April 2016, when the political situation in the country deteriorated until May 2016, the NBRM intervened on the foreign exchange market by selling foreign currency (about Euro 129 million, or 5.7% of the stock of reserves at the end of March). Interventions in the

⁴ Amid further stabilization of the expectations and confidence of the companies, in the period January-February 2017, the NBRM further cut the policy rate by 0.50 percentage points, thus reducing the CB bill interest rate at the pre-crisis 3.25%.

⁵ Foreign currency deposits will fully mature in the third quarter of 2017, that is, at the beginning of August.

second half of the year regularly included purchase of foreign currency and exceeded the amount of sales from the beginning of the year. Consequently, in 2016, the NBRM purchased Euro 17 million of foreign currencies on the foreign exchange market, which show the limited and speculative nature of the effects of the risks posed by the crisis, but also the prompt and timely response of the NBRM aimed to stabilize the expectations and restore the confidence of the economic agents, as well as the sound foundations of the economy and the solid foreign exchange potential for dealing with such and similar risks.

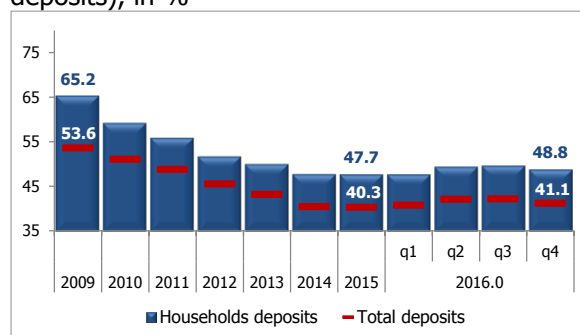
Measures taken by the NBRM stabilized the expectations of economic agents and maintained the stability of the exchange rate, and therewith of the inflation expectations. The general price level in 2016 moderately decreased (average annual fall of 0.2%), reflecting solely the decreased import prices of food and energy. 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 marked the 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 the volatile international market prices, it was estimated that the adjustments are temporary. This is also confirmed by the moderately positive output gap and by the changes in core inflation (excluding food and energy), which in 2016 moderately increased to 1.4% on average.

Risks posed by the political crisis in the country affected the volume of household savings in banks and the currency structure of deposits, increasing the preferences for foreign currency savings. However, the effects were mostly felt in the period April-May, and from the beginning of June until the end of the year, household deposits continued to grow in all savings components in terms of both maturity and currency, which is a clear signal for stabilizing the economic agents' expectations. Against such background, the degree of euroization, measured as deposits with FX clause to total deposits ratio, increased moderately (by about 1 percentage point) in 2016 after a long period of time and amounted to 41.1% at the end of the year.

In order to mitigate some of the potential risks to the currency structure of savings, in May, the NBRM made changes to the reserve requirement, by increasing the reserve requirement rate for banks' liabilities with FX clause from 20% to 50%. The changes aimed to support the process of denarization of deposits and to stop the process of conversion into foreign currency.

Despite the present risks to the economy, the absence of inflationary pressures and the relatively favorable external sector developments created favorable environment for further solid economic growth. Economic activity further accelerated in 2016, but moderately slower, with the performance being as expected. The economic recovery was partly supported by the banks' lending activity. The credit growth in 2016 exceeded the expectations, when total loans increased by 0.9%, or 6.5% annually, when controlled for the effect of

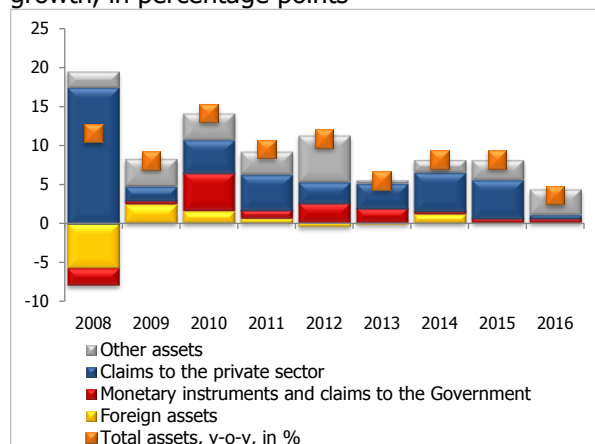
Chart 11
Euroization level, share of foreign currency deposits in total deposits (including demand deposits), in %



Source: NBRM

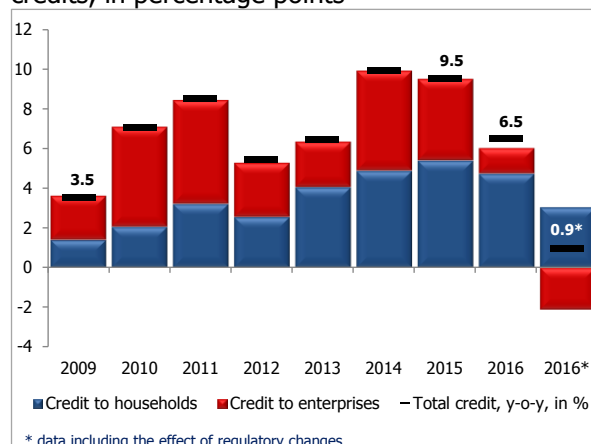
regulatory changes⁶, as opposed to the October forecast for the end of the year of 0.5% and 5.6%, respectively. In 2016, the NBRM continued to support the corporate lending with further use of the non-standard measure aimed to support lending to net exporters and electricity producers⁷.

Chart 12
Bank assets structure - contribution to the annual growth, in percentage points



Source: NBRM.

Chart 13
Contributions to the annual change in total credits, in percentage points



* data including the effect of regulatory changes

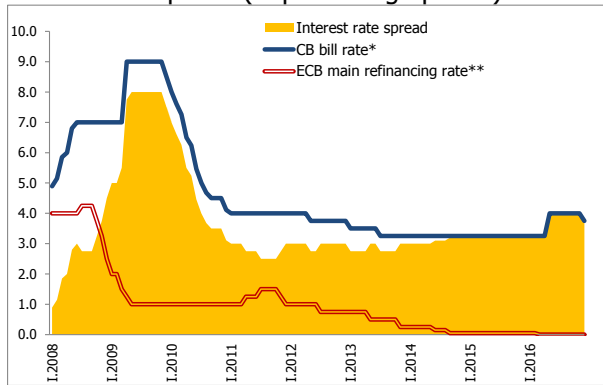
Given the application of stable nominal exchange rate of the denar against the euro, changes in interest rates in the euro area, as the anchor economy, play an important role in the monetary policy setup in the country. In 2016, the ECB continued to relax the monetary policy and cut policy rate from 0.05% to 0.00%. On the other hand, in order to maintain the foreign exchange rate stability, the NBRM increased the policy rate (from 3.25% to 4.00%). As a result, the spread between the policy rates of central banks extended from 3.2 percentage points to 4.0 percentage points. At the end of the year, with the cut in the NBRM policy rate from 4.00% to 3.75%, the interest rate spread moderately reduced from 4.0 percentage points to 3.75 percentage points. Analyzing the interest rates of banks in the domestic economy, the downward trend moderately slowed down, when the interest rate spread between the denar deposit interest rate and the foreign currency deposit interest rate insignificantly increased at the end of 2016 compared to the end of the previous year (1.5 percentage points versus 1.4 percentage points), as a result of the lower interest rate on foreign currency deposits.

⁶ On 17 December 2015, the NBRM Council adopted the Decision amending the Decision on credit risk management that requires from banks by 30 June 2016 to write off (and to continue writing off) all claims that have been fully provisioned for more than two years, and where the bank has identified and fully covered the credit risk of default at least two years before. Despite the write-off of these claims, i.e. their transfer to the off-balance sheet record, banks reserve the right for their collection. The effect of the transfer of part of the suspicious and contested claims of banks to off-balance sheet records was pronounced in the second quarter of 2016.

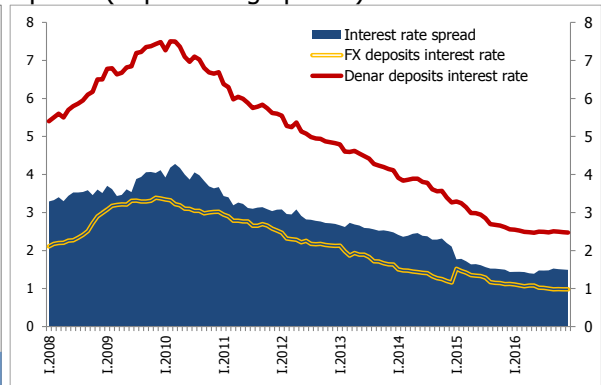
⁷ This measure allows a reduction of the reserve requirement base of banks for the amount of newly approved loans to net exporters and domestic producers of electricity and banks' investments in debt securities denominated in national currency without currency clause issued by net exporters and domestic producers of electricity. The measure was introduced in late 2012, and has been applied since 2013. Since the introduction of the measure, its application has been extended twice, i.e. until the end of 2017.

Chart 14

Interest rates of the NBRM and the ECB (in %) and interest spread (in percentage points)



Interest rates of banks (in %) and interest spread (in percentage points)



* NBRM policy rate: Interest rate on CB bills

** ECB policy rate: interest rate on ECB's main refinancing operations

Source: NBRM and ECB.

II. International environment

The global economic environment in 2016 is marked by strong political uncertainty, weak investment activity and further slowdown in the growth of total trade⁸ Global economic growth in 2016 was 3.1%, which is a minor slowdown compared to the previous year (3.2%), and the weakest growth since the onset of the global crisis. These performances reflect changes in the growth of developed economies, while the dynamic of economic activity in emerging economies and developing countries remained unchanged.

Chart 15
Global economic growth (in %)

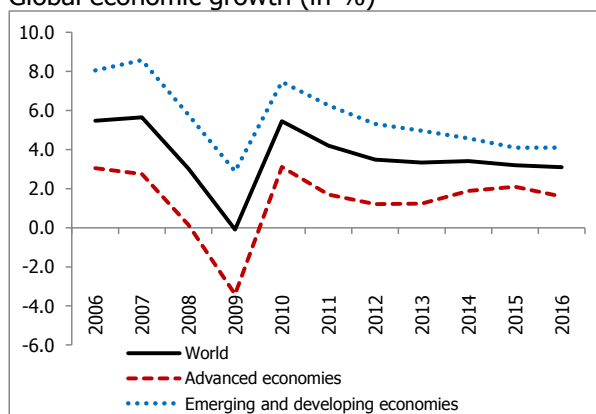
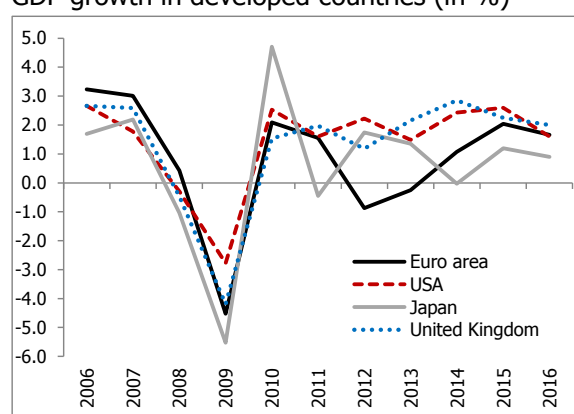
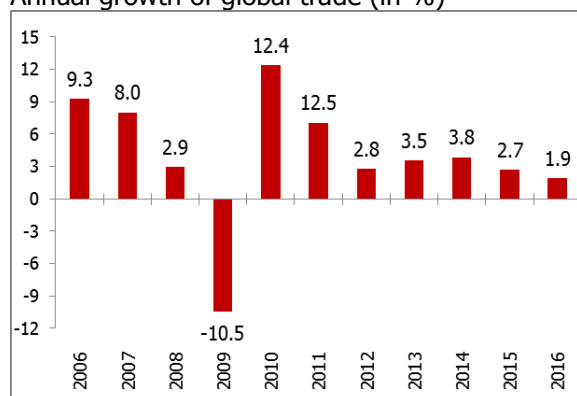


Chart 16
GDP growth in developed countries (in %)



Source: World Economic Outlook, October 2016 and update January 2017, IMF

Chart 17
Annual growth of global trade (in %)



Source: World Economic Outlook, October 2016 and update January 2017, IMF

Observing the developed countries, the United States reported greater economic slowdown, reflecting the weaker export activity, amid US dollar appreciation, reduced stockpiling and weaker investment activity. Observed by dynamics, certain acceleration was seen at the end of the year, just before the US presidential election. However, the outcome of the election further heightened the uncertainty, not only for the United States economy, but also globally, including the euro area as our key trading partner. Besides the announcements of the new US president for a possible increase in the level of protectionism in global trade, the

geopolitical tensions, slowdown in global trade, as well as the Brexit⁹ were key risk factors for the euro area in 2016. Despite these risks, the euro area continued to grow, but moderately slower, against the backdrop of ECB's adjustable monetary policy. The relatively high, although declining unemployment rate and the relatively low level of investment remain typical for the euro area and point to the need for faster and more diversified growth. However, the presence of global risks, internal political problems in the EU, and the need for stronger structural reforms in the euro area increase the uncertainty about its economic growth in the period ahead. The group of emerging countries grew at the same

⁸ "Global Economic Prospects", World Bank Group, January 2017.

⁹ In the referendum, held on 23 June 2016, the majority voted for the UK to leave the European Union.

pace as in the previous year, but with economic movements different from one country to another. The relatively low prices of some primary commodities slowed down the growth of exporting countries for these commodities, while the importing countries reported relatively high growth mainly due to the solid domestic demand and the positive effect of the low prices of primary commodities. Furthermore, this year, the steady growth of emerging Asian countries continued, while the countries of Latin America reported a negative growth.

In 2016, the global inflation slightly accelerated to 2.9%, (2.8% in 2015). This minor growth mostly reflects the mild rise in food prices. Developed countries reported significant increase of 0.4 percentage points in the inflation (from 0.3% in 2015 to 0.7% in 2016). This increase reflects the gradual recovery of the prices of primary commodities, and in particular, the growth of energy prices at the end of the year, despite stable and relatively low rates of core inflation. Inflation of emerging countries slowed down by 0.2 percentage points compared to 2015 and equaled 4.5%. These price movements in part reflect the appreciation of currencies in the oil exporting countries (particularly Russia), which had a second-round effect on headline inflation.

Analyzing specific quantitative indicators that depict the external landscape of the Macedonian economy, the foreign effective demand in 2016 went up by 2.0%, and continued its gradual recovery. The greatest positive contribution to the annual performance was made by the economies of Germany, Bulgaria and Serbia, while other countries made positive yet moderate contribution. On the other hand, in line with global developments, foreign effective prices in 2016 were unchanged on average (inflation of 0%), despite the average decline of 0.3% in 2015. Observed by country, Germany and Austria made the greatest positive contribution, while price movements in Bulgaria and Serbia made the strongest negative effect on foreign effective inflation.

Chart 18
Foreign effective demand

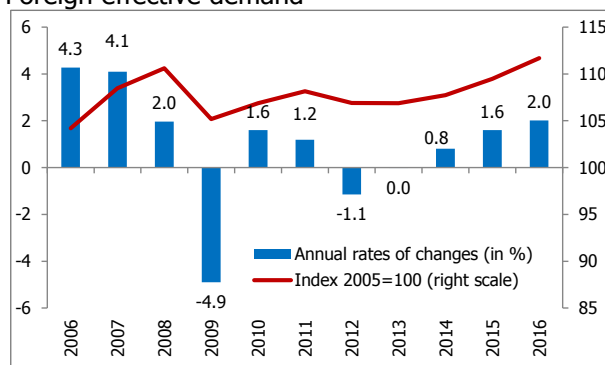
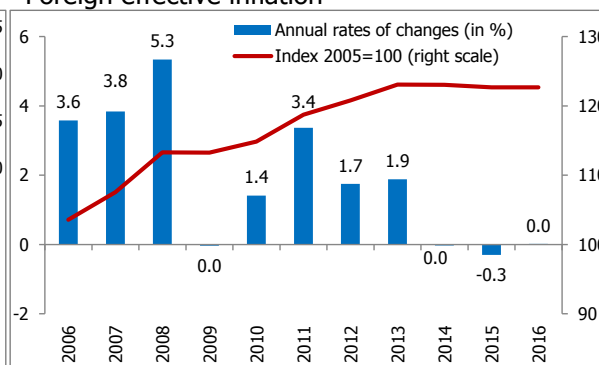


Chart 19
Foreign effective inflation



Source: NBRM calculations¹⁰.

The primary commodity markets in 2016 continued registering downward trend in the prices of energy, and metals, while the prices of food commodities moderately increased. Observed for the overall 2016, the average oil price was lower by 15.7% compared to 2015 (US dollar 44 per barrel). However, changes in the oil price (in euros)

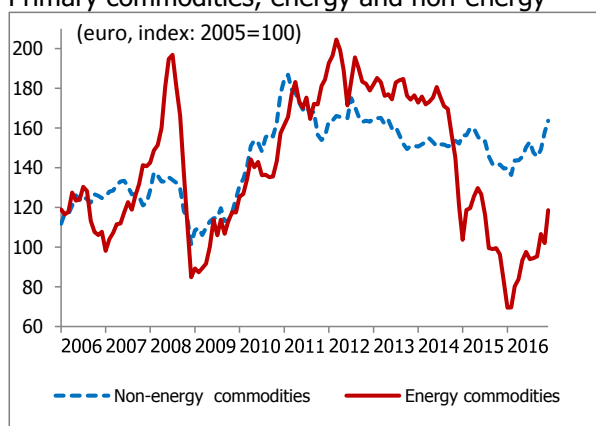
¹⁰ Foreign effective demand is calculated as the sum of the weighted indices of the gross domestic product of the most important trading partners of the Republic of Macedonia. The index calculation includes Germany, Greece, Italy, the Netherlands, Belgium, Spain, Serbia, Croatia, Slovenia and Bulgaria. 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.

marked this year. Thus, after the constant annual decline in the first nine months of 2016, in the last quarter, the oil price registered a significant annual increase of 17.2%. These movements primarily reflected the agreement among OPEC countries¹¹ to cut oil production, and the indications of Russia readiness (which is not an OPEC member) to support the measures by cutting its own oil production. Metal prices in 2016 continued to decline at a slower pace, registering an annual decline of 5%. This decline primarily reflected the low metal prices in the first half of 2016, due to the excess supply and low demand. On the other hand, metal prices in the second half of 2016 increased, primarily reflecting the decline in supply (closing of some production facilities, mostly in China) and indications of increased demand by China and the United States, due to the plans to increase investments in infrastructure projects. Food prices in 2016 slightly increased by 2.3%.

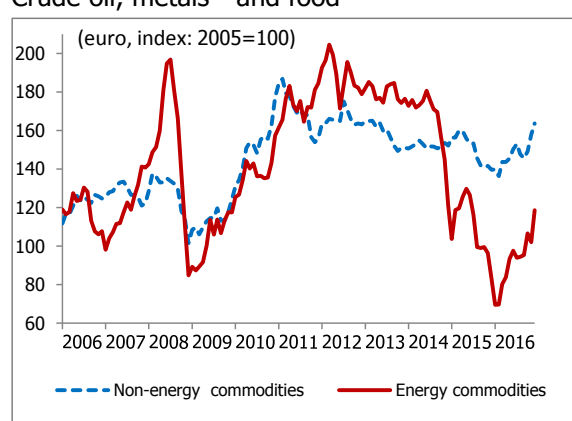
Chart 20

Monthly movement of prices of selected primary commodities

Primary commodities, energy and non-energy



Crude oil, metals¹² and food



Source: IMF's database on primary commodity prices.

In 2016, central banks of developed countries pursued divergent monetary policies. In the United States, amid solid economic performance, Fed continued to normalize the monetary policy. In December 2016, the Fed increased the interest rate target on the money market by 0.25 percentage points, or 0.50% - 0.75%. This increase was a reflection of the Fed's estimates for accelerating economic growth, as well as potential future inflationary pressures. On the other hand, the ECB continued to implement a stimulating monetary policy. Thus, in March 2016, the ECB took a set of measures to further ease the financial conditions in the euro area. Thus in March, the ECB cut the interest rate on the main refinancing operations from 0.05% to 0.00%, the interest rate on deposit facility from -0.30% to -0.40% and the interest rate on marginal lending facility from 0.30% to 0.25%, and took additional measures¹³. All these measures were taken to provide further support to

¹¹ Agreement was reached on 30 November 2016 in Vienna, requiring the production to be cut by 1.2 million barrels a day, starting from 1 January 2017. Another meeting between the OPEC and non-OPEC countries was held on 10 December, where, for the first time since 2001, it was agreed the non-OPEC countries to cut oil production to 558 thousand barrels, besides the cut of the OPEC member countries. This agreement will be implemented in the first six months of the year with a possibility of extension for another six months.

¹² Metals Price Index is a composite index, which includes prices of copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium.

¹³ A decision was made to implement four additional Targeted Longer-Term Refinancing Operations (TLTRO II) with maturity of 4 years, starting from June 2016, with an interest rate at the level of the ECB's policy rate. Moreover, for banks that will increase their lending activity to a level higher than the set target, a lower interest rate will be applied to the amount above the target, but most up to the level of deposit facility interest rate. Besides, there was an increase in the monthly purchase of bonds under the quantitative easing program (from Euro 60 to Euro 80 billion) starting from April 2016, including the purchase of non-financial corporate debt securities from the euro area with an appropriate investment rating. However, at the regular meeting held in December, the ECB decided to reduce the redemption of backed securities under the quantitative easing program from Euro 80 billion to Euro 60 billion per month (starting from April 2017), but extended its duration period from six to nine months.

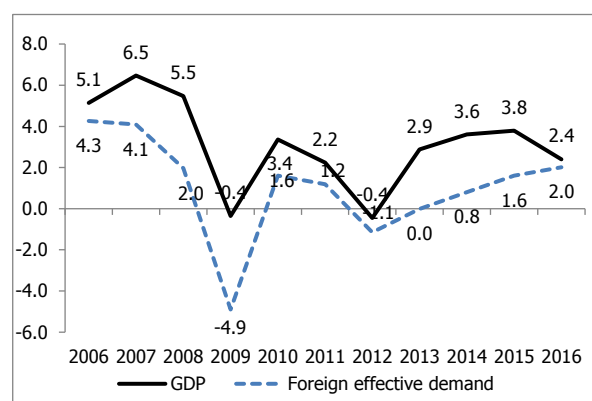
growth and to achieve the inflation target. The measures taken by the Bank of England and the Bank of Japan were aimed at the same target. In August, the Bank of England took measures to further ease monetary policy by cutting the policy rate by 25 basis points (to 0.25%), and by increasing the amount of securities purchased by the central bank. All these measures were taken to support growth and to achieve the inflation target. At the January 2016 meeting, the Bank of Japan took additional measures to ease the monetary policy in order to achieve the inflation target of 2%.

III. Macroeconomic developments in 2016

3.1. GDP and inflation

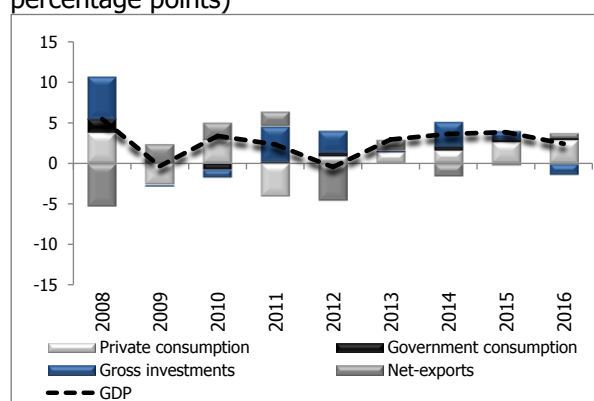
In 2016, the macroeconomic uncertainty increased given the increased risks related to the domestic political developments, amid unfavorable risks from the external environment. In spite of such environment, in 2016, the Macedonian economy grew with real growth rate of 2.4%, which is moderately lower, compared to 2015. The structure is similar to 2015, namely, construction was the sector with the highest positive contribution, reflecting above all the civil engineering works in the implementation of publicly funded infrastructure projects. Despite the increased adverse risks in the external environment, this year, the export sector was again a key driver of growth, which is associated with the new export-oriented facilities, as well as the increased foreign demand. During the year, the domestic economy was also supported by favorable labor market and productivity developments.

Chart 21
GDP and foreign effective demand (annual real growth rates, in %)



Source: State Statistical Office and Eurostat, NBRM calculations; GDP data for 2015 are preliminary, and data for 2016 are estimated.

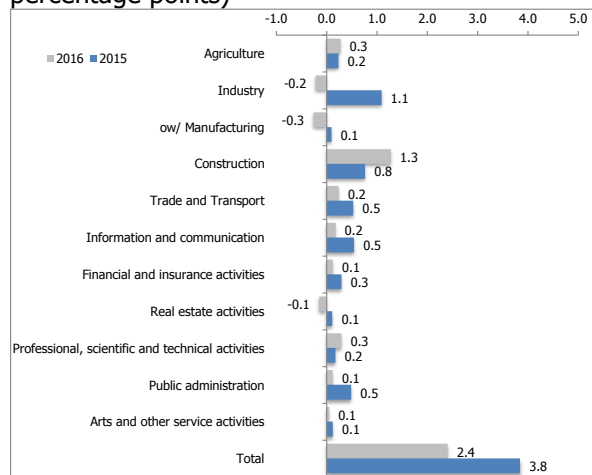
Chart 22
GDP (real growth, in %) and GDP expenditure components (contributions to growth, in percentage points)



In 2016, most activities made positive contribution to economic growth. Same as in 2015, construction made the largest individual contribution to growth, which is mainly due to the increased civil engineering works in the publicly funded infrastructure projects. Trade also saw favorable developments¹⁴, where, according to the total turnover data, growth mostly reflected the increase in both retail trade and wholesale trade. Analyzing other activities, additional positive stimulus to the growth of the domestic economy comes from agriculture and professional, scientific and technical activities. Industry, as a sector with significant share in GDP and job creation, reported a slight drop in value added in 2016, despite the physical volume of industrial output that moderately increased in 2016.

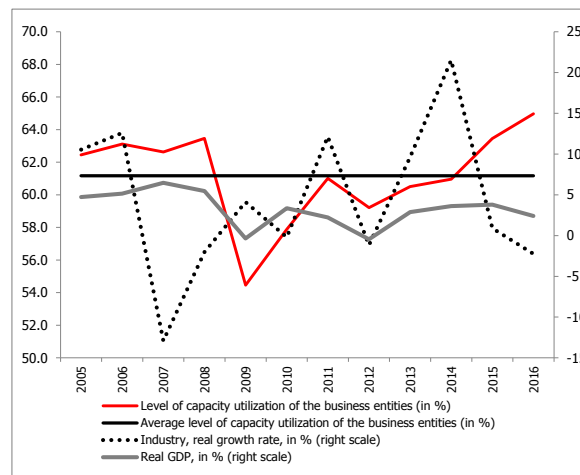
¹⁴ The analysis of trends in trade uses high frequency data on the trade turnover (SSO).

Chart 23
Contribution to the real annual GDP growth (in percentage points)



Source: State Statistical Office and NBRM calculations
GDP data for 2015 are preliminary, and data for 2016 are estimated.

Chart 24
GDP, industry and capacity utilization



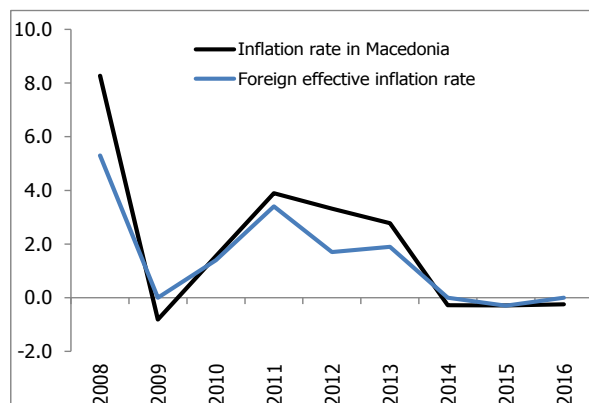
Analyzing aggregate demand, the growth of domestic economy in 2016 is explained by export and higher domestic demand. Observed by expenditure component, high export activity, same as in 2015, is a key driver of growth with the highest positive contribution. Moreover, the favorable export performance was related to the activity of the new export-oriented companies for several years. The domestic demand increased mainly due to the growth of private consumption, given the favorable labor market developments, real wage and pension growth, and solid household lending, with positive contribution of the public consumption. On the other hand, gross capital formation declined, as opposed to the positive shifts in almost all high frequency investment indicators that increased in 2016. The growth of domestic demand and exports increased the imports. However, net exports, whose negative contribution gradually declined for two years, in 2016 made positive contribution to growth.

In 2016, inflation in the Republic of Macedonia remained in the negative zone, for the third year in a row, which, in the absence of significant pressures on the demand side, reflects the global environment of generally low import prices of food and energy¹⁵. Thus, for the whole of 2016, the general price level decreased by 0.2% annually, which is a minimal slowdown of the fall in the price level compared to the previous two years (average decrease in the general price level of 0.3%). Analyzing the dynamics, consumer prices throughout the year remained in the negative zone with a more pronounced decline in the second quarter. The main factor for the deepening of the fall was the fall in domestic food prices. In the second half of the year, prices decreased at a slightly slower pace, which corresponds to the change in the dynamics of world prices of primary commodities, and above all, the oil price that started to grow at the end of the year¹⁶.

¹⁵ In 2016, the foreign effective inflation was 0%.

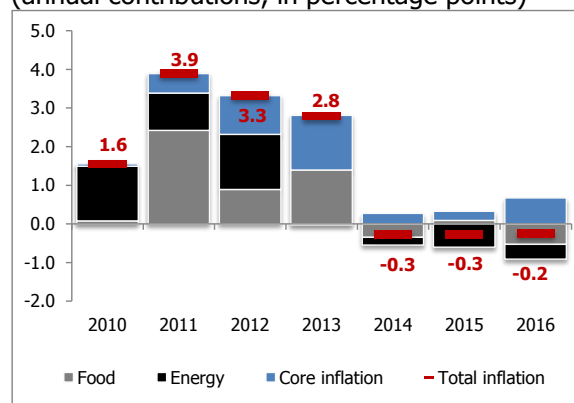
¹⁶ In 2016, the inflation was as follow: first quarter -0.1%, second quarter -0.7%, third quarter -0.1% and fourth quarter -0.1%.

Chart 25
Domestic inflation and foreign effective inflation, annual growth rates (in %)



Source: State Statistical Office, Eurostat and NBRM calculations.

Chart 26
Volatile (food and energy) and long-term component of inflation (annual contributions, in percentage points)



The main index components show that the fall in consumer prices reflects movements in the food and the energy component. Thus, food prices declined by 1.4% in 2016 (contribution of -0.5 percentage points to the headline inflation). This decrease in food products mainly reflects the lower prices in vegetables, fruits, meat, and cereal products during the year. Energy prices declined by 2.7% (contribution of -0.4 percentage points to total inflation), reflecting the fall in domestic prices of oil derivatives, amid average annual fall in oil prices on world stock markets. On the other hand, core inflation moved in the zone of positive values throughout the year and amounted to 1.4% (contribution of 0.7 percentage points to total inflation), mainly influenced by the higher prices of tobacco¹⁷ and home maintaining products.

3.2. Labor market

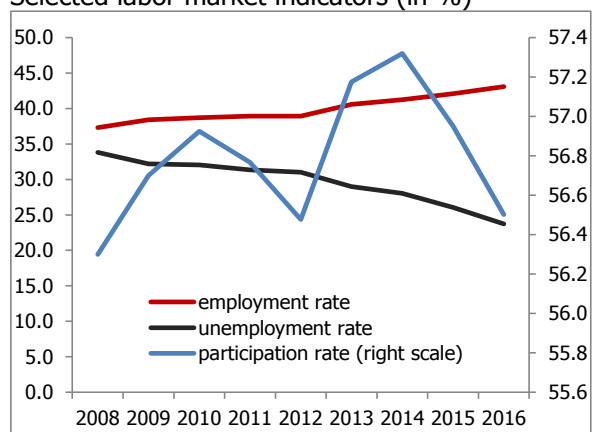
In 2016, most of the labor market indicators point to favorable trends.¹⁸ The good performance of this economic segment corresponds with the solid performance in the real sector, and additional support to the growth of employment, same as in the previous year, was provided through the active employment measures¹⁹. Thus, the number of employees increased by 2.5% in 2016, which is a small acceleration of the growth compared to last year. Moreover, the employment rate increased by 1 percentage point, to 43.1%. Analyzed by sector, same as in 2015, the employment growth mostly relates to *services*, particularly in the trade. Solid positive contribution was made by health and social care, public administration, defense and compulsory social insurance and administrative and auxiliary services. The employment growth in the *industry* continued in 2016 (with moderate dynamics), largely reflecting the positive developments in the construction sector. On the other hand, after the fall in 2015, the number of persons employed in agriculture declined during 2016, as well.

¹⁷ The annual growth of tobacco prices in 2016 is a combination of the excise increase from July 2015, the flat increase in cigarette prices of five denars per box in March 2016 and the increase in the price of a certain type of cigarettes in June 2016. In July 2016 there was an additional excise duties on cigarettes, but price changes do not show effects of this price correction.

¹⁸ The labor market analysis was made using quarterly labor force surveys, i.e. the annual indicators for 2016 are derived as an average of the published quarterly data.

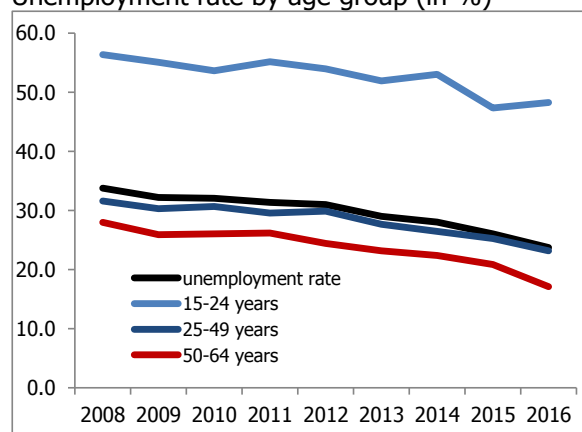
¹⁹ In 2016, the Government of the Republic of Macedonia, through the Ministry of Labor and Social Affairs and the Employment Agency, continued implementing active measures and programs designed to increase employment, such as entrepreneurship programs self-employment by means of borrowing and self-employment by using grants, that were extended to persons up to 29 years of age, financial support to micro and small enterprises and craftsmen for opening new jobs, subsidized employment programs, work-readiness programs, etc.

Chart 27
Selected labor market indicators (in %)



Source: State Statistical Office and NBRM calculations

Chart 28
Unemployment rate by age group (in %)



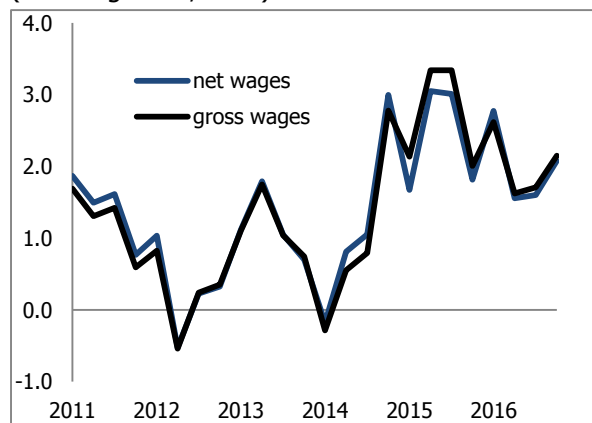
Despite the growth in labor demand, during the year, there was a slight downward adjustment of labor supply. The total active population decreased by 0.7%, and the simultaneous increase in the inactive population of 1.2% resulted in downward movement of the activity rate (of 0.4 percentage points) that reduced to 56.5%. Higher demand amid lower labor supply decreased unemployment, whereby the unemployment rate reduced to 23.7%, on average (decrease of 2.3 percentage points). Thus, analyzing by age group, the reduction of the total unemployment rate reflects the lower unemployment rate in adult population (persons aged 25-49 and persons aged 50-64), while the unemployment rate among young population (people aged 15-24) has increased. Such structural shifts point to potential reduction in long-term unemployment, bearing in mind that a significant proportion of the unemployed in this category are long-term unemployed.

The increase in average paid wages continued in 2016, but at a weaker pace compared to last year. Thus, nominal net and gross wages²⁰ registered an annual growth of 2% (2.4% and 2.7%, respectively in 2015). Upward correction of the net wages was registered in almost all sectors²¹ especially in agriculture (6.7%), construction (9.8%) and administrative and auxiliary services (7.9%). Also, wages increased in real terms for the third consecutive year. Given the downward adjustment of the general level of consumer prices of 0.3%, net and gross wages registered a real growth of about 2.3%.

²⁰ 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.

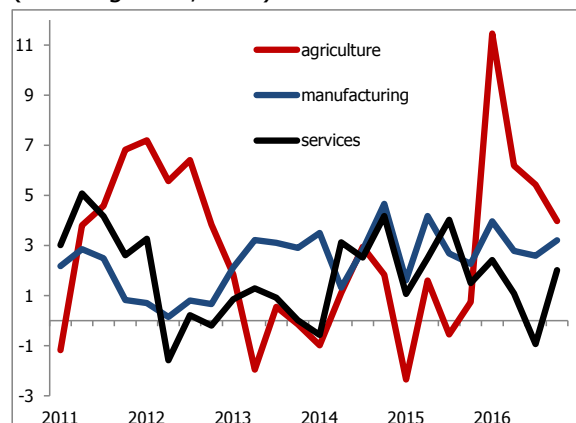
²¹ Lower wages were paid in real estate services, professional, scientific and technical services, finance and insurance, and in health and social care.

Chart 29
Average gross and net wages
(annual growth, in %)



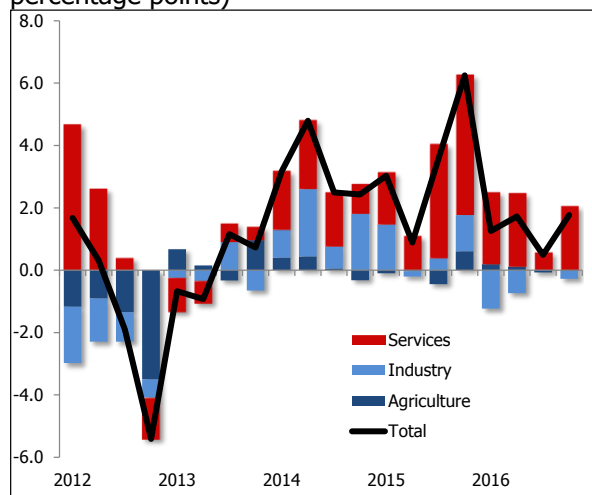
Source: State Statistical Office and NBRM calculations

Chart 30
Average net wages, by sector
(annual growth, in %)



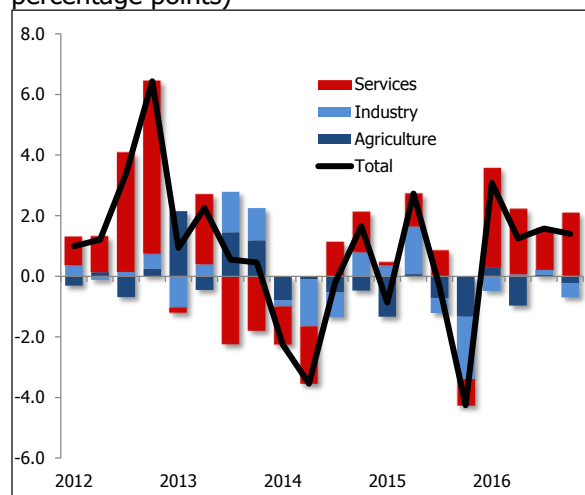
In 2016, there was continuation of the trends of positive labor productivity²², which is higher by 1.3%. However, given the slower economic growth, the measured labor productivity growth was also lower, compared to 2015. Observed by sector, construction made the highest contribution to growth, as a sector with the largest increase in value added amid moderate employment trends. Unit labor costs in 2016 continued to increase moderately (1.8%), with an increase in costs in the services sector, while unit labor costs declined in agriculture and industry.

Chart 31
Labor productivity
(contributions to the annual growth, in percentage points)



Source: State Statistical Office and NBRM calculations

Chart 32
Unit labor costs
(contributions to the annual growth, in percentage points)



3.3. Public finances

The process of fiscal consolidation, which began last year, continued in 2016. The budget deficit in 2016 was 2.6% of GDP, compared to 3.5% of GDP in 2015. This deficit is

²² Productivity and unit labor costs for the entire economy are calculated using State Statistical Office's data on GDP, number of employees and average gross wages. Total productivity is calculated as the weighted sum of calculated productivity at the level of the individual sector. Within each sector, productivity is calculated as the ratio between the added value in that sector and the number of employees.

lower than initially estimated with the annual budget and the deficit envisaged with the two revisions adopted during the year²³. With the first revision from July, the budget deficit increased to 3.6% of GDP²⁴, compared to the initial forecast of 3.2% of GDP. Against the backdrop of political uncertainty and slower economic activity than expected, total budget revenues were corrected downwards, and expenditures were corrected moderately downwards. After a short period of time, in August, a second, targeted, budget revision was adopted, where budget expenditures were increased in order to compensate for the damages in the flooded areas²⁵, which further widened the budget deficit to 4% of GDP. However, by the end of the year, most of the liabilities based on compensation for flood damages were not incurred, which combined with the lower performance in other budget expenditure categories (mostly capital investment expenditures) resulted in lower budget deficit in 2016.

Changes in the primary budget deficit²⁶ and the current deficit²⁷ in 2016 are similar to the shifts in the overall deficit. Thus, the primary budget deficit at the end of 2016 was 1.5% of GDP, which is lower compared to the previous year (2.3% of GDP), while the current budget deficit was reduced to 0.8% of GDP, as opposed to 1.5% of GDP in the previous year. Such movements arise predominantly from the lower performances in the budget expenditures, mainly related to the category of goods and services.

The cyclically adjusted budget balance continued to narrow in 2016, demonstrating consolidation of public finances through changes in the discretionary component of fiscal policy. Thus, the fiscal impulse²⁸ in 2016 was negative, amid lower structural deficit²⁹ of 3.8% of GDP, as opposed to 4.7% of GDP in 2015. Similar movements were seen in both the primary fiscal impulse and the structural primary deficit. Negative fiscal impulse was present for the second year in a row, and in conditions of improved output gap, such indicators point to a countercyclical character of fiscal policy in 2016.

²³ In July 2016, the Government of the Republic of Macedonia adopted the first Budget Revision for 2016, and in August 2016, the Government adopted the second, targeted Budget Revision for 2016.

²⁴ Within the analysis of the planned budget deficit, the forecasts of the Ministry of Finance of the Republic of Macedonia were used for the nominal GDP for 2016.

²⁵ The Budget Revision of August 2016 provided an additional Euro 36.4 million for full compensation for the flood damage of 6 August 2016.

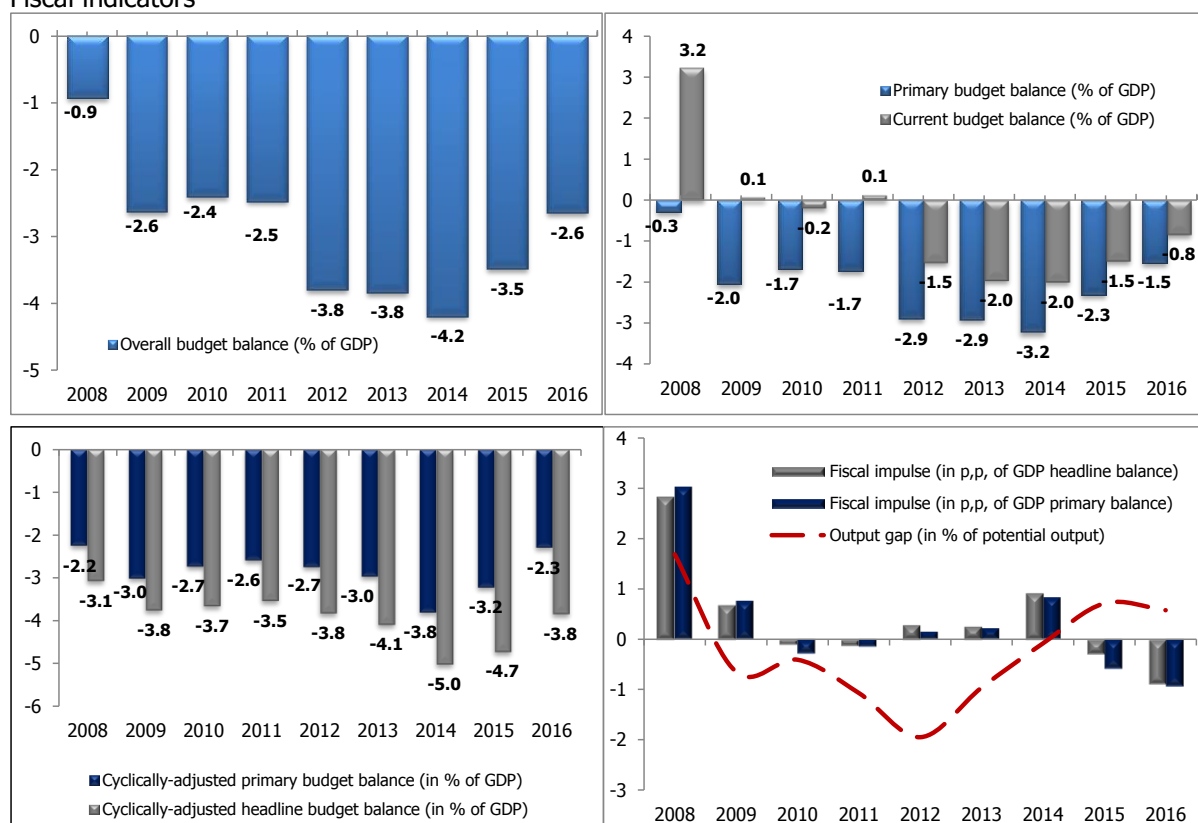
²⁶ Primary budget balance is the difference between total budget revenues and total budget expenses, less the repayment of current loan (interest) liabilities. This fiscal indicator is considered appropriate for the analysis of the current policy course since it does not include fiscal costs related to the past behavior of the fiscal policy to the public debt.

²⁷ 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).

²⁸ The fiscal impulse is defined as the difference between the cyclically adjusted balance in the previous and in the current year.

²⁹ 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.

Chart 33
Fiscal indicators



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

The main source of financing the budget deficit in 2016 was the government net borrowing on the foreign capital market, while a smaller portion of the financing needs were secured from domestic sources through a net issue of government securities. However, the performance during the year shows a different picture in terms of the structure of sources of financing. Thus, the budget deficit in the first half of 2016 was mostly financed using government deposits with the NBRM, while the funds secured from the domestic and foreign financial market covered only a small portion of the financing needs in this period. On the other hand, in the second half of the year, foreign borrowing was the main source for financing the budget deficit, with smaller mobilization of funds on the domestic financial market. Namely, to provide funds for covering the financing needs in 2016 and 2017, in July 2016, the government issued a new Eurobond³⁰. Given the growth of external net borrowing and moderate net issue of government securities on the domestic market, in 2016, there was a significant increase in government assets with the NBRM. In terms of the government activity on the primary securities market, the stock of gross issued government securities in 2016 was 10.3% of GDP, which is an increase of 1 percentage points of GDP compared with the previous year. Moreover, the growth almost entirely arises from the higher amount of issued treasury bills, while the stock of government bonds registered a moderate increase on an annual basis. Such changes in the maturity structure of government securities confirm the increased demand of market participants (mostly banks) for government securities with shorter terms. During 2016, the interest rates on government securities moderately increased, whereby the average weighted interest rate on treasury bills and government bonds increased by 0.7 percentage points and 0.3 percentage points, respectively, and reached 2.5% and 3.7%, respectively.

³⁰ The Eurobond was issued in the nominal amount of Euro 450 million, maturity of 7 years and interest rate of 5.625%.

Chart 34
Budget balance financing structure (in millions of denars)

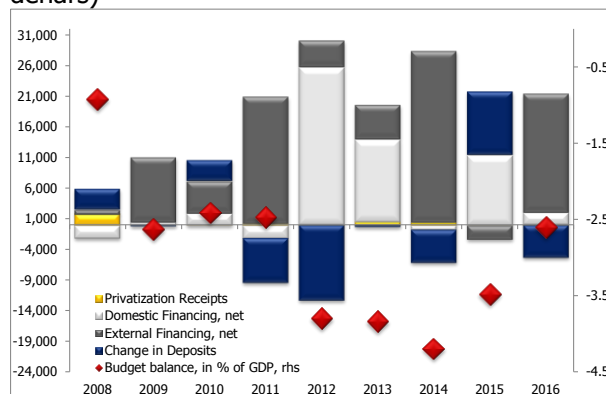
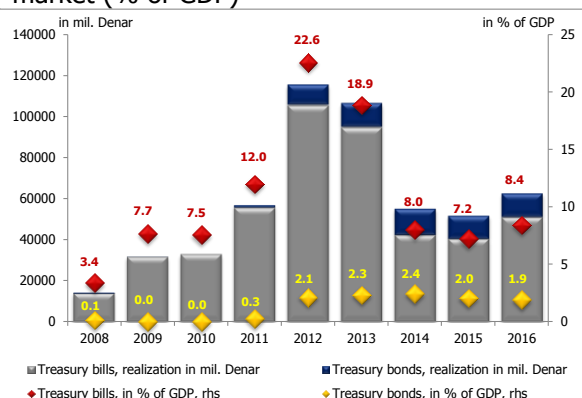


Chart 35
Gross government securities issued on primary market (% of GDP)



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

In 2016, the central government debt³¹ was Euro 3,851.5 million, which is an increase of 11.5% compared to the previous year. The annual growth of the debt mainly arises from the increase in the external government borrowing (of 16.7%), as a result of the newly issued Eurobond³², and the simultaneous increase in the domestic debt (of 3.6%). In such conditions, the share of central government debt in GDP increased by 0.9 percentage points, reaching 39.1% of GDP. Alongside the growth of the central government debt, in 2016, the total public debt³³ increased by 11.5% annually, reaching Euro 4,711.4 million at the end of the year. Hence, the total public debt was 47.8% of GDP, which is by 1.1 percentage points higher compared with the previous year. The further increase in the public debt mainly results from the increased government debt³⁴ (primarily the higher external debt of the central government), and less from the growth of the guaranteed debt of public enterprises and joint stock companies in state ownership. Despite the nominal growth of the guaranteed debt, in 2016, its share in total public debt stabilized (18.3% in 2015 and 2016, respectively), despite the constant increase in the previous three years due to the higher borrowing for infrastructure projects. Analyzing the resident public debt structure, the two main components of total public debt showed divergent movements in 2016. Namely, the external public debt to GDP increased by 1.9 percentage points compared to 2015 and reached 33.3% of GDP, while the share of domestic debt decreased by 0.8 percentage points and reduced to 14.5% of GDP.

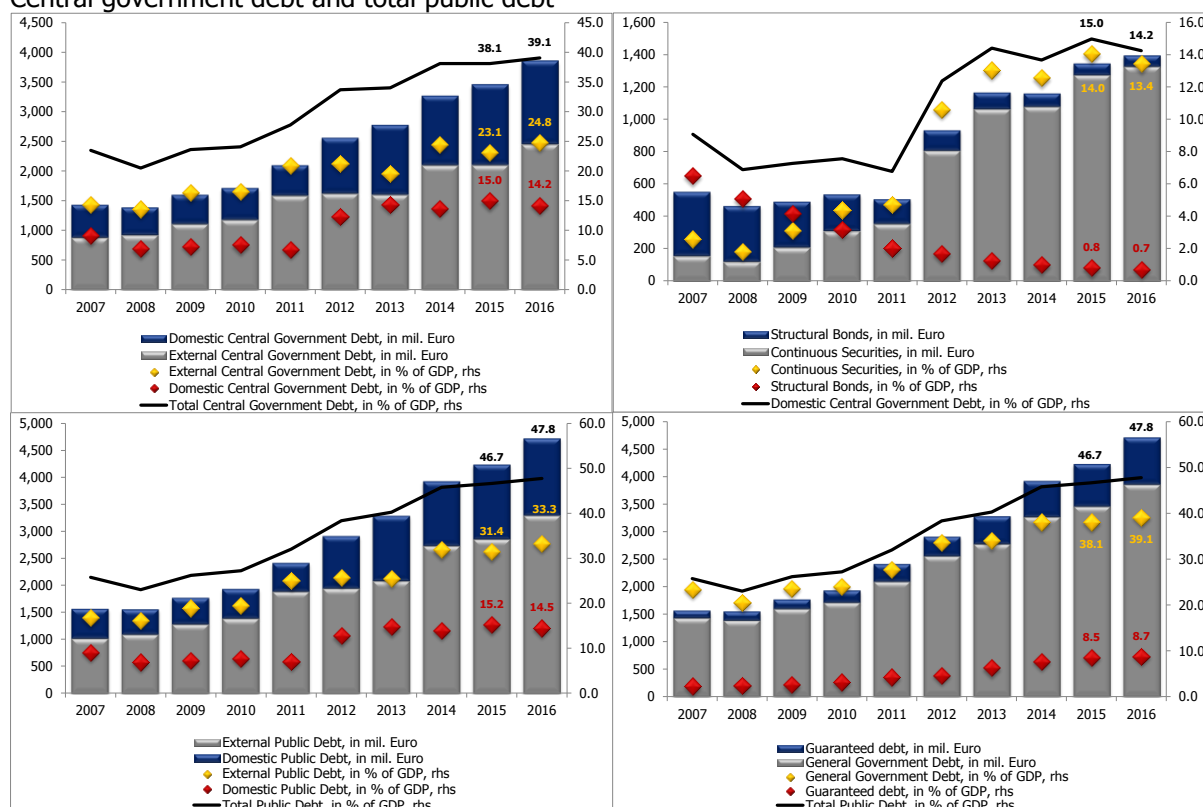
³¹ Refers to central government debt, including public funds, excluding municipalities.

³² Despite the regular repayment of long-term loan liabilities to Citibank of Euro 132.7 million, the net government external debt increased.

³³ The public debt is defined under the Law on Public Debt (Official Gazette of the Republic of Macedonia No. 165/14) as the sum of government debt and 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, for which the Government has issued a state guarantee.

³⁴ Government debt is defined as the sum of the debt of both the central and the local government.

Chart 36
Central government debt and total public debt



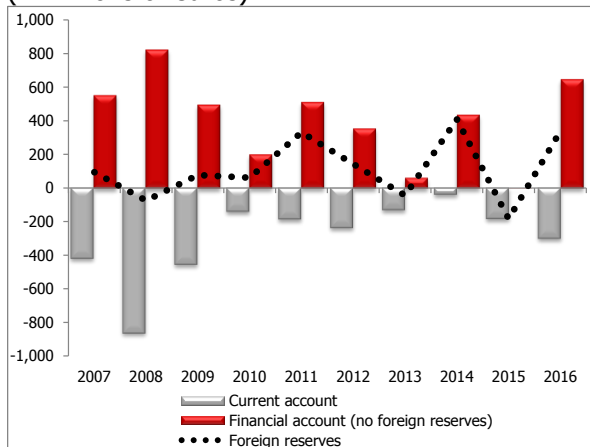
Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

3.4. Balance of payments, IIP and external debt

In 2016, the current account deficit remained moderate, without any indication of larger imbalance in the external sector. On an annual basis, the negative balance on the current account increased by 1 percentage point and reached 3.1% of GDP. This is due to the deepened primary income deficit, which corresponds to the higher estimated investment income of the foreign-owned companies, and the reduced positive balance of the secondary income, partially reflecting the effects of the uncertain political environment on the expectations of the domestic entities. The unfavorable trends in the primary and secondary income were mitigated through the improved balance in the foreign trade. The improvement was driven by many factors such as increase in net exports of the new industrial facilities, reduction in the negative energy balance, increased net inflows of several categories of services, and absence of major pressures of the domestic demand on imports. The financial account of the balance of payments registered significant net inflows of 6.5% of GDP, largely due to the government borrowing on the international financial markets by issuing the fifth Eurobond³⁵. Direct investment were a significant source of net inflows in the financial account, which increased by 1.4 percentage points of GDP compared to the previous year and reached 3.6% of GDP. These financial flows were sufficient to cover the current account deficit and to increase foreign reserves.

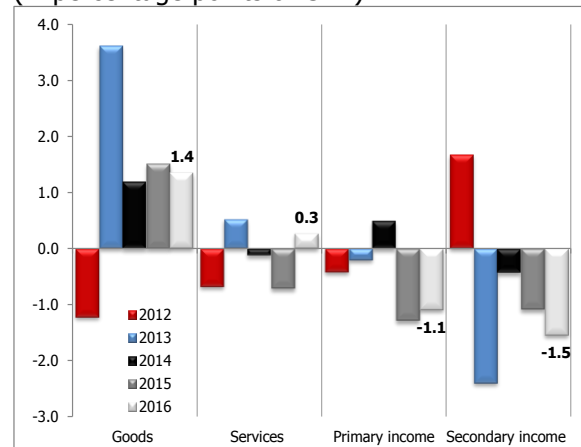
³⁵ In July 2016, the government borrowed on the international financial markets by issuing the fifth Eurobond in the amount of Euro 450 million, at a coupon rate of 5.625% and 7-year maturity.

Chart 37
Current, capital and financial account and foreign reserves
(in millions of euros)



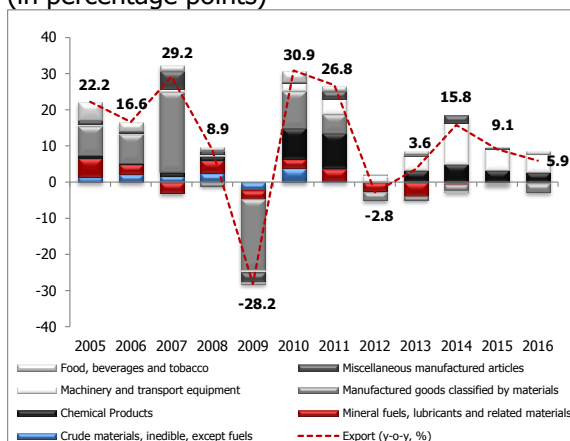
Source: NBRM.

Chart 38
Net contribution of individual components to the annual growth of the current account
(in percentage points of GDP)



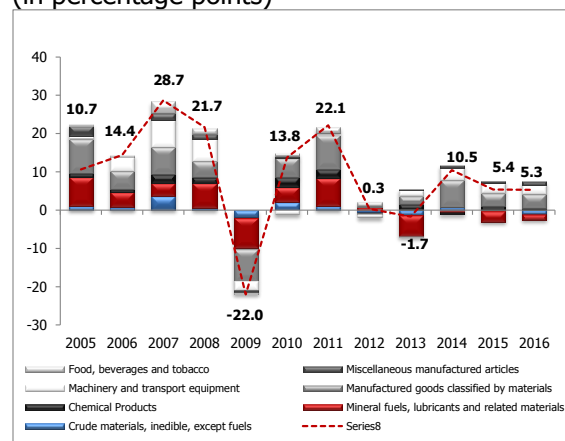
The foreign trade analysis indicates solid increase in both components, with moderately faster growth in exports compared to import of goods. In 2016, the export activity of the new foreign-owned companies was the driver of the positive export performance, mostly expressed through the high growth of export of machinery and transport equipment i.e. investment exports. On the other hand, the traditional export branches, especially in the metal manufacturing industry, in 2016, registered slower export activity. The exports performance influenced imports, so the raw materials for the new foreign facilities were the most important factor for import growth. Investment imports and private consumption imports made additional contribution to import growth. On the other hand, energy imports were reduced, mainly due to the lower value import of oil products, caused by the decline in world stock prices of oil.

Chart 39
Contributions to the annual export growth
(in percentage points)



Source: NBRM.

Chart 40
Contributions to the annual import growth
(in percentage points)



The analysis of price competitiveness indicators of the Macedonian economy³⁶ shows moderate deterioration compared to the previous year. REER deflated by consumer prices

³⁶ The analysis of price competitiveness indicators uses REER indices, calculated using weights based on the foreign trade without primary commodities. Primary commodities 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.

appreciated by 1.2%, while REER deflated by producer prices appreciated by 3.5%. Such annual changes mostly derive from the change in the nominal effective exchange rate against the currencies of some of the major trading partners, amid favorable movements of the relative prices on REER deflated by consumer prices, while the relative producer prices made additional contribution to the REER appreciation. Unit labor costs, as another competitiveness indicator, moderately increased by 1.8% in 2016, which, amid productivity growth, stems from wage growth.

Chart 41
CPI and PPI based NEER and REER (2010=100)

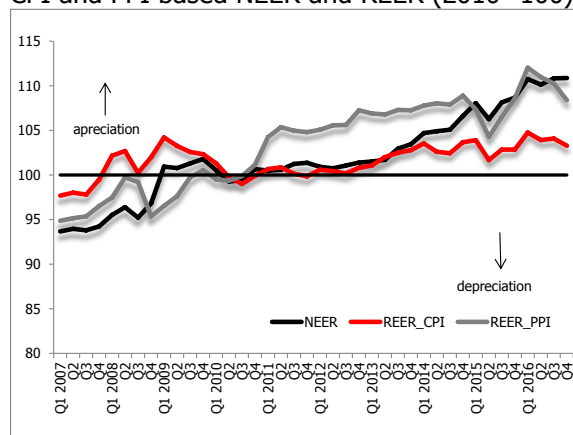
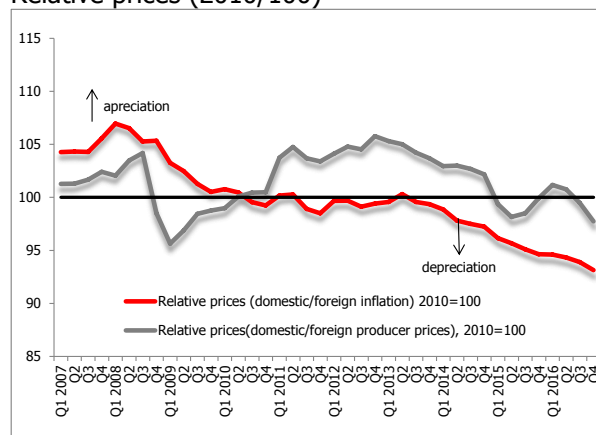


Chart 42
Relative prices (2010/100)



Source: NBRM.

After the decrease in the previous year, in 2016, the surplus in the trade in services increased by 0.3 percentage points of GDP, narrowing the current account deficit. Growth stems from the increased net inflows in the category of other business services³⁷ and in the telecommunication, computer and information services, amid lower positive balance of manufacturing services. In 2016, the primary income deficit significantly deteriorated, i.e. extended by 1.1 percentage point of GDP. This change mainly results from the shift in investment income, reflecting the higher estimated profits of foreign capital companies in 2016, compared to the previous year³⁸. The decrease in the relative share of net inflows from secondary income continued in 2016, when the share of this component in GDP dropped by 1.5 percentage points. In conditions of higher government transfers, the lower surplus in this category is due to the reduced net inflows from private transfers, partly because of the adverse effects of the domestic political crisis. The unfavorable movements were pronounced especially in the second quarter of the year, when the strong speculation about the stability of the Denar and the domestic banking system urged households to hold cash foreign currency. Although in June the situation stabilized, this shock reduced the purchase of cash from the currency exchange market and accordingly, the net inflows in the secondary income.

In 2016, high inflows of 6.5% of GDP were registered through the financial account of the balance of payments, compared to the neutral financial flows in the previous year. Main sources of these inflows are the external net borrowing of the government and other sectors in the economy³⁹, as well as the favorable performances of foreign direct investments. Country debt, covered by portfolio investments, is a result of the issuance of the fifth Euro 450 million worth Eurobond on the international financial markets, despite the

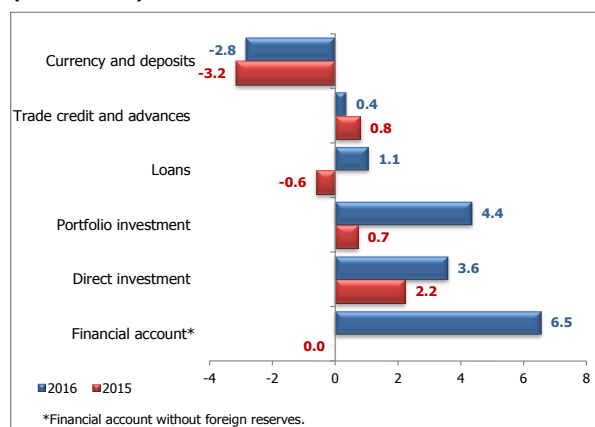
³⁷ The positive annual change in the balance of the category of other business services follows the significant outflows in 2015.

³⁸ The reinvested earnings for the current year are estimated on the basis of the results from the quarterly report for the actual and the planned financial result for the current year.

³⁹ Includes banks and non-banking corporate sector.

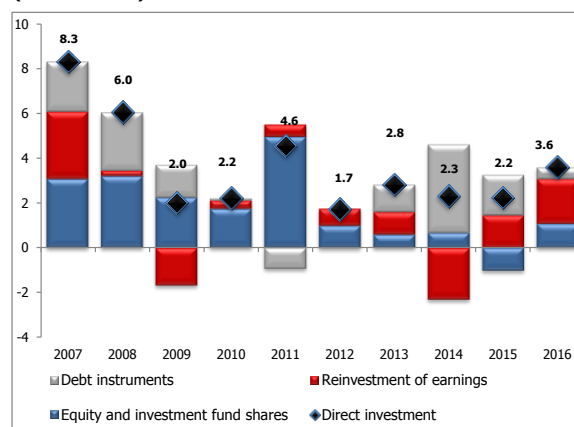
decrease in the government liabilities on financial loans⁴⁰. Direct investments were an additional source of inflows in the financial account in 2016, which showed favorable structure, with higher share of non-debt component, i.e. increased reinvested earnings and equity capital. Analyzing by activity, direct investments were mostly aimed at production of textile and textile products, and automotive industry. The net increase in other sectors' external liabilities is predominantly in the form of long-term loans (1.9% of GDP), which mainly arise from the borrowing of public companies in support of infrastructure projects. On the other hand, currencies and deposits continue to be the category that causes outflows in the financial account. In 2016, the variability of these short-term flows further increased, arising from the growing distrust of economic agents conditioned by the domestic political crisis. Namely, the increased political uncertainty in the second quarter of the year caused high outflows in the category of other sectors in the economy, due to the withdrawal of foreign assets by the households, which were then kept outside the banking sector. Increased outflows were partially offset by net inflows in depository institutions, i.e. banks. These movements were a consequence of the NBRM's decision to reactivate the measure with which banks placed foreign currency deposits in the central bank under slightly more favorable terms than those on the international markets. The measure⁴¹ made the banks to withdraw their foreign currency deposits from accounts abroad, thus mitigating the outflows by the households. By the end of the year, the gradual depletion of the negative effects of the political situation was evident through the stabilization of outflows in the currencies and deposits of other sectors.

Chart 43
Financial account
(% of GDP)



Source: NBRM.

Chart 44
Direct investment
(% of GDP)

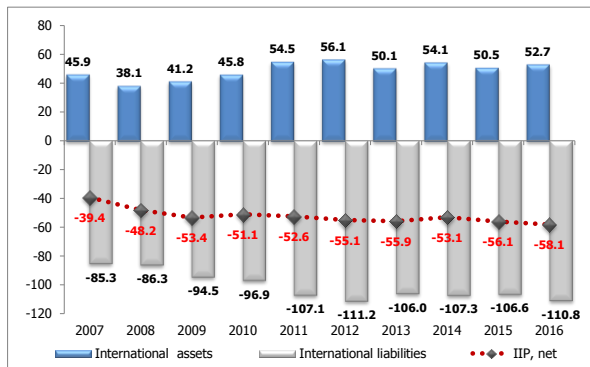


The international investment position (IIP) was negative at the end of 2016 and equaled Euro -5,731.6 million, or -58.1% of GDP. Relative to the end of the previous year, net liabilities to the rest of the world slightly rose by 2 percentage points of GDP, given the faster increase of international liabilities than that of international assets (4.3 percentage points and 2.3 percentage points of GDP, respectively). The structure of international liabilities in 2016 shows dominance of foreign direct investment as a stable and long-term source of funding.

⁴⁰ In November 2016, the government made a regular repayment of liabilities based on a long-term financial loan from Citibank in the amount of Euro 132.7 million.

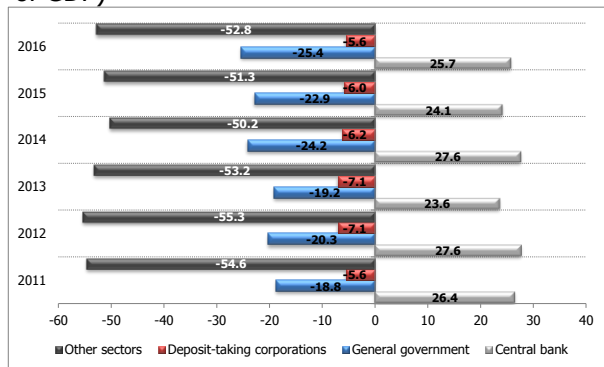
⁴¹ The growth of foreign currency deposits of domestic banks with the NBRM in this period stems from the Decision on foreign currency deposit with the National Bank of the Republic of Macedonia of 6 May 2016, which allows interest rates to be determined at a level higher than the level of interest rates which domestic banks receive for placing funds in euros abroad. Since 25 October 2016, foreign currency deposits have not been offered as an alternative for placing foreign assets.

Chart 45
International Investment Position (% of GDP)



Source: NBRM.

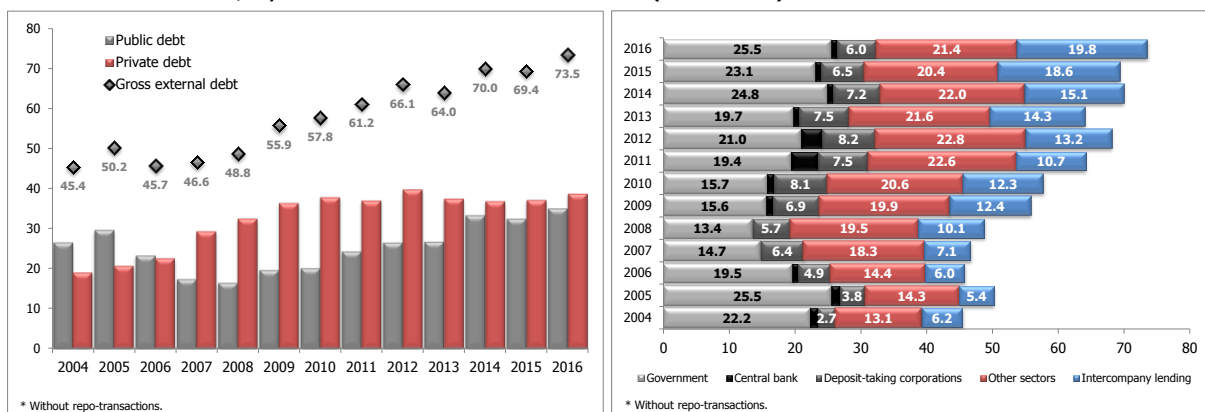
Chart 46
International investment position, by sector (% of GDP)



The sectoral analysis shows that the annual deterioration of the IIP is mainly due to changes in the government sector and other sectors, while the shift in the position of the central bank acted in the opposite direction. Contrary to the previous year of deleveraging, in 2016, the net external position of the government sector registered annual deterioration due to the increased net debt to external creditors. Unfavorable net position was also reported by the other sectors in the economy caused by the increased net liabilities to foreign direct investors and based on long-term financial loans. On the other hand, the central bank's net assets increased as a result of the accumulation of foreign reserves, which is in line with the external borrowing of the government. At the same time, the position of depository institutions did not register significant annual changes.

At the end of 2016, the gross external debt stood at Euro 7,253.2 million, or 73.5% of GDP, which is an increase of 4.1 percentage points of GDP, compared with the end of 2015. The growth of gross external debt reflects the higher public and private sectors debt. The increase in public debt is mainly due to the increase in long-term liabilities of the central government in the form of debt securities, as a result of the fifth Eurobond. At the same time, the public companies' debt based on long-term financial loans, as a source for financing road infrastructure projects, continued to increase. Private sector debt predominantly reflects the inflow of the debt component of direct investment, coupled with the higher indebtedness of the non-banking private sector.

Chart 47
Gross external debt, by debtor and institutional sector (% of GDP)



Source: NBRM.

Overall, the external indebtedness indicators of the national economy show that the gross external debt is in the safe zone. At the end of 2016, the only indicator that classified the economy in the group of highly indebted countries was the gross external debt to GDP ratio. The external debt analysis provides various information about the changes in solvency compared to the end of 2015. Thus, favorable developments are seen in the indicators of the share of interest payments and gross debt repayments to exports and other inflows⁴², while the share of gross debt to exports and the gross debt to GDP ratio deteriorated. Liquidity indicators remain in the safe zone, and their dynamics show slight deterioration. The exception is the coverage of short-term debt liabilities with residual maturity with foreign reserves, which is still above one, and increases on an annual basis.

At the end of 2016, net external debt, as another indicator of the external position of the economy, amounted to Euro 2,669.8 million, or 27.1% of GDP, which is an increase of 2.2 percentage points of GDP, compared to 2015. The increase in net external debt is a result of the growth of both public external net debt and net private debt.

Table 1
External debt indicators

| | <i>Solvency</i> | | | | <i>Liquidity</i> | | |
|--|--|---|--------------------|---|--------------------------------------|---|----------------------------------|
| | 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 | Foreign reserves/ Short-term debt | Foreign reserves/ Short-term debt, with residual maturity* | Short-term debt/ Overall debt |
| | in % | | | | ratio | ratio | in % |
| 31.12.2004 | 2.41 | 129.3 | 47.3 | 12.4 | 1.14 | 0.89 | 30.3 |
| 31.12.2005 | 2.66 | 147.0 | 54.2 | 11.1 | 1.67 | 1.04 | 26.7 |
| 31.12.2006 | 3.44 | 131.3 | 49.8 | 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 | 3.01 | 149.1 | 74.0 | 17.2 | 1.82 | 1.13 | 22.3 |
| 31.12.2015 | 2.69 | 143.9 | 73.2 | 20.0 | 1.69 | 1.13 | 21.3 |
| 31.12.2016 | 2.36 | 151.3 | 79.2 | 14.9 | 1.64 | 1.15 | 22.0 |
| <i>Moderate indebtedness criterion</i> | <i>12 - 20%</i> | <i>165 - 275%</i> | <i>30 - 50%</i> | <i>18 - 30%</i> | <i>1.00</i> | | |

* The moderate indebtedness criterion is taken from the World Bank methodology for compiling indebtedness ratios, which implies using three-year moving averages of GDP and export of goods and services and other flows as denominators in the calculation of the ratios.

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

Source: NBRM.

3.5. Monetary and credit aggregates

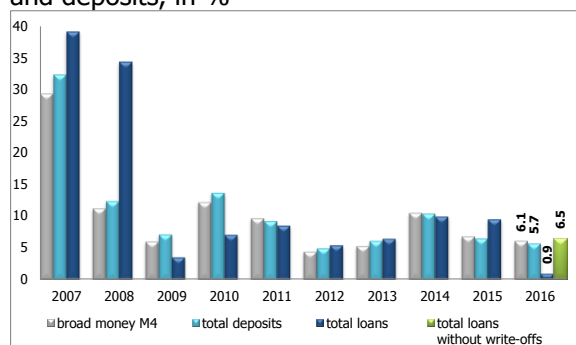
The money supply and the lending activity in 2016 registered an increase, but moderately weaker compared to the previous year. The increase of the broadest money supply M4 corresponds with further recovery of the economic activity, positive developments in the labor market and increase of the disposable income, as well as the favorable external position of the economy. However, during 2016, the dynamics of the money supply was heavily influenced by factors of a non-economic nature. In the middle of 2016, the escalation of the political crisis and the appearance of the speculations around the stability

⁴² Besides the export of goods and services, it also includes inflows of investment income, remittances from workers and compensation for employees.

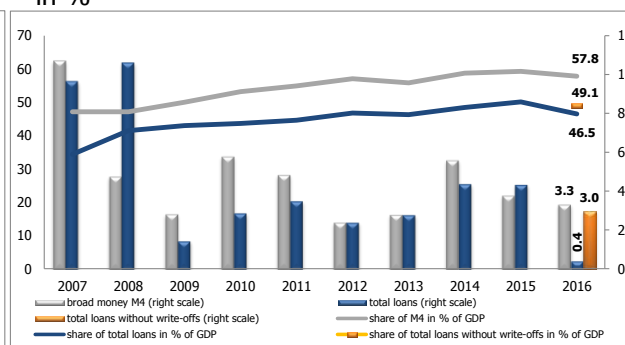
of the denar and domestic banking system led to increased deposits withdrawal of the households from the banks. Although, starting in June, the expectations were stabilized, and household deposits started to grow, "the crisis episode" still led to a deceleration of the annual growth of deposits. The lending activity, adjusted for the regulatory changes⁴³ in 2016, continues to solidly grow, but at a slower pace compared to the two previous years. In terms of the supply and demand of loans, the loans supply continues to solidly grow in 2016, amid a stable solvency and liquidity position of the banks and increased competition within the banking sector. On the other hand, regarding loan demand, there was a significant deceleration of the increase after a long time period, partially reflecting the political crisis effects in the country.

Chart 48

Annual growth in money supply M4, total loans and deposits, in %



Share of money supply M4 and total loans in GDP, in %



Source: NBRM.

In 2016, the broadest money supply M4 registered an increase of 6.1% which was moderately weaker compared to the previous year. Thus, all individual components had a positive contribution in the growth of money supply. However, during 2016, similar to the two previous years, demand deposits have the largest individual contribution, showing the sensitivity of domestic agents to the instable political environment in the country and the propensity for possessing high-liquidity assets in conditions of increased uncertainty. In 2016, despite the uncertain environment, savings contributed to the growth of money supply, both on a short and long-term, signaling relatively quick stabilization of the economic agents' behaviors, supported by the undertaken measures by the central bank.

Table 2

Money supply components - balance and changes

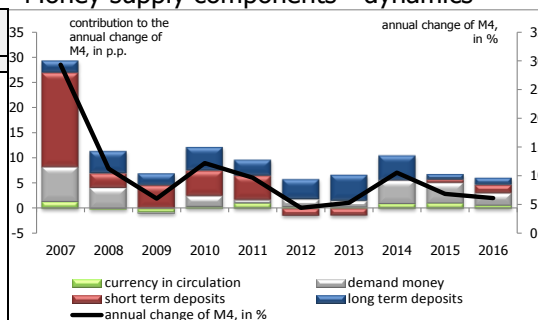
| | Balance as of | | | Annual change | | |
|-----------------------------|-----------------------|---------|---------|---------------|------|------|
| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 |
| | in millions of denars | | | in % | | |
| Currency in circulation | 23,221 | 26,300 | 28,193 | 12.1 | 13.3 | 7.2 |
| Demand money | 62,326 | 74,978 | 83,156 | 26.4 | 20.3 | 10.9 |
| M1 | 85,548 | 101,278 | 111,349 | 22.2 | 18.4 | 9.9 |
| Short term denar deposits | 57,151 | 53,557 | 51,592 | 0.1 | -6.3 | -3.7 |
| Short term foreign currency | 90,980 | 96,514 | 103,836 | 0.0 | 6.1 | 7.6 |
| M2 | 233,678 | 251,349 | 266,776 | 7.2 | 7.6 | 6.1 |
| Long term denar deposits | 51,673 | 53,518 | 55,834 | 24.5 | 3.6 | 4.3 |
| Long term foreign currency | 24,527 | 26,140 | 28,612 | 18.0 | 6.6 | 9.5 |
| Total deposits* | 224,330 | 229,728 | 239,873 | 6.6 | 2.4 | 4.4 |
| Total deposits | 286,656 | 304,706 | 323,029 | 10.4 | 6.3 | 6.0 |
| M4 | 309,878 | 331,007 | 351,222 | 10.5 | 6.8 | 6.1 |

* Without demand money

Source: NBRM.

Chart 49

Money supply components - dynamics

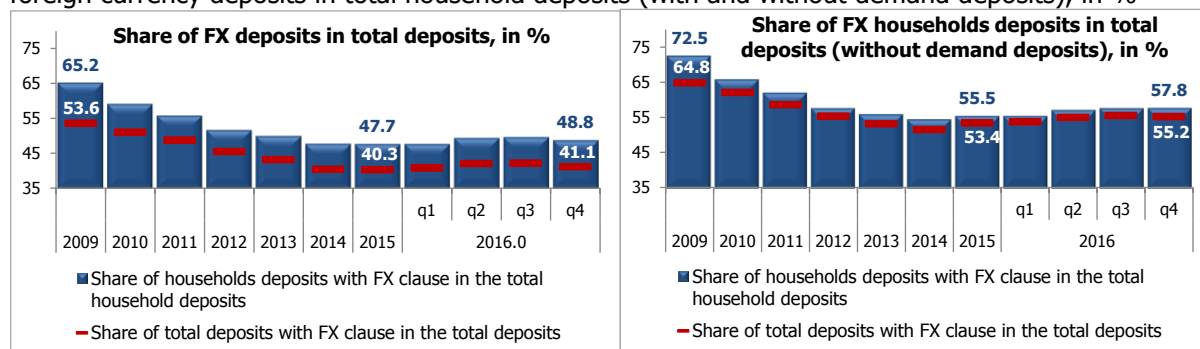


⁴³ On 17 December 2015, the National Bank Council adopted the Decision amending the Decision on credit risk management that requires from banks by 30 June 2016 to write off (and to continue to write off) all claims that have been fully booked for more than two years, and where the bank has identified and fully covered the credit risk of default at least two years before. Despite the write-off of these claims, i.e. their transfer to the off-balance sheet record, banks keep the right for their collection.

In terms of total deposits, in 2016, almost half of the annual growth of banks' total deposits potential is due to the increase of assets in transactions accounts (mainly in households, and in the corporate sector to a lesser extent), signaling cautious behavior, amid increased risks. The analysis of the savings in the banking system without demand deposits indicates that the annual growth is mostly due to the corporate sector, whereas household savings have a more moderate contribution which is an unusual characteristic in the growth structure. This shift reflects the political crisis effects on household savings, which were mostly felt in the period April-May, when household deposits in the banking system (without demand deposits) decreased for around Denar 6 billion or 3.2% of the balance at the end of March 2016. A decline was registered in all savings components, primarily in the denar categories and in short-term savings. Part of the withdrawn assets was converted into foreign currency. From June to the end of the year, household deposits were continuously increasing, whereby the contribution of short-term and long-term saving was almost balanced. However, regarding the whole 2016, within the "households" sector, the annual deposits' decrease reflects the increased long-term savings, whereas short-term household deposits registered a decline.

Chart 50

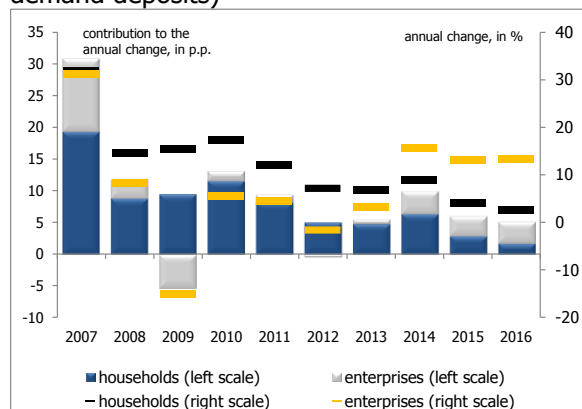
Euroisation level, share of total foreign currency deposits in total deposits and share of household foreign currency deposits in total household deposits (with and without demand deposits), in %



Source: NBRM.

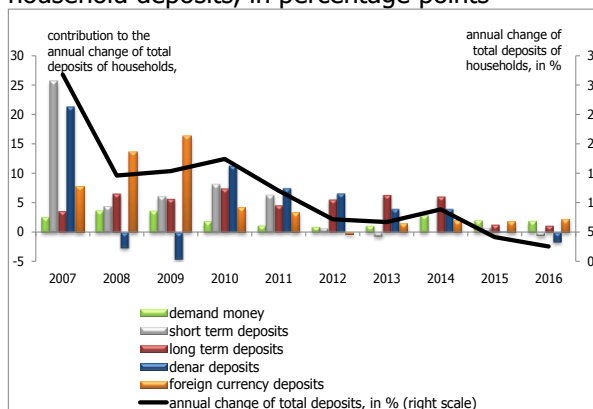
The increased risks from the political developments in the country had a great impact on the currency structure of household deposits. Households' propensity for foreign currency savings was characteristic for 2016 also, whereby amid increased uncertainty, parallel with the growth of foreign currency savings, household denar deposits, after a longer time period, registered a decline, on an annual basis. Regarding the corporate sector, the annual growth is mostly due to the growth of short-term deposits and relatively higher growth of foreign currency compared to the denar deposits, which is also an unusual occurrence for the corporations and probably a reflection of the increased uncertainty in the economy. Given such shifts, and the fast stabilization of the expectations after NBRM's measures, the financial euroisation level, measured through the share of deposits with a foreign currency component in total deposits, in 2016 moderately increased from 40.3% to 41.1%, whereby the shifts in this indicator regarding the "household" sector were somewhat more pronounced.

Chart 51
Sector structure of total deposits (including demand deposits)



Source: NBRM.

Chart 52
Contributions to the annual change in total household deposits, in percentage points

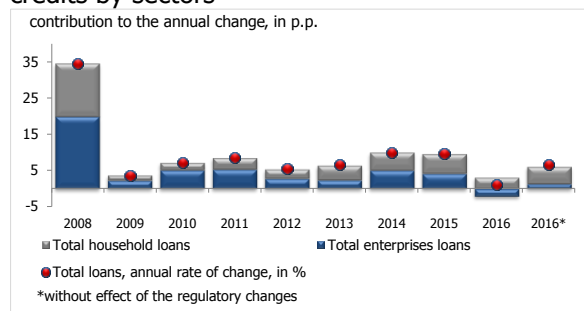


In 2016, the activity on the credit market activity was sound. On an annual basis, total loans are higher by 1.0% i.e. by 6.5% if the regulatory effect is isolated. The growth of credit supply was supported by the healthy solvency and liquidity position of the banks and increased competition in the banking sector. On the other hand, in 2016, the demand of credits significantly decelerated, partially reflecting the effects from the political crisis in the country. Such performances are also supported with the results of the lending surveys. Namely, for the first time after a longer period of time, for 2016, the survey shows significant deceleration of the demand of credits in the corporate and "households" sector. In terms of sector structure, the annual growth of loans in 2016 (without regulatory changes) is due to the growth of loans granted to the "household" sector, whereas corporate loans have a positive but small contribution to the annual growth. Thus, the corporate loans' contribution to the annual growth of total loans decelerates of the second consecutive year. The NBRM continues to apply the non-standard measure directed to net exporters and producers of electric energy⁴⁴ for further support of the lending to the corporate sector. Also, adopting the Decision for amending the Decision on the methodology of determining capital adequacy from December 2015, the NBRM created conditions for easier access of the corporations to the banks' financial services (including small and medium enterprises⁴⁵).

⁴⁴ This measure allows reduction of the banks' reserve requirement base for the amount of new loans granted to net exporters and domestic producers of electricity and for banks' investments in debt securities in domestic currency without FX clause issued by net exporters and domestic producers of electricity. The measure was introduced in late 2012, and has been applied since 2013. Since the introduction of the measure, its application has been extended twice, i.e. until the end of 2017.

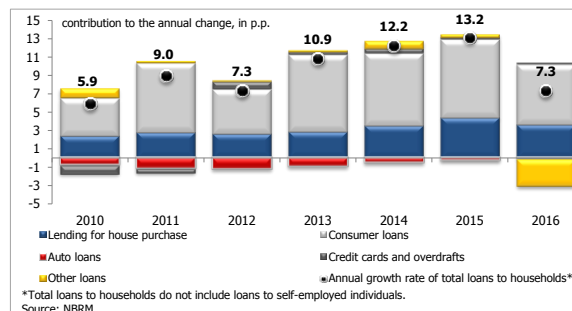
⁴⁵ The Decision on amending the Decision on the methodology for determining the capital adequacy in December 2015 reduced the capital requirement for guarantees issued by banks which guaranteed payment based on a certain business relationship of the client as well as for banks' claims backed by commercial property that meets certain conditions. This will allow banks to allocate lower amount of capital for credit and guarantee operations with legal entities, including small and medium enterprises, which can cause reduction in the cost of banks and therewith, of clients for this type of operation.

Chart 53
Contributions to the annual change in total credits by sectors



Source: NBRM.

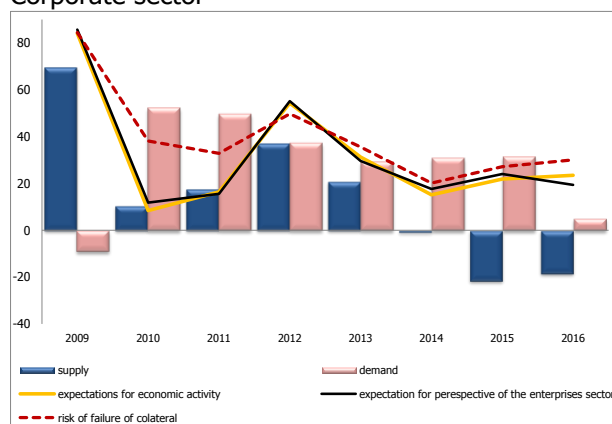
Chart 54
Total household loans, by purpose



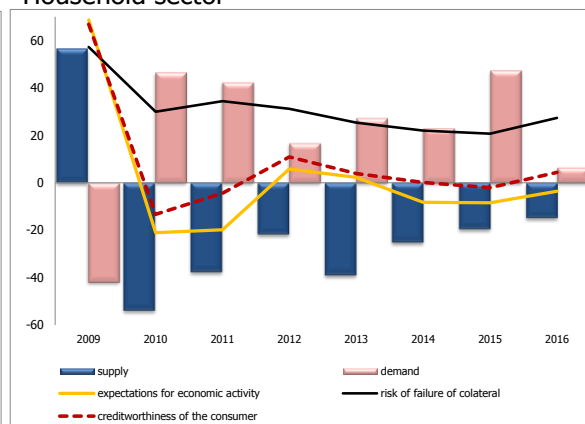
*Total loans to households do not include loans to self-employed individuals. Source: NBRM.

The analysis according to the individual types of loans to households indicates that the annual growth of loans in 2016 is also due to the growth of lending for consumption purposes and housing loans. However, growth deceleration is registered in both components similar to the dynamics in the total loan portfolio. The lending activity survey shows that lending terms for consumer loans are loosened in 2016, with a similar intensity as during the previous year. On the other hand, the growth of the demand for consumer loans significantly decelerated. Deceleration of the demand is also characteristic for the housing loans, where in 2016, a less expressed relaxation of the lending terms is noticeable compared to the previous year.

Chart 55
Supply, demand of credits and banks' risk perception⁴⁶ (net percentage)
Corporate sector



Household sector



Source: Lending Survey, NBRM.

⁴⁶ 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 relaxed); 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 tightening the lending terms, 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.

IV. Macroeconomic environment and monetary policy in 2017 and 2018⁴⁷

In accordance with the legal provisions, the National Bank monetary policy will seek to maintain price stability as a primary monetary objective in the following period. Also, the National Bank will pursue its efforts towards maintaining a stable and competitive banking sector and support the general economic policies without jeopardizing the achievement of the primary goal. Analyzing the monetary strategy, the NBRM will continue implementing the strategy of maintaining 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, which 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's forecasts from October 2016, it is expected that the implementation of the monetary policy in 2017 and 2018 will be conducted in a relatively stable environment, but with further presence of the external and domestic risks. The last forecasts of the NBRM from October 2016 predict that the economy will continue to grow rapidly, primarily influenced by the export and investments. The banking sector is expected to further support the 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 i.e. about the historical average of approximately 2%. Amid expectations for favorable economic conditions, in the period ahead, the NBRM will mainly be focused on monitoring the achievement of the projected path of foreign reserves and foreign exchange market developments, as well as monitoring all present risks and accordingly to that, will adjust the monetary policy accordingly.

The implementation of the projected macroeconomic framework is accompanied by risks stemming mainly from the external environment and the domestic uncertain environment. The external risks that could spill over 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 primarily related to the potential lower global growth and the euro area growth, as our most significant trade partner, reflecting the Great Britain's decision for exiting the EU and weaker growth of the American economy, as well as the further present geopolitical tensions. Regarding domestic risks, they mainly arise from the unstable political environment, whose economic effects in 2016 were relatively limited. However, these risks are continue to be present and might have impact on the macroeconomic performances in the following period. Any materialization of the aforementioned risks will mean change in the environment for the monetary policy conduct, in comparison with the main expectations.

⁴⁷ Based on NBRM's forecasts from October 2016.

Inflation is expected to gradually increase in the coming period, which according to the October forecasts, will range from 1.3% in 2017 to 2% in 2018. It is expected that the growth of prices in 2017 will mostly be driven by the growth of food inflation and the growth of energy inflation to a lesser extent, which is in accordance with the forecasts for growth of world prices of food and energy in the following year. Certain effect on inflation are also expected from the growth of core inflation, which is linked with the further increase of the domestic demand, but also with the transmitted effects from the growth of food and energy prices. In 2018, inflation will register a moderate intensification, amid strengthening domestic economic growth and demand, intensification of foreign inflation and further growth of prices of food and energy in the global market. The inflation forecast is accompanied by risks, mainly related to the movements in the world prices of primary products. From the October forecasts onwards, the expectations for the global prices of primary products have been changed upwards, indicating upward risks for the projected domestic inflation.

In the following two years, a gradual acceleration of the economic growth rate is expected, whose main drivers would be export and investments. It is expected that the export growth will further be supported by the new export-oriented companies, the recovery of part of the traditional sector, as well as the recovery of the foreign demand. The increased export activity and announcements for foreign investments in new facilities, together with the fiscal stimulus in the infrastructure will contribute for investment growth in the following two years. It is expected that such movements will have a positive effects on the labor market, which will contribute on the consumption growth of the households. Additional support to the domestic demand is also expected by the lending activity. In such conditions, the GDP growth in 2017 will equal 3.5%, while in 2018 it would additionally accelerate and reach 3.7%. The risks on the projected growth continue to arise from the domestic political environment, and given the high openness of the economy, from the global environment and the events of 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 the banks' deposit potential, as well as the measures already taken by the monetary authority will contribute to greater financial support for the domestic economy through the banking sector. The increase of total loans (without the write-off effects) in 2017 is projected on 6.4%, whereas by the end of 2018 is expected to accelerate a little and reach 6.7%. Such projected credit growth reflects the factors on both the demand and the supply side. Namely, the positive achievements and expectations for the continuation of favorable trends in the labor market, and the projected solid growth in the investment activity will contribute to a stable demand for loans in the following two years. On the supply side, further support from the growth of the deposit base is expected, as well as from banks' stable risk perceptions. Regarding the deposits potential, after the deceleration of the deposits growth in 2016, which was a reflection of the greater deposits withdrawal from the banking system due to the uncertain domestic political environment, a stabilization of the conditions and gradual return of the assets in the system is expected. This, together with the favorable expected trends in the domestic economy will enable stronger deposits growth during 2017 and 2018. Downward risks around the forecast of the credit and deposit growth still exist. The weaker than expected potential recovery of the economy, as well as the continuation of the uncertainty around the domestic risk factors, might lead to greater restraint for savings, limit the funding sources of banks, worsen the risk perceptions and decrease the readiness for private sector borrowing.

Forecasts for 2017 and 2018 show an external position that will ensure adequate level of foreign reserves. It is expected that the current account deficit will be relatively

stable and will hover around 3% of GDP. Thus, greater changes are not expected in the stock of goods and services, in conditions of energy deficit increase, amid favorable shifts in other segments. On the other hand, after the unfavorable shock in 2016 due to the political crisis, regarding the secondary income in 2017, an increase of the surplus and its moderate decline in the following year is expected. An increase is expected in the primary income deficit, partially as due to the assessments for further improvement of the foreign companies' profit. Regarding financing, it is expected that, in the upcoming period, most of the current account financing will be funded from foreign direct investments and borrowing from the public and private sector in the long term. In terms of foreign reserves, in the following two years is expected that transactions in the balance of payments will contribute for an additional increase of the foreign reserves and further maintenance of adequacy indicators on foreign reserves in the safe zone. Main risks to the external position of the economy in this period still come from the pace of the global recovery, movements of global prices and the domestic political environment.

A cautious fiscal policy is expected in the two following years, with further consolidation of budget deficit and relatively stable public debt level⁴⁸. The fiscal policy is an important factor which has an impact on the monetary policy design, and the adequate coordination of these policies is a key factor for maintaining the external position of the country and maintaining macroeconomic stability. In the coming period, the budget deficit is expected to gradually narrow. The public investments remain to be the priority goal of the fiscal policy. Namely, in the following period, realization of grand investment projects in road and railway infrastructure, local infrastructure and energy sector, as well as agriculture is projected. As anticipated, the deficit is going to be funded from external and domestic sources. Thus, within the domestic sources, foremost is the issuance of government securities as well as using part of government's deposits with the NBRM. This fiscal framework envisages moderate increase in the government debt in the following period, which will not jeopardize the sustainability of the public finances. The fiscal policy setup is accompanied by risks, which same as in the monetary policy, arise from the domestic environment, and from the external environment and their impact on the domestic economic activity, as well as on the accessibility to foreign financial markets.

The National Bank regularly monitors the current developments, present risks and according to them, assesses the monetary policy setup and is constantly prepared to take appropriate measures for maintaining price and financial stability in the economy.

⁴⁸ Forecasts in the part of fiscal policy are based on the Budget for 2017 and The Fiscal Strategy of the Republic of Macedonia 2017-2019.

V. Monetary instruments

During 2016, the changes in the monetary instruments were towards implementing the objectives of the monetary policy. Despite the unfavorable environment for implementing the monetary policy in the second quarter of the year, the timely reaction of the monetary authority maintained the stability of the banking sector and the exchange rate of the denar. The deepening of the domestic political crisis and the occurrence of the speculations for the stability of the banking sector and exchange rate in the period April-May created pressures for deposits withdrawal from the banking sector and increased foreign currency demand. In order to stabilize the economic agents' expectations, despite the intervention with net sales on the foreign exchange market, NBRM more significantly increased the interest rate on CB bills from 3.25% to 4% at the auction in May. Also, the amount of CB bills was reduced to compensate the reduced denar liquidity of the banks, which primarily was compensated through the standing facilities (overnight deposits and credits). Despite the reaction with the main instrument, additional measures for stabilizing the denar deposit base were introduced. Thus, the reserve requirement ratio for liabilities with FX clause was increased from 20% to 50% and placements of banks' foreign currency deposits with the NBRM were enabled with more favorable interest rates than abroad. It is expected that reduced banks' costs will enable more favorable supply of both foreign currency and denar deposits interest rates for the costumers.

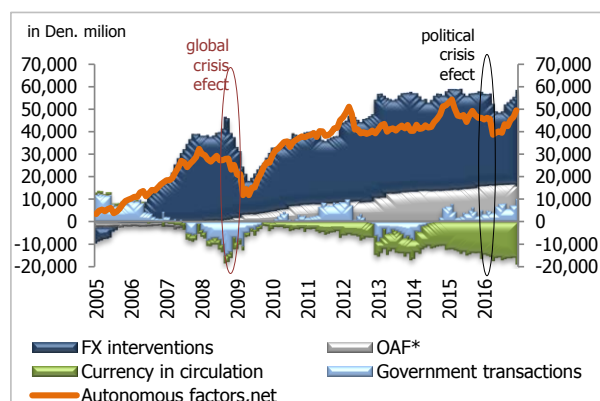
The timely and adequate reaction of the NBRM enabled fast stabilization of the expectation of the domestic public, which led to a gradual normalization of the developments in the foreign exchange market and banks liquidity by the end of June. In the second half of the year, the effects from the shock were fully exhausted from the period April-May, and positive developments were registered in the foreign exchange market. Parallel to that, positive developments were also registered in the deposits of the banking system, which created conditions to start the cycle for normalizing the monetary conditions. Thus, in December, NBRM moderately reduced the interest rate on CB bills, by 0.25 percentage points, and at the same time withdrew part of the excess liquidity of the banking system, through increasing the CB bills supply.

5.1. Factors of change in the liquidity of the banks

In 2016, the liquidity of the banks registered significant changes, influenced by the autonomous factors⁴⁹. This was particularly expressed in the middle of April 2016 when liquidity registered a high decline impacted by the events in the domestic political scene. Namely, the uncertain political environment and the speculations on the stability of the banks and the value of the denar contributed for cautious reactions of the households which had increased propensity for saving cash in denars and foreign currency and deposits withdrawal from the banking system. This led to a sharp decline of the foreign currency and denar liquidity of the banks. In such conditions, in order to preserve the denar stability from the speculative attacks, the NBRM, in the period April-May 2016 intervened in the foreign currency market with the market makers, by injection foreign currency liquidity in the total amount of Euro 129.1 million. At the same time, the denar liquidity assets of the Macedonian banking system registered the highest decline (around Denar 8 billion) since the economic crisis onwards.

⁴⁹ Autonomous factors are items from the balance sheets of the NBRM, on which the central bank has no influence, and their dynamic depends on other sectors of the economy. Autonomous factors include: currency in circulation, government deposits, net foreign assets and other autonomous factors.

Chart 56
Autonomous factors, cumulative liquidity effect



*OAF - Other autonomous factors.
Source: NBRM.

Chart 57
Banks' transactions with natural persons in the foreign currency and exchange market

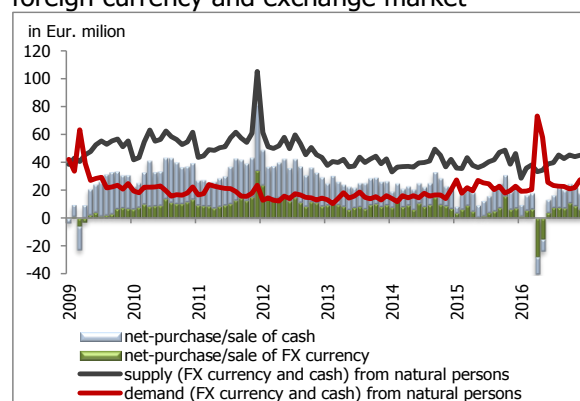
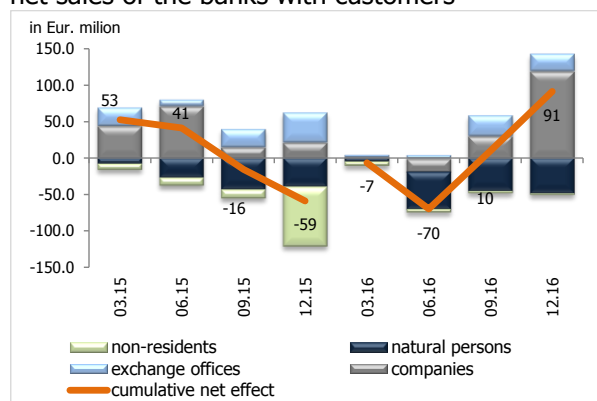
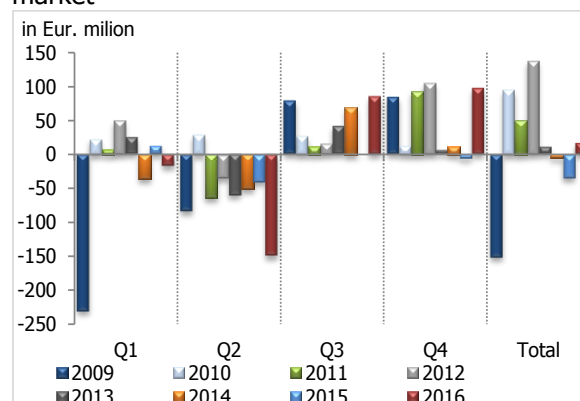


Chart 58
Cumulative annual changes in foreign currency net sales of the banks with customers



Source: NBRM.

Chart 59
NBRM's interventions on the foreign exchange market



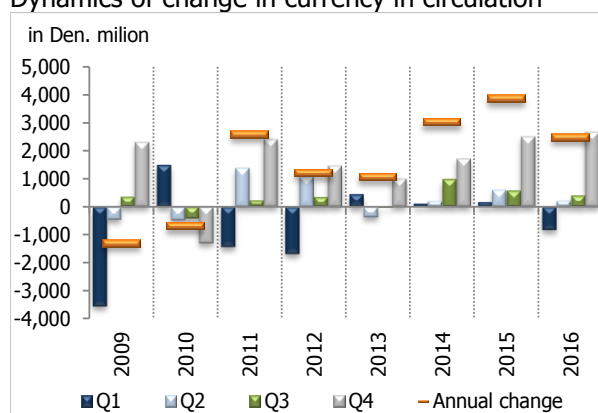
NBRM's foreign currency interventions along with the set of other measures enabled stabilization of the expectations of the households and gradual improvement of the developments in the foreign exchange market, which was continuously confirmed with the normalization of the demand for foreign currency on the level which was typical prior the crisis period. In the second half of the year, the stable and moderately higher supply of foreign currency from natural persons, combined with the higher supply of foreign currency by the corporations on an annual basis, led to increased foreign currency liquidity by the banks and correspondingly higher supply than demand of foreign currency in the interbank foreign exchange market. Subsequently, NBRM purchased a total of Euro 135 million in this period, entirely compensating the decline of the foreign reserves and banks' denar liquidity during the crisis period from the period April-May 2016. Thus, despite the expressed unfavorable effect of the political situation, the NBRM's interventions in 2016 in the foreign exchange market on net basis contributed for the increase of the banks' liquidity by Denar 983 million (or net purchase of Euro 16.65 million).

In 2016, despite the foreign currency interventions, the government transactions also contributed to the increase of the banks' denar liquidity. This autonomous factor had the largest contribution on the annual increase of the banks' liquidity (by Denar 4.950 million), especially in the period April-May when the banks compensated the decline of the denar liquid assets from the matured government securities. By the end of the year, the

government borrowing in the domestic market moderately decelerated, and the annual growth of government securities was related with the investments by the institutional investors (pension funds and insurance companies).

In 2016, currency in circulation mainly had usual dynamics, given that the speculations for the stability of the denar had a short-term and insignificant effect on the households' demand for denar cash in April. Subsequently, in conditions of constant improvement of the real disposable income of the households, currency in circulation in 2016 registered an annual growth of Denar 2.476 million, which is at the level of the past few years' average. The effect from this flow of the banks' liquidity was compensated with the created liquid assets from the government transactions and the interventions in the foreign exchange market, thereby the autonomous factors contributed to the growth of the liquidity of the banking system for Denar 3.306 million, on an annual basis.

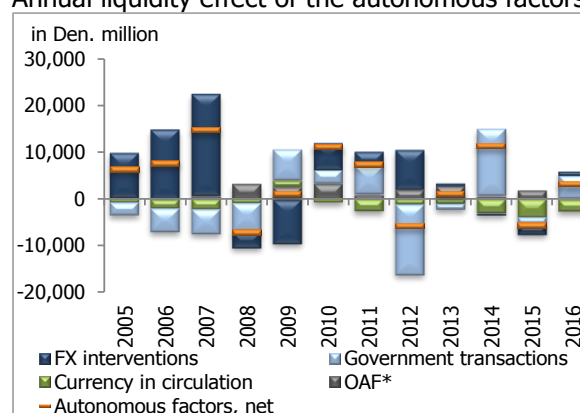
Chart 60
Dynamics of change in currency in circulation



*OAF - Other autonomous factors.

Source: NBRM.

Chart 61
Annual liquidity effect of the autonomous factors



5.2. Monetary instruments

5.2.1. CB bills

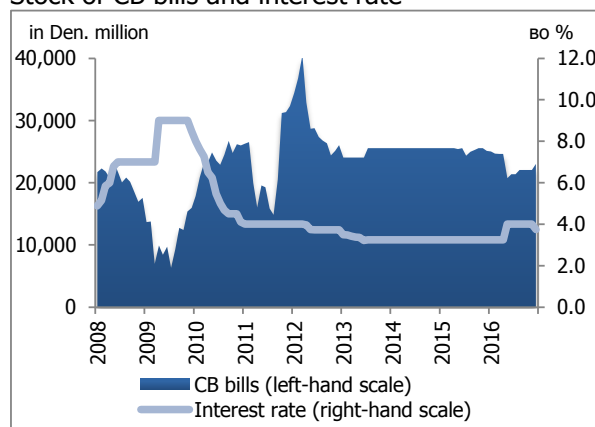
In 2016, the changes in the interest rate and the offered amount of CB bills, as the main monetary instrument, contributed in achieving the monetary policy objectives through efficient management of the liquidity of the banking system, as well as supporting the interventions in the foreign exchange market. Thus, despite the several years of low and unchanged interest rates (in conditions of low negative inflation rates, favorable external position, space for stimulating the lending activity in the country), at the beginning of May 2016, as a response to the shock of non-economic nature, the NBRM made a decision for increasing the interest rate on CB bills for 0.75 percentage points, from 3.25% to 4.0%⁵⁰. At the same time, given the significant decline of the banks' liquidity potential, the NBRM reduced the CB bills supply to Denar 22,000 million⁵¹. The interest rate and the amount of CB bills were maintained at these levels until December, when amid visible stabilization of the expectations by the economic agents and significant improvement of the denar liquidity of the banks, conditions to start the cycle of gradual normalization of the monetary policy were created. In such conditions, at the meeting in December, the NBRM's Operational Monetary Policy Committee decided to decrease the interest rate on CB bills by 0.25

⁵⁰ The key interest rate was unchanged since July 2013.

⁵¹ In the three previous years, in order to maintain favorable liquidity conditions to support the lending to the private sector, the NBRM continuously offered unchanged amount of CB bills which was determined at the level of Denar 25,000 million.

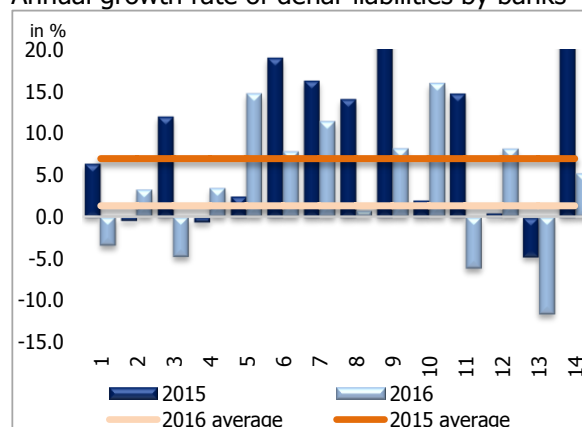
percentage points, to 3.75%. It was also decided to increase the CB bills supply for Denar 1,000 million compared to the matured amount, at the level of Denar 23,000 million⁵².

Chart 62
Stock of CB bills and interest rate



Source: NBRM.

Chart 63
Annual growth rate of denar liabilities by banks⁵³



Given the unfavorable risks on the long-term denarization process of banks liabilities and the increased propensity of the household for foreign currency savings, the distributions of the supplied amount at the CB bills auctions⁵⁴, in 2016 also, was proportionally to the individual share of the individual bank in the total liabilities in domestic currency without FX clause. Thus, the reduced deposits during the shock were partially returned to the banking system in the second quarter, contributing to a lower growth of the deposit base compared to the previous year, whereby banks which registered a higher individual denar deposits growth, compared to the growth at the system level, acquired an opportunity for a larger share in the offered CB bills. In such conditions and given the determination of the CB bills supply in accordance with the liquidity position, the demand for CB bills by banks was at the level of the supply in most auctions⁵⁵.

5.2.2. Standing facilities with the NBRM

In 2016, amid managing the short-term changes of liquid assets, banks were actively using the deposit facilities with the NBRM⁵⁶. In the analyzed period, the NBRM did not conduct any changes in the interest rates on deposit facilities⁵⁷, and the dynamic of these instruments mostly corresponds with the changes in the liquidity of the banks influenced by the autonomous factors. Thus, during the shock in the period April-May, placements in seven-day deposit facilities served as the first line of protection from the liquidity shortage. Amid high decrease of the banks' accounts, banks primarily used placements in these deposits, which were reduced to the lowest level in the last two years. This change, which rapidly and efficiently provided banks with sufficient denar liquidity, once again proved the key function of the instrument for neutralizing the short-term flows of banks' liquid assets.

⁵² At the end of the year, the CB bills interest rate was higher compared to 2015 by 0.5 percentage points, whereas the amount of the basic instrument was lower by Denar 2,075 million.

⁵³ The order of the banks is random and does not depend on the size of the bank.

⁵⁴ At the CB bills auctions, which were held in the first day of the periods of reserve requirements, a volume tender was applied (restricted bid amount and fixed interest rate)

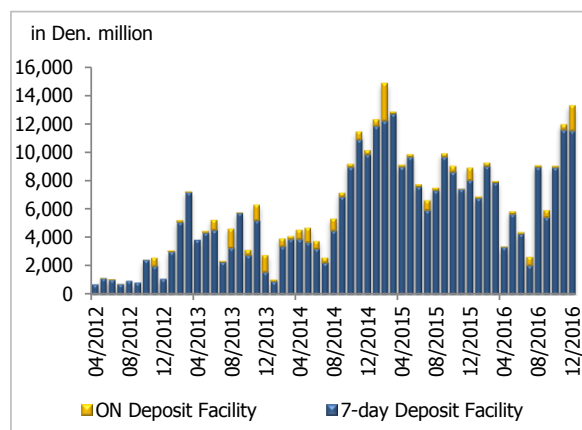
⁵⁵ The ratio between the supply and demand of CB bills in the auctions which were held in 2016 amounted to 0.98.

⁵⁶ Placing liquid assets in deposit facilities with the National Bank is on the initiative of banks. Overnight deposit facilities that are available to the banks every day, the possibility of placing liquid assets in deposits with maturity of seven days is available to banks every Wednesday.

⁵⁷ The interest rate on deposit facilities with a seven-day maturity amounted to 0.5%, whereas the interest rate on placing assets in overnight deposit facilities is 0.25%.

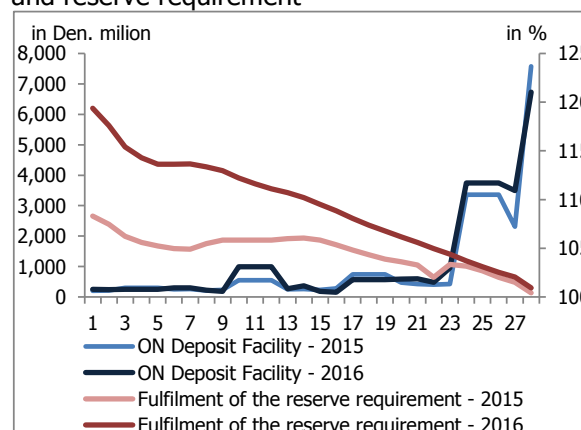
Despite assets of the seven-day deposit facilities, banks also used overnight credit facilities⁵⁸ in order to compensate part of the required short-term liquidity. The interest on this instrument was only for a short period, whereby the average injected liquidity on daily basis was relatively low and amounted to Denar 500 million.

Chart 64
Average stock of deposit facility



Source: NBRM.

Chart 65
Dynamics of overnight deposit facilities (averages) and reserve requirement



In the second half of the year, in conditions of continuous growth of the liquid assets and maintaining the CB bills supply at the same level, banks rolled over the placements in seven-day deposit facilities, which in December reached the highest level (Denar 11.475 million) since April 2015. Given the solid liquidity position in this period, banks were not using overnight credits.

Amid managing liquidity on daily basis, banks were also using overnight deposit facilities. In 2016, in terms of dynamics, there were some changes in this instrument, which was strongly used by the end of periods of reserve requirement, in order to reduce the average excess liquidity on a minimum level⁵⁹.

5.2.3. Repo operations for liquidity creation in the banking system⁶⁰

In 2016, the National Bank held regular weekly auctions for repo transactions. Usually, banks have no interest in using liquidity through this instrument, except in two auctions during the second quarter, where liquid assets of Denar 1,350 million on average were injected. In the remaining auctions in 2016, the supply was set at a lower level (Denar 500 million), and the banks did not demand liquid assets.

5.2.4. Foreign currency deposit with the National Bank

In order to maintain and increase the deposits of natural persons and legal entities in the domestic banking system, in May 2016, the conditions of the foreign currency deposit

⁵⁸ The interest rate on this instrument is higher by 0.5 percentage points compared to the key interest rate of the NBRM.

⁵⁹ In 2016, in fulfilling the reserve requirement, banks applied the so-called front loading strategy. This strategy for managing liquidity in combination with the set of monetary instruments contributed to the efficient liquidity management by the NBRM, whereby the average excess liquiditys over the reserve requirement in the the last day of the period of reserve requirement in 2016 was maintained relatively low, at 1.1%.

⁶⁰ Auctions for providing seven-day liquidity are conducted once a week, i.e. every Friday. The interest rate on this instrument is equal to the interest rate on CB bills.

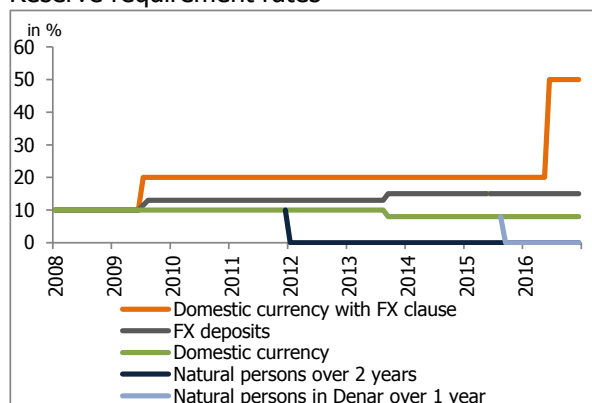
with the central bank⁶¹ were reviewed and improved. In this regard, from 13 May 2016, the NBRM once again made it possible to place unlimited amounts of foreign currency deposits by the domestic commercial banks with somewhat higher interest rates from the negative interest rates which prevail in the international financial markets. The favorable interest rate level for this instrument aimed to reduce the costs of domestic banks and subsequently to provide a room for higher banking interest rates on deposits of domestic legal entities and natural persons.

Banks have a relatively high interest for placing assets in foreign currency deposits with the NBRM, whose total stock in October 2016 reached Euro 156.5 million. Given the stabilization of deposits in the banking system, at the end of October 2016, the NBRM terminated the auctions of foreign currency deposits. Thus, given that in the amount of foreign currency deposits placements with a maturity of six and twelve months prevail, they have positive effects on the banks costs until their maturity.

5.2.5. Reserve requirement

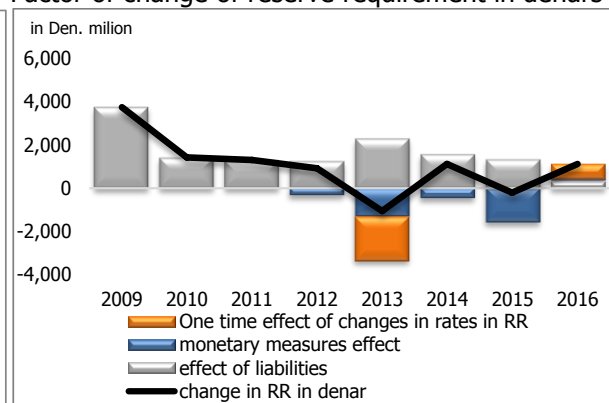
In 2016, despite the primary function for managing the money supply, banks reserve requirement continued to have a macro prudential character, whereby this instrument with its setup continues to give support to the process of denarization of the long-term savings, as well as stimulate the lending activity of the corporate sector. Also, in the period of the non-economic shock, changes were also adopted in this instrument as a response to the increased risks. Thus, in order to further maintain the low propensity of economic subjects to place deposits with FX clause with the domestic commercial banks, in May 2016, the NBRM increased the reserve requirement ratio for liabilities in domestic currency with FX clause from 20% to 50%⁶². This measure had favorable effects on the currency structure of banks liabilities, given that shortly after the change denar deposits with FX clause had a downward trend, whereby at the end of the year the insignificant share of only 0.4% in the total liabilities of the banks⁶³ was maintained.

Chart 66
Reserve requirement rates



Source: NBRM.

Chart 67
Factor of change of reserve requirement in denars



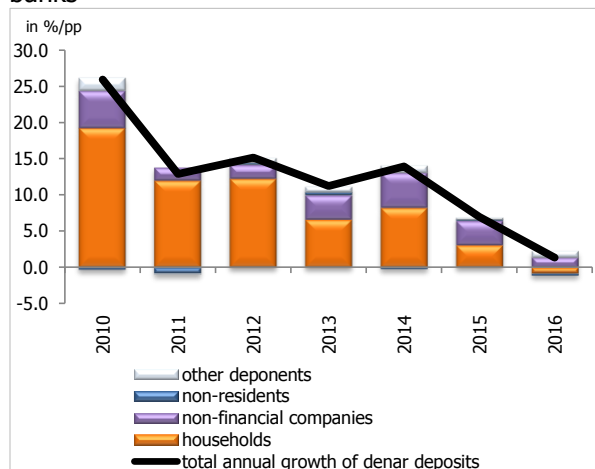
⁶¹ On 5 May 2016, the Decision on foreign currency deposit with the National Bank was adopted ("Official Gazette of the Republic of Macedonia" no. 87/16).

⁶² Other differentiated reserve requirement ratios by currency and maturity were maintained at the same level.

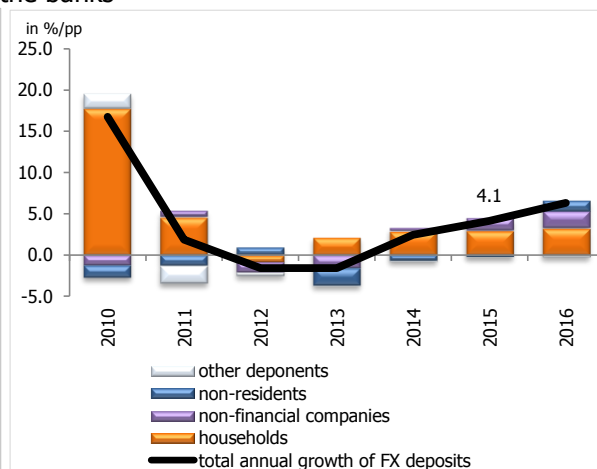
⁶³ The analysis of the trends of banks liabilities on the basis of data on the banks' liabilities included in the basis for calculating the reserve requirement.

Chart 68

Contribution by sectors (in percentage points) to the annual growth of denar liabilities of the banks



Contribution by sectors (in percentage points) to the annual growth of foreign currency liabilities of the banks



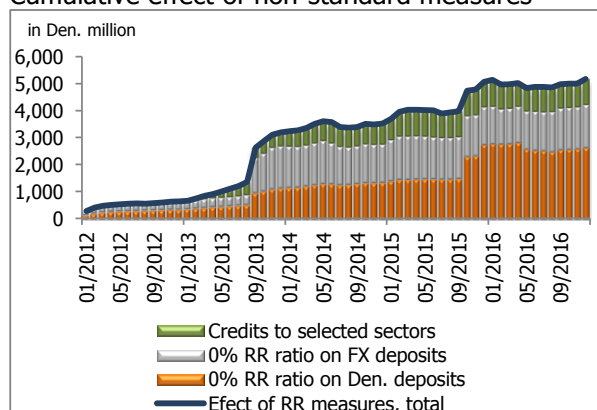
Source: NBRM.

The annual growth of reserve requirement in denars (for Denar 1,110 million, on the level of Denar 18,407 million)⁶⁴ was mostly due to the growth of denar and foreign currency liabilities of the banks. Thus, the reduced propensity of household savings in domestic currency, joint with the moderate growth of denar deposits of other sectors contributed around Denar 600 million to the higher reserve requirement in denars. However, the more significant growth of the foreign currency liabilities of the banks led by the households and the corporate sector mostly conditioned the growth of reserve requirement in denars (with an effect of around Denar 1,090 million). The propensity for savings in foreign currency contributed for a higher reserve requirement in euros, which in 2016 increased by Denar 818 million (in equivalent) and at the end of the year, it amounted to Denar 14,080 million.

In 2016, the application of reserve requirement for stimulating bank lending activity to systemic important sectors⁶⁵ continued. Thus, unlike in the previous years when these loans were growing, in 2016, there was a stabilization of the lending to net exporters, and positive shifts which contributed to a stronger credit support to the electric energy producers. These loans increased by Denar 515 million and had the largest contribution to the annual growth of the loans for systemically important sectors.

Chart 69

Cumulative effect of non-standard measures



Source: NBRM.

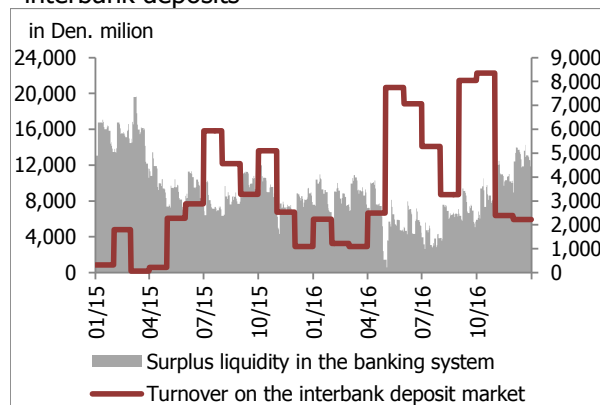
⁶⁴ Banks' reserve requirement in denars is calculated as the sum of the confirmed amount of liabilities in domestic currency, confirmed amount of liabilities in domestic currency with FX clause and 30% of the confirmed amount in foreign currency.

⁶⁵ Refers to net exporters and domestic electric energy producers.

Box 1. Developments in the money markets⁶⁶

In 2016, banks had a significantly higher activity in the money markets, which is mostly explained by the reduced liquidity in the first half of the year. The total turnover in the money market registered an annual growth of 78% and reached historically the highest level of Denar 62,045 million. The increased demand mostly corresponds with the decline and relatively lower level of the banks liquidity during the second and third quarter. Due to the short-term financing, banks primarily were directed to the interbank market of uncollateralized deposits, where trading with one-week deposits (with 50 percentage points) had the greatest contribution on the annual growth of 70%. Simultaneously, the borrowing overnight deposits was also high with share of 20 percentage points in the annual growth of the total turnover.

Chart 70
Excess liquidity and market turnover of interbank deposits



Source: NBRM.

Banks funded part of the liquid assets in the secondary market by purchase and sale of securities. The turnover of this market instrument increased by 49% amid high growth of trading with CB bills. This change is due to the fact that banks participated in the CB bills auctions with maximum set amount (based on the share of denar liabilities of the banking system), and later during the maintenance period of reserve requirement it was financed through outright sale of CB bills to other banks. The annual growth of trade in the secondary market for securities was supported by the higher turnover (of around 30%) with government securities. This change was supported by the further diversification of the ownership structure and the extension of the average maturity of the government securities.

Chart 71
Maturity structure of the turnover with uncollateralized deposits

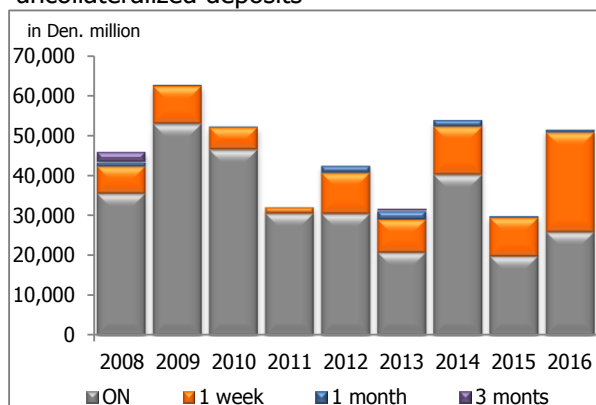
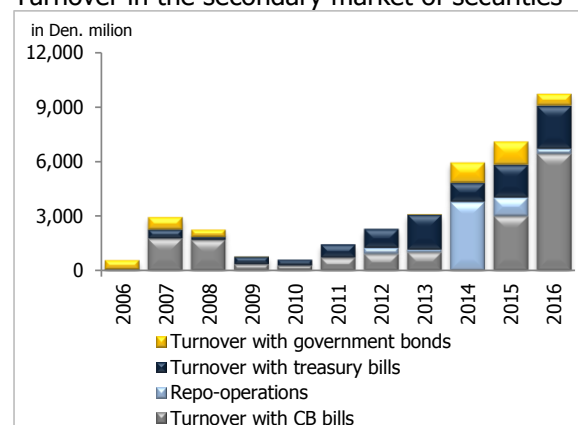


Chart 72
Turnover in the secondary market of securities



⁶⁶ Money market in Macedonia includes the following segments: the uncollateralized deposit market, secondary market of short-term securities and long-term securities, secured deposits market (repo market).

VI. Foreign Reserves Management and Investment

The management and investment of the foreign reserves of the Republic of Macedonia (hereinafter: foreign reserves) during 2016 was implemented in volatile conditions, both on the domestic and international financial markets. At the beginning of the year, the NBRM started with the operational application of the new approach for distribution of foreign reserves tranches in accordance to the liquidity requirements and the investment period, and in accordance with the recommendations of the World Bank for the best practices for managing foreign reserves. This revised and advanced approach enables higher flexibility in managing liquidity, which was confirmed during the year. Namely, the NBRM successfully responded to the necessity for maintaining the stability of the domestic currency in the second quarter of 2016, whereas in the third and fourth quarter showed high efficiency amid investing the assets from the issuance of the fifth government Eurobond, as well as during the payment of matured external debt liabilities of the county.

The investment of the foreign reserves during 2016 faced challenges for maintaining the value and creating income from the invested assets. During 2016, the European Central Bank (ECB) continued to increase the liquidity on the financial markets in order to encourage the economic activity, which led to further decline of the yields of the safest financial instruments, as well as maintaining the yields in the negative zone in some countries. In such circumstances, the investment framework was widened with additional investment opportunities that provided positive return and acceptable level of credit and market risk. The investment on longer maturities of the yield curve in euros and US dollars in the hold-to-maturity portfolios also widened, as well as for investments within the liquidity tranches in the estimated range for interest rate risk management. Investments in other currencies were actively monitored, and in terms of high uncertainty for the outlook of the British economy, after the decision of the United Kingdom to exit the EU, the active currency position in British pounds was closed. Active positions in Australian and Canadian dollars were also closed towards the end of the year, and part of the assets was redirected to the United States amid perceptions for further increase of yields in the following period. All investment decisions during the year were made in accordance with the key investment objectives for maintaining safety and liquidity of the foreign reserves, whose value increased as a result of the profitability of the investments.

6.1. Key guidelines for managing foreign reserves

Pursuant to the experiences and recommendations of the World Bank, a new Policy for Foreign Reserves Management and Investment (hereinafter: Policy) was prepared towards the end of 2015 and it was adopted by the NBRM Council as a strategic framework for implementing the process of foreign reserves management during 2016. The key aspects of this important function of the NBRM were elaborated in a more detailed manner in the new policy:

- The policy covered a wider definition for the key role of the foreign reserves and their special purposes and objectives, which are taken into consideration amid managing and investing. Starting from the estimated adequate level, and taking into consideration all possible sources and uses of foreign reserves, as well as the assessment of macroeconomic vulnerability to external shocks, the Policy gives guidelines for optimal division of the foreign reserves in accordance with their liquidity and investment period, in: operational, liquidity and investment tranche;

- Regarding the credit risk, establishing a single criterion for the lowest acceptable long-term credit rating of BBB-/Baa3 for all investments and counterparties was envisaged as a novelty;
- Regarding market risks, a new concept for acceptable risk level is set which is determined as potential total decline of foreign reserves for a certain investment period, whereby a risk budget was introduced as an acceptable level of underperformance of the return versus the return of referent portfolios. On the other hand, the currency risk taken vis-à-vis the basic currency structure is limited with the level of revaluation reserves for this purpose.

Based on such framework, new Rules for foreign reserves management and investment (hereinafter: Rules) were adopted, which define the criteria for determining the level of individual foreign reserves tranches, and the types of instruments by tranche. The rules also defined the basic currency structure of the foreign reserves, pursuant to the guidelines established in the Policy. In terms of the interest rate risk, maintaining an acceptable interest rate risk level was a novelty, and also a division was done between the risk taken from setting referent portfolios and risk budget for active management. Novelty about this segment was that besides for the euro and US dollar investment tranches, a referent portfolio for both operational and liquidity tranche in euros was also determined. Regarding credit risk, novelty is the application of composite rating (average rating) by the credit rating agencies: "Standard and Poor's", "Moody's" and/or "Fitch", which is used for setting the credit limit of the issuers, financial institutions and/or financial instruments.

The investment committee, in accordance with its role for making tactical decision, adopted the Investments Plan which was based on the strategic allocation of foreign reserves and covers the tactical modified duration of tranches and tactical currency structure of foreign reserves.

Towards the middle of the year, the need for finding investment possibilities within the euro tranches increased, which represented an exceptional challenge in terms of further widening of the range of negative yields in the segments of the yield curve. In order to enable more favorable conditions for foreign reserves investment, at the beginning of July, the Council, within the Policy, adopted increase of the maximum maturity of securities in the investment tranche which are classified as securities held to maturity from 7 to 10 years. Correspondingly, in the Rules the maximum maturity of securities available for trading in the liquidity tranche was revised from 3 to 10 years.

The Investment Committee assessed the strategic allocation of foreign reserves and increased the strategic and tactical modified duration of the euro liquidity tranche and of the euro and US dollar investment tranches. At the same time, the Investment Committee in accordance with the determination towards safer investments and increasing the exposure towards so-called "core countries of the euro area", made a more detailed revision of the issuers of securities and types of instruments where part of the investments could be directed. The changes enabled an extended selection of instruments and subsequently, extended possibilities for investment of assets denominated in euros.

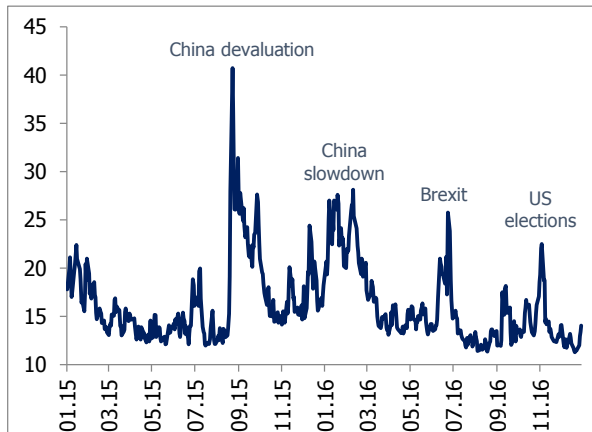
6.2. Investment conditions at the international financial markets in 2016

In terms of the international financial markets, 2016 was a year of surprises in many aspects. Significant moments that marked this year were: "Brexit", the American presidential elections and the election of the new administration with a change of the focus from monetary towards fiscal policy, the agreement of OPEC member countries for reduction of the oil production and improved economic indicators in the euro area in the second half of

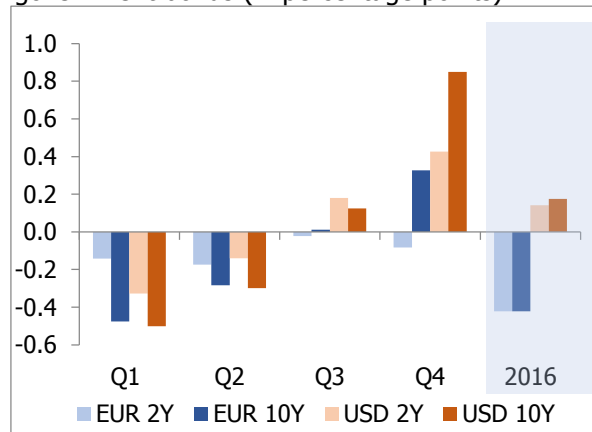
the year. Thus, stocks markets, bonds and commodity products registered volatile movements which were a reflection of the changes in the economic fundamentals, as well as in the changes of the investors' propensity for risk taking.

At the beginning of the year, the international financial markets faced a high volatility caused by the concerns for the future economic growth of China, and also for the global economy, as well as strong decline of the oil price, which contributed for maintaining expectations for low prices.

Chart 73
Stock prices volatility (VIX)⁶⁷



Changes of the yields of US and European government bonds (in percentage points)



As a response to the low inflation expectations and increased economic uncertainty, the ECB announced a voluminous package of expansionary measures on the meeting in March⁶⁸. At the same time, amid deceleration of the growth of the American economy in the first half of the year, the central bank of the United States stated that it does not expect a rapid tightening of the monetary conditions, which determined a decline of the yields of government bonds both in the United States and in the euro area. These movements were intensified towards the middle of the year, after the United Kingdom voted to exit the European Union, the risk aversion increased and subsequently, the market participants were directed to safe-haven instruments. The yields in the euro area were maintained at low levels until the end of the year, influenced by further expansive measures by ECB. Namely, in accordance with the announcements in the previous period, in December, the ECB adopted a set of measures for further monetary support⁶⁹ in 2017, which conditioned a decline of the yields of government bonds with a maturity up to two years.

On the other hand, yields of European debt securities in the segment from 5 to 10 years registered an upward correction in the last quarter, impacted by the growth of yields of American government securities. Besides the ongoing normalization of the monetary

⁶⁷ VIX index is published by the Chicago Board Options Exchange, and represents a measure for the implicit volatility of the options for index S&P 500. Often it is referred to it as the index of "fear" among investors and represents an indicator for the market expectations for volatility of the stock markets in the following period of 30 days.

⁶⁸ The new set of expansionary measures predicted the cut in the interest rates, increase the monthly purchase of securities from Euro 60 billion to Euro 80 billion, from April 2016 (by including non-banking corporate debt securities from the euro area with an investment grade, starting from the second quarter of the year) and implementation of four additional targeted longer-term refinancing operations (TLTRO II) with favorable conditions.

⁶⁹ It was decided the purchase of securities to continue until the end of 2017 at least, but after March 2017, the total amount of Euro 80 billion shall be monthly reduced to Euro 60 billion, due to the reduced risks of deflation. Thus, ECB predicted that the purchases should be conducted in a period of nine additional months, and not only six months as it was previously expected. Also, ECB adopted a Decision for abandoning the restriction for purchasing securities whose yield is under ECB deposit rate, whereby the ECB does not treat this change as necessity, but as a possibility. Among others, ECB shifted the limit for minimum residual maturity of securities purchased from two to one year.

conditions⁷⁰, in the United States, the yields' growth was influenced by the presidential election outcome which increased the expectations for fiscal expansion and intensified the inflation expectations⁷¹. The intensified expectations for further increase of interest rates impacted by the tightening of the monetary conditions by FED contributed to strengthening of the US dollar.

Chart 74
EUR/USD exchange rate

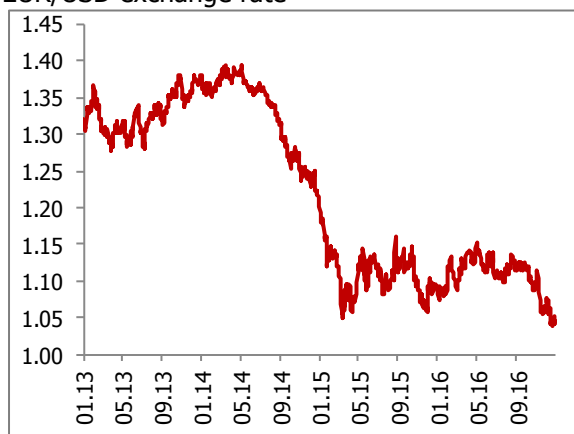


Chart 75
Gold price (ounce/US dollar)



Gold price movement followed the intensity of risk aversion of the market participants. Thus, in the first half of the year, the gold price increased to 1,370 US dollars per ounce, and after the voted Brexit, the uncertainty regarding the global economic prospects intensified. After the stabilization of the market perceptions, in the last quarter of the year, the gold price registered downward corrections along with the intensified market expectations for interest rates increase in the United States on several occasions, as a response to the announcements for intensified fiscal support by the policies of the newly elected American president. However, at the end of 2016, the gold price amounted to 1,159.1 US dollars, which is by 9.12% higher compared to the end of the previous year. During the year, the demand for gold by the central banks registered a decline of 33% compared to the previous year. Namely, central banks purchased 384 tons of gold on net basis, which is the highest level since 2010 onwards. The central banks of Russia, China and Kazakhstan increased their gold reserves during the year, whereby the purchase of gold by the central bank in China stopped in November and December due to the need of interventions in the foreign exchange market in conditions of capital outflows from the economy. Also, few other central banks reduced the gold reserves, such as Venezuela, Azerbaijan, Argentina and Jordan⁷².

6.3. Foreign reserves investment

6.3.1. Distribution of investments by tranche

The different liabilities and purposes of the foreign reserves in different time periods are taken into consideration when distributing foreign reserves by tranche. In this regard, foreign reserves are distributed in operational, liquidity and investment tranche, in accordance with their liquidity and their investment period. A novelty in this distribution is

⁷⁰ In December, the Federal Reserve System decided to increase the target range for the federal funds rate by 25 base points. This was the second increase in the ongoing cycle after the increase of the interest rates in December 2015.

⁷¹ The oil price contributed for increased price pressures and before the OPEC meeting registered an increase and after the reached agreement was stabilized on a higher level. At the meeting in Vienna between the oil producing countries members of OPEC (and afterwards with countries which are not members of OPEC) was decided to reduce the oil production starting from 1 January 2017. The oil price increased from 47.7 to 55.4 US dollars per barrel by the end of the quarter.

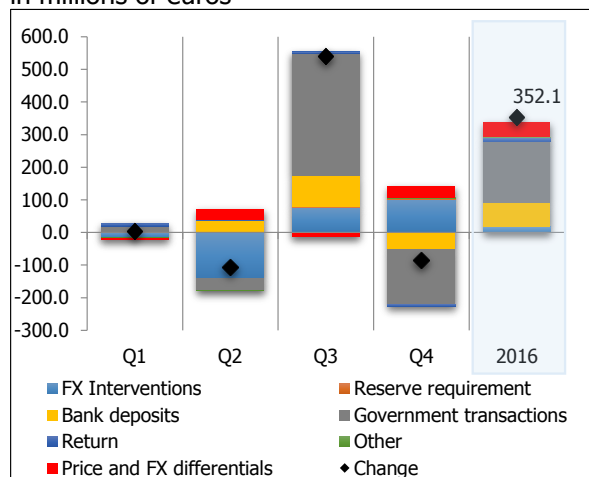
⁷² World Gold Council, Gold Demand Trends Full Year 2016, 3 Feb. 2017.

the segregation of an operational portfolio, which conceptually was part of the liquidity tranche in the past, and which was formed to more actively monitor and manage foreign reserves cash flows. Starting point for determining its value are the projected monthly outflow on behalf of the government, interventions of the National Bank on the foreign exchange market and assets for facilitating the conclusion and settlement of transactions with the foreign reserves. The liquidity tranche should cover the needs to replenish the operational portfolio and is determined on the level of the projected outflows for the next 12 months. The euro prevails in the operational and liquidity tranche as a foreign currency in which most of the payments and interventions in the foreign exchange market are conducted. On the other hand, in order to increase the flexibility amid managing the liquidity tranche and to generate higher income, it can also be invested in US dollars, as well as other foreign currencies, which were within the investment tranche in the previous year, and which at the beginning of the year became a part of the liquidity tranche. Excess foreign assets, after satisfying the liquidity needs, are redirected for investments within the investment tranche composed of euros and US dollars, whose integral part is also the portfolio of securities held to maturity.

The new methodology of liquidity management enabled the NBRM to efficiently respond to the needs for using the foreign reserves in the second quarter of the year, whereby during the quarter the operational portfolio was replenished with assets from both the euro liquidity tranche and the euro investment tranche for trading.

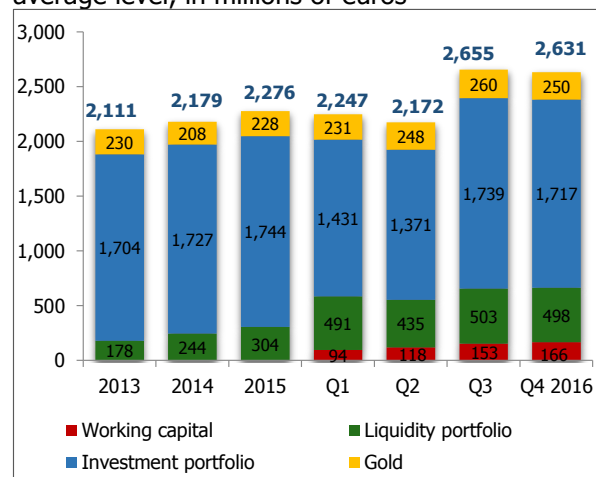
Unlike in the second quarter, when reserves registered a decrease, during the third quarter more factors contributed for their more significant growth, whereas the transfer of assets from the operational towards the liquidity and investment tranche was done, depending on the estimated period when the assets from the inflows would be needed. Also, given the generated inflows of assets from foreign currency deposits of the banks held with the NBRM, the level of potential liabilities in the next 12 months (on moving basis) increased, which implies maintaining higher level of the liquidity tranche.

Chart 76
Determinants of foreign reserves
in millions of euros



Source: NBRM.

Chart 77
Foreign Reserves Tranches
average level, in millions of euros



In the last quarter of the year, foreign reserves decreased, mainly due to the repayment of matured liabilities on the basis of the commercial loan of the government and other liabilities on the basis of external debt, as well as due to the outflows based on the matured foreign currency deposits of the banks after terminating the possibility for further placements with the NBRM. These outflows were partially compensated with inflows of assets as a result of the prolonged interventions for purchase of foreign currency with the

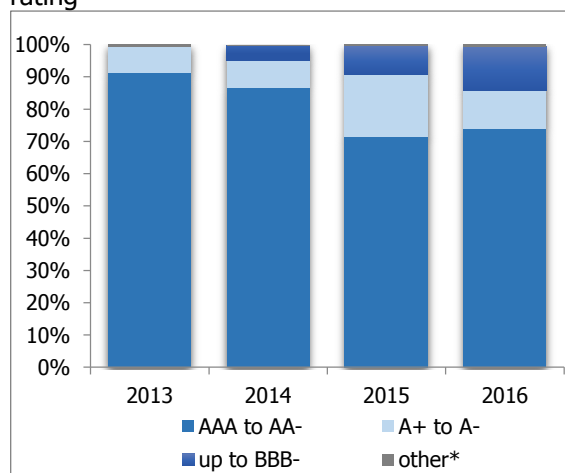
supporting banks and due to the growth of the value of US dollar assets within the foreign reserves. Liquidity within the operational tranche was provided on time in order to settle foreign liabilities and this tranche was replenished by the liquidity and investment tranche in euros.

Foreign reserves registered an increase for a total of Euro 351.7 million on an annual basis, whereby almost half from this growth is realized due to the government transactions where inflows of assets based on the issued Eurobond prevail. Other factors also contributed for the foreign reserves growth, especially the impact of foreign currency deposits of the banks with the NBRM⁷³, as well as the increase of the market value of the reserves due to the increased value of the gold and other currencies. The interventions on the foreign exchange market (net purchase in the amount of Euro 16.5 million) contributed to the growth of reserves in 2016, as well, as a result to the continuous purchases in the second half of the year which entirely compensated the sales of foreign currency in the beginning of the year and especially in the period April-May.

6.3.2. Credit exposure and instruments

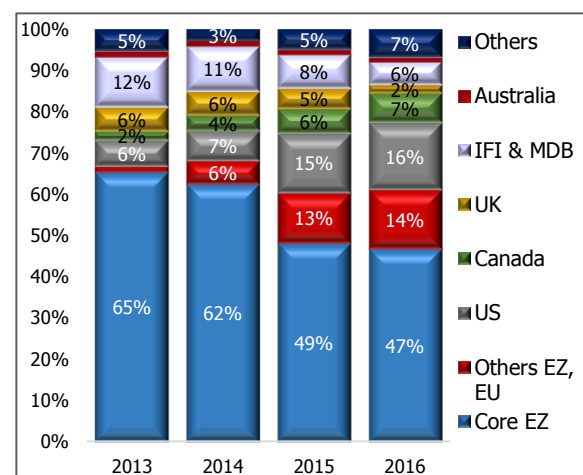
The safety of foreign reserves investment is very important in determining the investment strategy of the NBRM. In accordance with the envisaged investment frames, most foreign reserves or an average of around 74% were invested in financial instruments with the highest credit rating (from AAA to AA-) i.e. with lowest exposure to credit risk. In order to achieve balance with the value preservation principle in conditions of low and negative yields, a certain part of the foreign reserves was invested in instruments with a credit rating from A+ to A-, which also are characterized by a high level of safety, and enable moderate positive return of assets. Thus, not deviating from the safety principle, the NBRM endeavors to achieve a reasonable return from the investments through a cautious and simultaneously active foreign reserves management, in terms of strictly controlled risk.

Chart 78
Average annual investment structure, by credit rating



*MMF, BIS are classified in the category others
Source: NBRM.

Chart 79
Average annual investment structure, by country



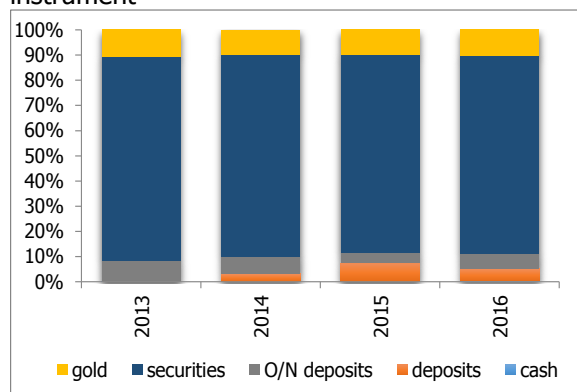
*IFI and MDB - international financial institutions and multilateral development banks

⁷³ During the summer period, banks registered a growth of the foreign currency liquidity as a result to the common seasonal developments, whereby they used the benefit of the foreign currency deposit instrument i.e. the possibility of placing low but positive rates on maturities longer than 6 months. On 28 October, the NBRM discontinued the auctions of foreign currency deposits and the previously placed assets were paid on the date of their maturity. Namely, the continuous favorable developments in the foreign exchange market pointed to economic agents' stabilized expectations after the shock in April and May. The total amount of foreign currency deposits at the end of 2016 was Euro 74.5 million which are due in 2017.

Geographically, significant part of the foreign reserves investments are directed towards the euro area core countries, but the low yields of the fixed income instruments on the European markets and the necessity of search for yield also determine a moderately higher exposure to other economies from the euro area and European Union. Investments in instruments from issuers of securities in US dollars for the second consecutive year also have a relatively high share in terms of the geographic distribution of investments. This is due to the foreign reserves investment opportunities in safe instruments which at the same time have prospects for favorable yield of investments, given the already started cycle of increase of interest rates in the United States.

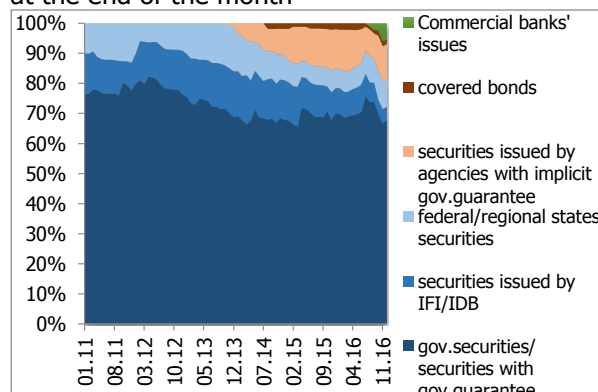
Given that securities are included in both the investment and liquidity tranches, these financial instruments, with an average share of 78.4% prevail within the structure of foreign reserves by instruments. The focus on the safety principle of foreign reserve investments, in combination with maintaining appropriate level of liquidity, is also registered in the structure by financial instruments. Namely, regarding securities, a moderate increase is registered in investments in government securities and securities with government guarantee, which had a share of 70.5% on an average in the foreign reserves securities investments (1.4 percentage points higher compared to 2015). In order to maintain the interest risk within predefined limits, in the euro liquidity tranche the longer term investments in government securities were combined with investments in short-term commercial papers and deposit certificates issued by prime foreign commercial banks which enable flexibility in terms of need for liquidity. A significant share (11.5%) had investments in securities with implicit government guarantee, which despite the high level of safety, also have higher yield compared to government securities. A moderate share of investments was directed in securities issued by multilateral organizations⁷⁴ with an average share of 7.1% in the securities and securities issued by the regional governments of Germany, Australia and Canada (with an average share of 7.7%).

Chart 80
Annual average investment structure, by instrument



Source: NBRM.

Chart 81
Structure by securities type at the end of the month



Part of the foreign reserves was also kept on the current accounts (around 6.2% on average) which mostly refer to operational tranche assets. In order to optimize costs, besides on the accounts with the central bank, part of the assets was kept in current accounts in foreign commercial banks. Deposits⁷⁵ were also placed in foreign commercial banks, within the liquidity and investment tranche, whereby their share moderately decreased (from an average of 7% in 2015 to 4.8% in 2016) mostly due to the foreign

⁷⁴ The European Investment Bank (EIB), Council of Europe Development Bank (COE), European Company for the Financing of Railroad Rolling Stock (EUROFIMA), International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Nordic Investment Bank (NIB), Asian Development Bank (ADB), Inter-American Development Bank (IADB).

⁷⁵ Investments in deposits within the investment tranches are limited to maturity up to one year.

reserves growth, as well as placements of some matured deposits in other instruments of the money market (deposit certificates, commercial paper and government securities).

Within the foreign reserves structure, the share of gold slightly increased, from 10% in 2015 to 10.3% in 2016, which is due to the growth of its price in the international markets by 9.1%, but the moderate growth of the quantities of gold within the foreign reserves had an additional impact. Namely, beginning from 2005, when the last amount of gold was obtained (20,498 ounces) from the inheritance of gold from the former Yugoslavia and the monetization of the gold of the NBRM's Vault in 2006 (2,634 ounces), this increase is the first after a long period. This is due to the implementation of the Decision of the Government of the Republic of Macedonia for converting commemorative coins in monetary gold, as well as converting the confiscated gold items, given by the Agency of the Republic of Macedonia for managing the seized property, in monetary gold as well. Thus, the gold quantity increased by 2,288.06 ounces, i.e. from 218,875.84 ounces rose to 221,163.91 ounces of gold, which enabled growth of the foreign reserves in the amount of Euro 2.44 million.

Gold, which is usually a lower-yield financial instrument, during the year, was placed in the short-term deposits with prime foreign commercial banks. Given the US dollar attractiveness and high forward rate for gold, concluding swap contracts with gold⁷⁶ with some of the counterparties with which the NBRM has concluded ISDA contract⁷⁷ started. Within the transactions concluded during 2016, placements of US dollars were made and at the same time borrowing gold (with a spot currency date) and obligating to conduct reverse transaction for 1 month from the date of concluding the derivative contract. At the same time, the gold obtained as a collateral is placed in deposits in one of the high quality counterparties, for the same period in which the US dollars are placed.

From the other operations with foreign reserves, NBRM continued to use the operations for securities lending by concluding repo and reverse repo transactions at the same time. In order to compensate part of the costs associated with maintaining accounts at the counterparties and securities depository, the use of depository service for automatic securities lending from the NBRM's portfolio kept at the depository. In terms of costs for maintaining accounts and custody services, during 2016, based on the previously conducted analysis, activities for consolidation of the securities portfolio towards one of the international depositories are undertaken, which offered a lower rate for the services. This contributed in reducing the costs of the NBRM for maintaining accounts and safekeeping of the securities in the international depositories.

6.3.3. Currency structure⁷⁸

The currency allocation was done according to the foreign reserves' strategic currency allocation, in order to support the exchange rate targeting as a monetary strategy of NBRM. Subsequently, assets invested in financial instruments denominated in euros prevail within the foreign reserves, with an average share of 56%. However, given the extremely unfavorable market conditions in the European markets, where further decline of

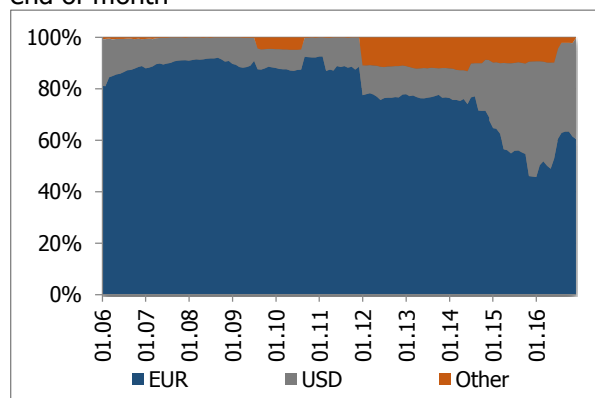
⁷⁶ The gold swap represents a derivative contract in which two counterparties agree to exchange gold with a certain currency (US dollar) on a certain date and at the same time do the reverse transaction on a certain future date. Thus, a type of collateralized loan is concluded.

⁷⁷ ISDA contract is an international framework agreement which is obligatory to be concluded between the counterparties which conduct foreign currency and derivative transactions. NBRM has concluded such type of agreement with five counterparties: Natixis, Societe Generale, Toronto Dominion Bank, Commerzbank and BNP Paribas.

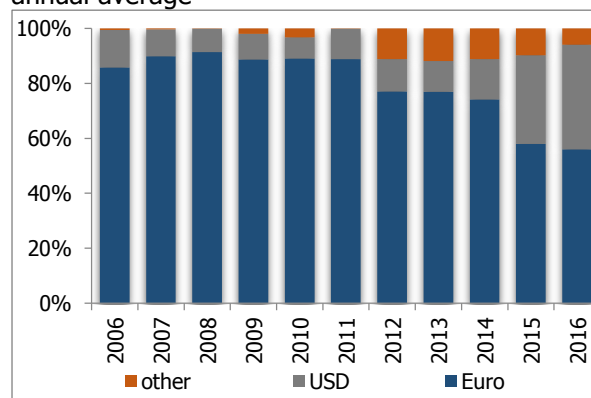
⁷⁸ The currency structure is analyzed taking into account the stock of foreign reserves reduced by the amount of gold.

yields was registered, and in accordance with the tactical distribution of investments, a significant portion of foreign reserves were invested in financial instruments denominated in US dollars. The share of these investments in the currency structure amounted to 38.1% on average during 2016 and increased by around 5.8 percentage points compared to 2015. This growth is justified given the already started cycle of interest rate increase in the United States.

Chart 82
Currency structure of the foreign reserves
end of month



annual average



Source: NBRM.

During 2016, NBRM actively monitored the performances of the investments in other currencies. Thus, by the end of the second quarter, after the referendum decision for exit of the United Kingdom from the European Union, investments in British pounds were reassessed. Given the current information which suggested uncertain prospects for the British economy and downward risks of additional decline of the value of the British pound⁷⁹, in June, the NBRM closed the investments in British pounds. By the end of July, anticipating the decision of the Central Bank of Australia to decrease the key interest rate, the position in Australian dollars was closed, and the exposure towards US dollars increased. Until the end of the year, pursuant to the commitment for increased exposure to the US dollar, on the account of reducing the exposure to other investment currencies, the investment in Canadian dollars were also closed.

6.3.4. Exposure to interest rate risk and results from foreign reserves investment

Foreign reserves placement and investment was mainly in securities which bring revenues from interests and coupons, but are exposed to the changes of their market prices i.e. current yields. This exposure to interest rate risk is controlled through determining a key modified duration and keeping part of the securities held to maturity. Managing the interest rate risk, besides by the modified duration, is also monitored in terms of limiting the acceptable level of interest rate risk⁸⁰, which during the year was maintained within the determined frames, which suggests that the investment strategy is appropriate.

The results from the foreign reserves investment are mostly due to the market conditions at the moment of investment, as well as to the return of the referent portfolios⁸¹,

⁷⁹ In 2016, the value of the British pound registered a decline by 16% compared to the euro.

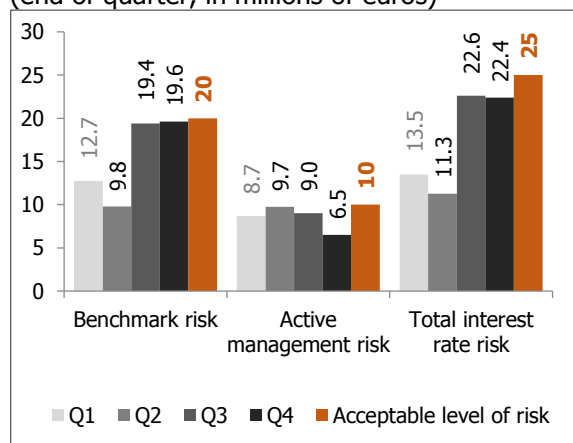
⁸⁰ The acceptable level of interest rate risk according to the Policy for foreign reserves management and investment is limited to the probability for reducing the market value of the foreign reserves to 1% amid confidence level of 95% during the investment period of one year.

⁸¹ Referent index of securities' prices and money market index consisted of real financial instruments, with modified duration that corresponds to the target modified duration of the investment tranche.

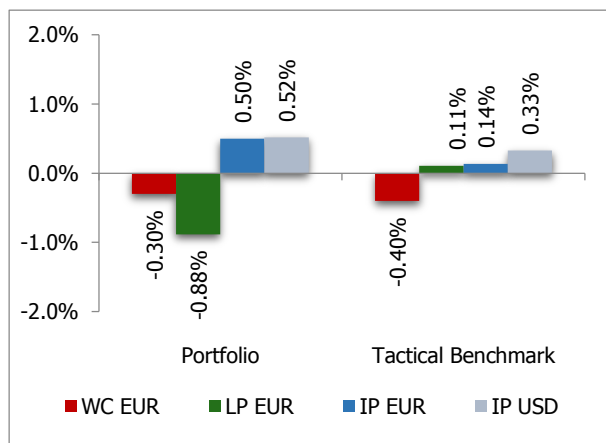
which serve as an investment direction. The operational tranche, given the need for maintaining assets in euros, has a negative impact on the revenues from the foreign reserves investment, on the level which is close to the referent portfolio level. The euro liquidity tranche, which is entirely invested in credit instruments with a positive yield, had a negative return due to the growth of the credit premium in the last quarter of the year. On the other hand, the euro and US dollar investment tranches registered relatively solid rates of return, which were slightly higher, compared to the referent indices.

Chart 83

Exposure to interest rate risk
(end of quarter, in millions of euros)



Rates of return by tranche

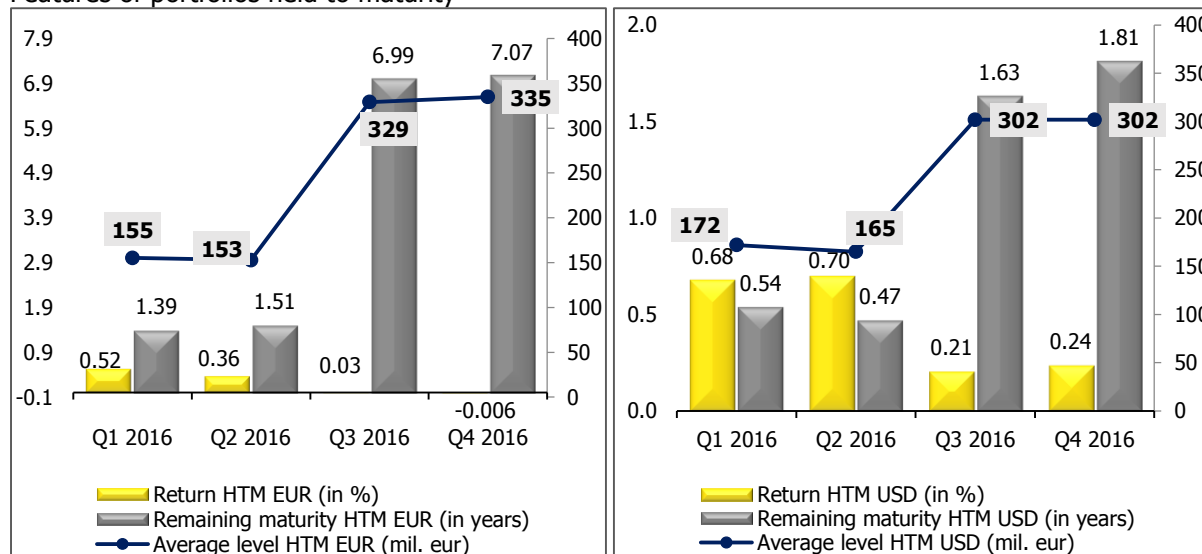


Source: NBRM.

In order to reduce the interest rate risk exposure, part of the invested securities within the foreign reserves is recorded as securities which are held to maturity, which according to their features have a predictable and stable yield. During the third quarter, part of the inflow from the Eurobond was distributed and invested in the euro and US dollar hold-to-maturity portfolios, so that their total amount increased to the level of around Euro 650 million and reached 25% of foreign reserves.

Chart 84

Features of portfolios held to maturity



*HTM (Held-to-maturity)

Source: NBRM.

The residual maturity of the euro hold-to-maturity portfolio was significantly increased, due to the low yielding investments. These features are in accordance with the

commitment for increasing the share of investments in government bonds of the euro area core countries, and baring the safety principle in mind. In the US dollar hold-to-maturity portfolio, the new assets were mostly directed towards US Treasuries, invested in the three-year segment of the yield curve, with a relatively favorable yield rate. Thus, despite the moderate increase of the investments' residual maturity, still these assets are invested in a relatively shorter period, and amid maturity can be re-invested with higher yield rates, in accordance with the expectations for higher interest rates in the United States.

The total rate of return on foreign reserves in 2016, which besides income includes exchange rate and price differentials, was 0.72%, which is close to the 2015 level (0.74%).

Box 2. Activities related to improving the institutional capacity building in the foreign reserves management

During 2016, the activities of the NBRM within the cooperation with the World bank (RAMP - Reserves Advisory and Management Program) continued and another two working missions were held by World Bank experts in which the model of risk budgeting and the strategies for improving the foreign reserves investment were presented. Also, the activities for enabling the application of the futures within the portfolio managed by the World Bank were completed in the third quarter, and the first transactions were concluded by the end of September.

According to the World Bank recommendation, in the last quarter of 2016, NBRM started negotiations with one foreign bank for establishing cooperation in the area of trading futures, whereby this bank positively responded to the requests. It is expected that the further stages of establishing this cooperation will be finished by the end of the first quarter of 2017 and by the next period, these derivative instruments will be actively used in the foreign reserves management.

Also, improving the knowledge and building institutional capacities within NBRM continued, through visits of the employees which are included in the process of foreign reserves investment to specialized workshops organized by the World Bank. These visits were used for exchanging experiences with both the World Bank experts and representatives of central banks globally, also members of the World Bank program, which is especially important for maintaining high level of efficiency, professionalism and quality of human resources involved in the foreign reserves management process.

VII. Activities and developments in the payment systems

The NBRM permanently implements numerous activities in the area of improving the payment infrastructure in the domestic economy and activities for harmonization of the national regulation with the regulations of the European Union (EU) in order to ensure compatibility of the national practice with the practice in the EU. Within these frames, in the course of 2016, several important projects were successfully completed, through which the NBRM successfully realized its operational, oversight, development and catalyst role in this segment.

In 2016, the major project – the upgrade of the Macedonian Interbank Payment System – MIPS of the NBRM for making payments in euros (besides denars) was completed, thereby passing in two-currency payment system. This project as such is the second generation of reforms in the payment infrastructure, after the first significant payment operations reform in 2001. This major project achieved integration of the payment infrastructure of the Republic of Macedonia with the payment infrastructure of the European Union, by establishing a correspondent connection with the TARGET 2 payment system of the Eurosystem. The ultimate goal of this project is faster and safer cross-border payments in euros and reduction of cost for the benefit of Macedonian companies and households.

The reform process in the area of payments also took place within the IPA project, aimed at harmonizing the national with the European legislation. This project, in which the NBRM had an active participation, included a preparation of a Draft Law on Payment Services and Systems implementing the Directive on Payment Services in the Internal Market (PSD 2007/64 and part of the provisions from PSD2 2015/2366), the Settlement Finality Directive (SFD 2009/44) and the E-Money Directive (EMD2 2009/110). This project should contribute to stimulating competition, strengthening the rights of payment service users, lower prices of payment services, and establishing a legal basis for faster integration of the Republic of Macedonia into the EU and inclusion in the Single European Payment Area (SEPA).

In 2016, new by-laws on payment statistics were adopted, which resulted in significant harmonization of data with the requirements of the Regulation on Payment Statistics No. 1409/2013 of the European Central Bank. The new framework of the payment statistics contributes to achieving one of the strategic objectives of the NBRM to provide quality statistical data, harmonized with the European statistical standards, thereby keeping an account of the reporting burden and their efficient, timely and simple delivery to the users.

In order to improve the oversight role of the NBRM, in 2016, the payment systems oversight by-laws were revised. The latest, internationally accepted standards known as "Principles for Financial Market Infrastructures" were adopted, issued by the Committee on Payment and Settlement Systems at the Bank for International Settlements and the International Organization of Securities Commissions. The implementation of the new oversight framework expects further improvement of the safety, stability and efficiency of payment systems in the Republic of Macedonia. At the same time, in order to strengthen the stability of the MIPS payment system, testing of the Business Continuity Plan of MIPS at the level of the industry with the largest participants in the system was conducted.

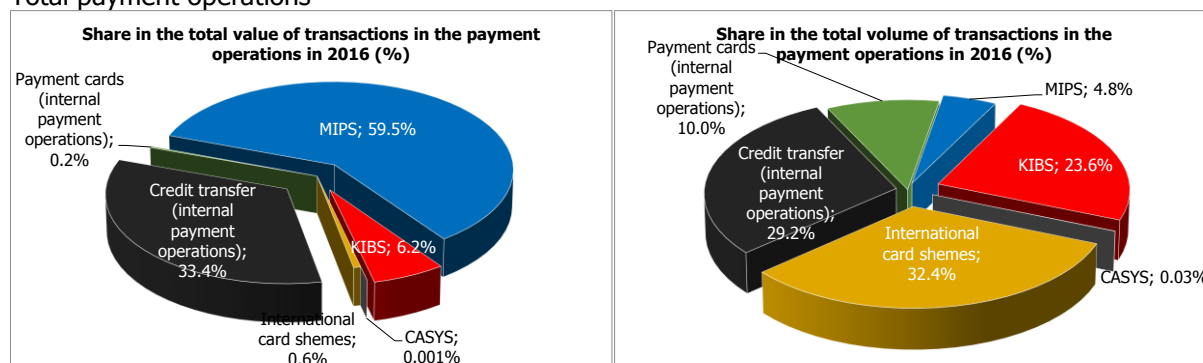
The knowledge exchange process for trends and developments in the field of payment systems, instruments and services at the international level continued in 2016, by

organizing the Ninth Conference on Payment and Securities Settlement Systems by the NBRM in cooperation with the central banks of the Netherlands and Portugal. At the Conference significant topics related to the current development of the legal framework in the payment area at the European level, the strategic vision of the Eurosystem 2020, as well as the innovations within SEPA and the challenges of payment security were elaborated.

7.1. Total payment operations in the country

In 2016, the value of total payment operations in the country⁸² amounted to Denar 5,438.6 billion. Moreover, Denar 3,609 billion (66%) were realized through payment systems (MIPS, KIBS, CaSys⁸³) and international card schemes, while Denar 1,829 billion (34%) through internal banks' systems. The largest share in the value of transactions was registered with MIPS (59.5%). In the same period, the total number of transactions amounted to 103 million transactions, of which 63 million transactions (61%) executed through interbank payment operations⁸⁴, and the rest through banks' internal systems. High share in the number of total transactions was registered with the international card schemes and the internal payment operations with cards (32.4% and 10.0%, respectively), which points to the propensity of customers to pay with payment cards in the trade.

Chart 85
Total payment operations



Source: NBRM.

7.2. Payment instruments

In 2016, the total value of cashless transactions⁸⁵ in the country initiated by or aimed at natural persons and legal entities (excluding transactions within the monetary financial institutions sector) amounted to Denar 3,178 billion, which is by 5.3 times more than the nominal GDP for 2016. In terms of payment instruments, most or 99% of the value of cashless transactions were made through credit transfers, while only 1% refers to transactions in the trade with payment cards issued by resident PSPs. Analyzing credit transfers, almost equal value was achieved by initiating paper and electronic orders. Although the share of transactions with payment cards in the total value of cashless transactions is low, the realized value with this payment instrument represents 11% of the

⁸² The total payment operations in the country cover all sectors of the economy, including the monetary financial institutions sector.

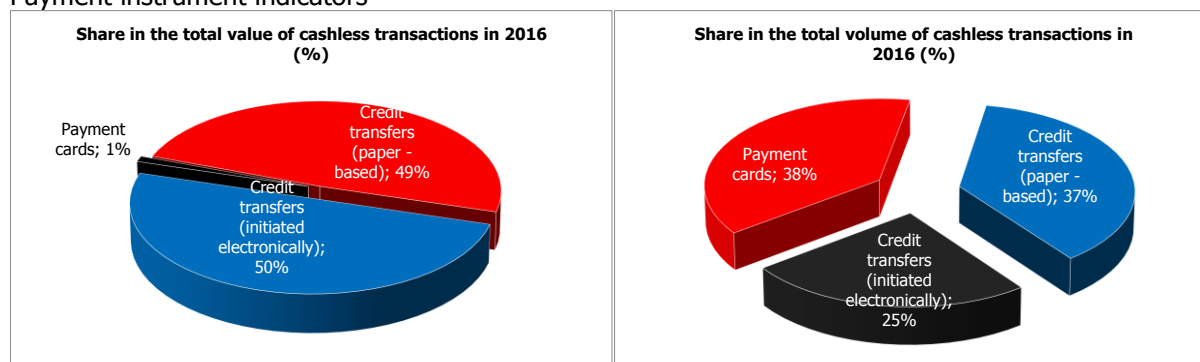
⁸³ Clearing Interbank Systems – KIBS and International Card System – CaSys

⁸⁴ Interbank payment operations include transactions in the country settled through payment systems and international card schemes.

⁸⁵ Cashless transactions refer to transactions initiated with a payment order – payment instrument: credit transfers, direct debits, payment cards, e-money transactions, cheques and other payment instruments. Direct debits are still not introduced as a payment instrument in the Republic of Macedonia, whereas cheques were abolished in 2007. At the same time, despite the legal possibility, there are no e-money transactions. In addition, the total cashless transactions cover only credit transfers in the domestic payment operations and payments with payment cards issued in RM in the domestic payment operations.

personal consumption in the Republic of Macedonia in 2016. In comparative context, the share of the value of transactions with payment cards in the personal consumption in the Republic of Macedonia is lower, compared to the old EU member states⁸⁶ (32%) and the countries of Central, Eastern and Southeast Europe (CESE)⁸⁷ (19%),⁸⁸ which points to the need for further change of consumers' practices, i.e. greater use of payment cards.

Chart 86
Payment instrument indicators



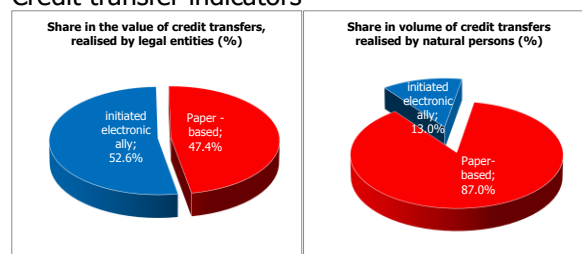
Source: NBRM.

Observing the number of cashless transactions by natural persons and legal entities in the country in 2016, 92 million transactions were conducted, with the bulk, or 62% through credit transfers, and the rest by credit cards. This structure in the number of transactions, contrary to the structure of the value of transactions, points to the fact that credit cards, as payment instruments, are mostly used by natural persons.

Due to innovations in payments and benefits offered by electronic banking (possibility of initiating payments 24/7 and lower commissions for electronic orders, compared to the commissions for paper-based orders initiated at banks' counters), in the Republic of Macedonia, there is a trend of using electronic banking services in both legal entities and natural persons. There is a relatively significant share of 41% of electronic orders in the total number of credit transfers, which is still twice as low, compared to the countries of the old EU member states and CESE (89% and 86%, respectively). The total number of credit transfers per capita in Macedonia is 28 transactions, which is twice lower compared to the CESE countries and the old EU member states (58 and 56 transactions, respectively), which perhaps indicates the fact that cash is still widely used in the overall transactions in the economy.

Most credit transfers were made by legal entities (93.5%), and less by natural persons. Legal entities are increasingly using the electronic banking benefits, with 53% of the value made through electronic initiation of credit transfers, using personal computers. Most of the value of credit transfers (87%) of natural persons was made by applying paper orders. Despite the great application of paper credit transfers in making payments, natural persons also tend

Chart 87
Credit transfer indicators



Source: NBRM

⁸⁶ Austria, Belgium, Germany, Greece, Denmark, Ireland, Italy, the United Kingdom, Portugal, Finland, France, the Netherlands, Sweden and Spain.

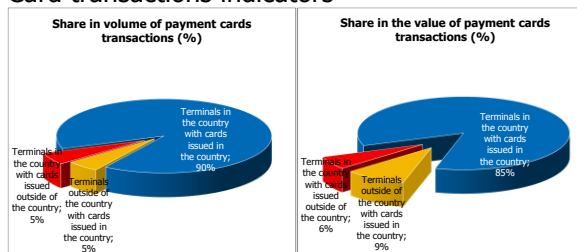
⁸⁷ Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Poland, the Czech Republic, Romania, Slovakia, Slovenia, Hungary and Croatia.

⁸⁸ The latest available data for the EU member states refer to 2015.

to use the new sophisticated methods of payments in the country. Moreover, the personal computer has the largest application in the realized transactions with electronic credit transfers, but there is also a moderate use of mobile phones and ATMs.

The total value of transactions with payment cards for 2016 amounted to Denar 191 billion⁸⁹. In terms of the location of terminals (in the country and abroad), where payments are made with domestic and foreign payment cards, the largest value was registered by the terminals located in the country with domestic cards (85%), then by the terminals located in the country with foreign payment cards (9%) and finally, by the terminals abroad with domestic payment cards (6%). Analyzed in terms of the number, most (90%) were realized with domestic payment cards at terminals located in the country, while transactions with foreign cards at domestic terminals and transactions with domestic cards at terminals located abroad have equal share.

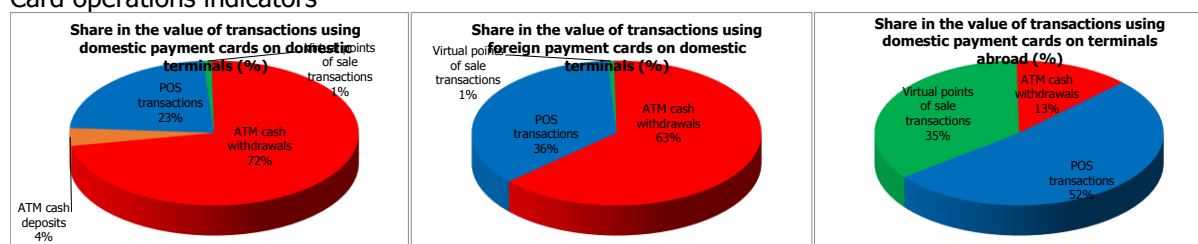
Chart 88
Card transactions indicators



Source: NBRM

Regarding the purpose of using domestic and foreign payment cards at terminals located in the country, payment cards were mostly used for cash withdrawal (with a share of 72% and 63%, respectively). Furthermore, residents realized 23% of the value at the POS terminals in trade, 4% for ATM cash deposits, and only 1% for Internet payments (virtual points of sale). The situation with non-residents at domestic terminals, which realized 36% at the POS terminals and 1% for Internet payments, is similar. On the other hand, domestic payment cards abroad were mostly used at the POS terminals (52%), as well as in Internet-trade (35%), and least for cash withdrawal (13%). Card transactions in the country and abroad in 2016 provided a net inflow for the Republic of Macedonia in the amount of Denar 5.6 billion⁹⁰.

Chart 89
Card operations indicators



Source: NBRM

7.3. Payment infrastructure

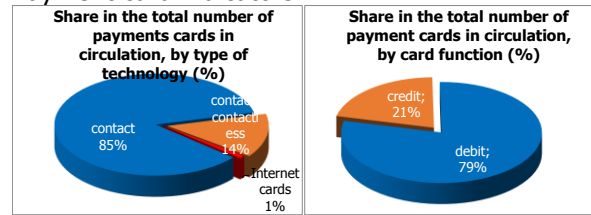
The total number of issued cards with a payment function in December 2016 was 1,818,676. Thus 79% of the total number of cards are cards with a debit function, and the rest is comprised of the cards with a credit function. As a result of the following of the global

⁸⁹ Payment card transactions in this section are presented in terms of the location of terminals (in the country and abroad), whereby besides transactions in trade, ATM cash withdrawals and deposits transactions are also included.

⁹⁰ The net inflow is determined on the basis of the data on the NBRM payment statistics.

trends and the latest technical and technological solutions in the field of payments, banks started promoting the contact-contactless cards. The number of these cards at the end of December was 252,851 cards, or 14% of the total number of issued cards. The introduction of these sophisticated payment-processing technologies in the card operations achieves higher efficiency and speed in payments in trade, as well as reduction of customer queues.

Chart 90
Payment card indicators



Source: NBRM

In 2016, the total number of ATMs on the territory of Macedonia amounted to 1,039, most of which serve only to withdraw cash, and the rest of them, in addition to the main function, offer the possibility of initiating a credit transfer (256) and depositing cash (86). The tendency of introducing ATMs with upgraded, additional functions should enable services for all sides involved in the payment process, primarily toward the change of costumers' practices, i.e. more frequent use of benefits from the sophisticated payment methods, speed and efficiency in payment, save waiting time at banks' counters, and thus reducing manual data processing of the tellers. At the end of 2016, the number of payment card accepting devices at the POS terminals was 36,974, and the virtual points of sale amounted to 711.

Table 3
Indicators of devices and merchants who accept payment cards

| Number of payment card accepting devices and total number of merchants | balance on 31.12.2016 |
|---|-----------------------|
| ATMs | 1,039 |
| -ATMs with a cash deposit function | 86 |
| -ATMs with a credit transfer function | 256 |
| POS terminals | 34,974 |
| EFTPOS terminals | 34,826 |
| Contact | 22,770 |
| Contact/contactless | 12,056 |
| Terminals at virtual points of sale | 711 |
| Total number of merchants in the country who are clients of the payment service provider and accept their cards | 13,080 |
| -physical points of sale | 12,265 |
| -virtual points of sale | 613 |
| -payments on other device | 202 |

Source: NBRM

The total number of merchants in the country who accept payment cards at the end of 2016 was 13,080. Merchants (12.265) who accept payments at POS terminals have the highest share, followed by merchants (613) who accept payments at virtual points of sale and the rest is comprised of merchants (202) who accept payments at other terminals (fast collection systems⁹¹ and micropayment service providers⁹²).

⁹¹ "Micropayment" shall denote payment of products and services in a single amount not exceeding Denar 1,000, with the approval for making the payment being issued through telecommunication, digital or IT devices.

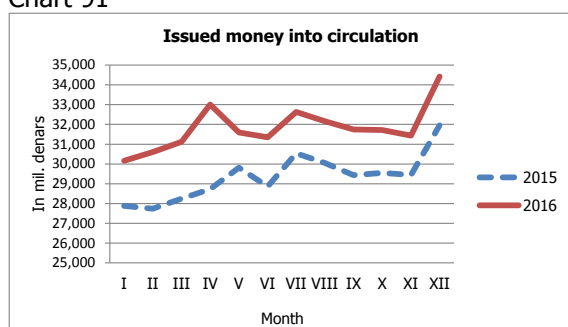
⁹² The fast collection system is an innovative technology that enables faster cash and cashless payments for various types of services (payment of water bills, radio broadcasting fee, cable television, mobile telephony, insurance, tuition, etc.) through appropriate devices.

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 2016, the total amount of the currency in circulation amounted to Denar 34,425 million, which is by Denar 2,477 million or 7.75%⁹³ more compared to the end of 2015. The structure of the currency in circulation suggests that at the end of the year, banknotes and coins make up 96.6% and 3.4%, respectively of the total value. In terms of the number of pieces of currency in circulation, the share of banknotes equals 24.8% (77.9 million pieces), and the share of coins equals 75.2% (235.6 million pieces).

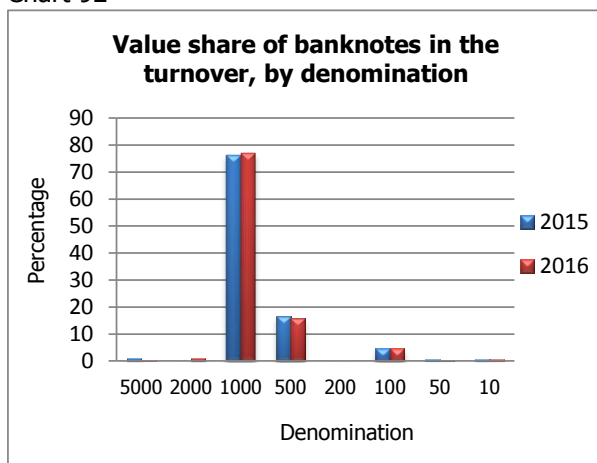
Chart 91



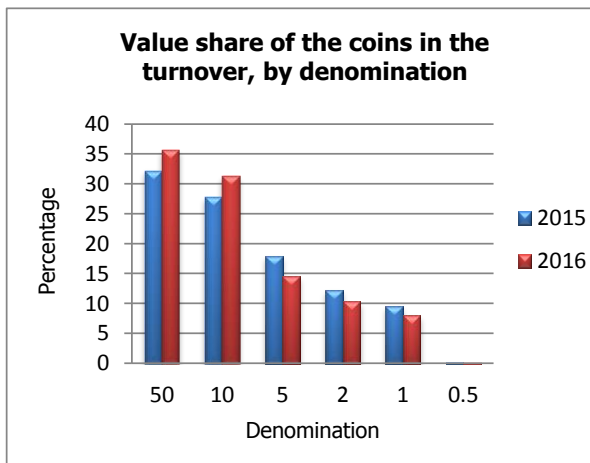
Source: NBRM.

Banknotes in denomination of Denar 1000 (77.0%) and Denar 500 (15.7%) account for the most of the total value of banknotes in circulation. Other banknotes account for 7.3% of the total value. In 2016, coins in denominations of Denar 50 (35.6%), Denar 10 (31.3%) and Denar 5 (14.6%) had the largest share in the value of coins.

Chart 92

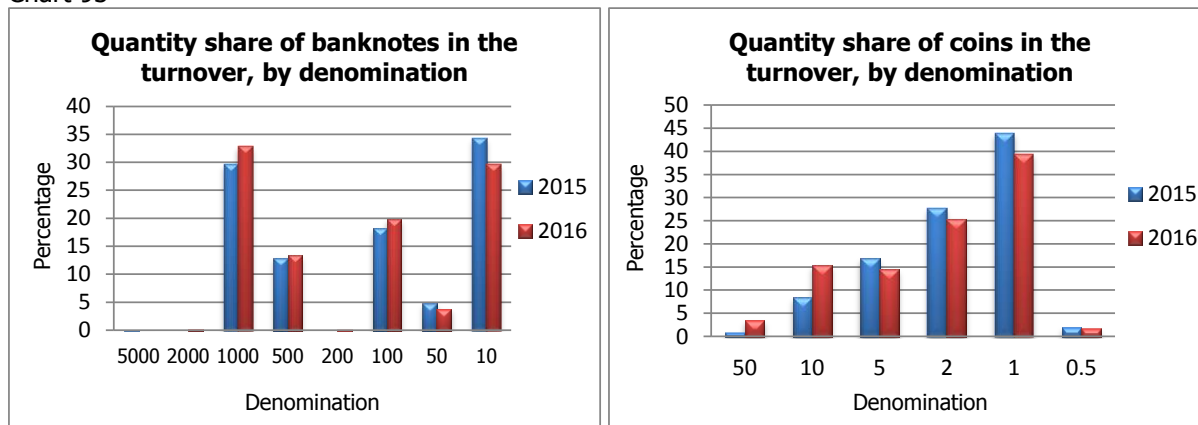


Source: NBRM.



⁹³ The presented data on the currency in circulation do not include the quantities and value of the collector coins, which were made and put into circulation by the National Bank for artistic, cultural and promotional reasons. Collector coins are available primarily abroad, but also in the Republic of Macedonia. As of 31 December 2016, the value of the collector coins in circulation amounted to Denar 5.4 million or the currency in circulation amounted to Denar 34.430 million in total.

Chart 93



Source: NBRM.

In the structure of the currency in circulation, according to the number of pieces, the share of banknotes in denomination of Denar 1000 (32.9%), Denar 10 (29.7%) and Denar 100 (19.8%) is the largest. Other banknotes constitute 17.6% of the total quantity of banknotes in circulation. The coin in denomination of Denar 1 (39.5%) constitutes the most of the total coins in circulation.

In the course of 2016, efforts were made to improve the quality of currency in circulation, especially of the money in lower denominations, by increasing the amount of the coins in circulation in denominations of Denar 10 and Denar 50 and gradually withdrawing from circulation of banknotes in the same denominations, which circulate in parallel with coins of these denominations. This approach is due to the fact that coins have a longer life, i.e. they are less damaged. Unlike them, banknotes, especially those in the lower denominations and with greater frequency of use, have a shorter life and their damaging is significantly faster.

It should be emphasized that the NBRM, toward the end of the year, i.e. from 15 December 2016, put into circulation new banknotes in denominations of Denar 200 and Denar 2000. The introduction of the new denominations in circulation will contribute to increasing the supply of denominations that are available when making cash transactions, and as a secondary effect, it is expected that the demand for certain denominations will be balanced and reduction and amortization of the hit on the demand for certain denominations through their gradual replacement with the new banknotes.

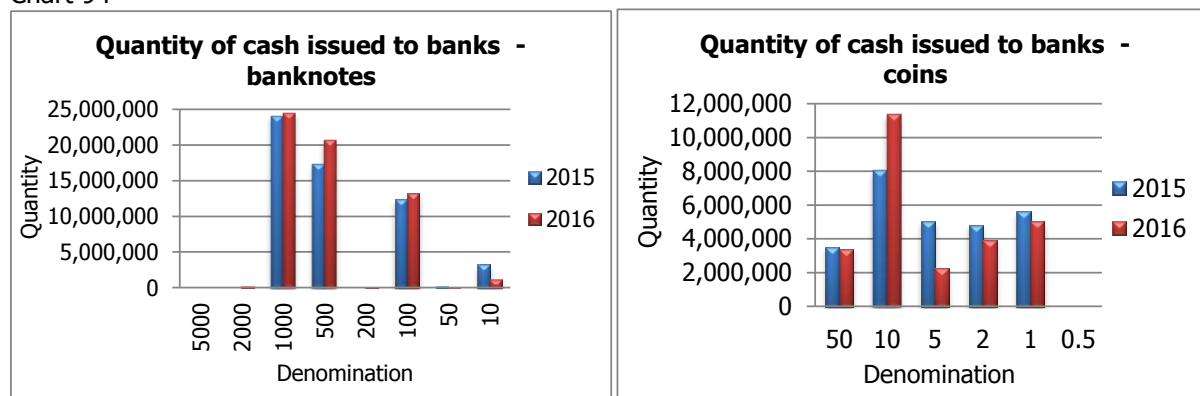
8.2. Supplying banks and cash centers with banknotes and coins

During 2016, the NBRM issued cash to banks and cash centers⁹⁴ in the amount of Denar 36,872 million (increase of 7.1% compared to 2015). At the same time, they received cash from banks and cash centers in the amount of Denar 34,394 million (increase of 12.6% compared to 2015). 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 38.7% in 2016 (i.e. 41.1% in 2015) and the

⁹⁴ Pursuant to the by-laws adopted during 2015, the NBRM enabled registration and inclusion of cash centers (companies that fulfill the conditions for supplying with cash) in the operating system of the logistic cash operations. The purpose of this amendment to the by-laws is an opportunity to infiltrate the market influences in this segment of the operation and create sound competitive conditions, which will ultimately ensure higher quality of the cash services and reduction of the commission charged by the banks, by maintaining a standard quality level of the money. During 2016, two cash centers were registered, one of which is actively included in the cash supply process, while the other is in the inclusion phase.

most common coin is the denomination of Denar 10 with a share of 37.8% in 2016 (versus 26.7% in 2015).

Chart 94



Source: NBRM.

8.3. Processing and destroying banknotes and coins

During 2016, the quality control process of banknotes in circulation covered all received banknotes. Of the total 61.5 million banknotes processed, 12.1 million banknotes (15.8 million in 2015) were destroyed due to unfitness or damage. Most destroyed banknotes were denominated in Denar 100 and Denar 10 (65.2%). In 2016, 6.7 million pieces of coins in denominations of 1, 2, 5, 10 and 50 Denars were processed, 211 thousand pieces of which being withdrawn as unfit for circulation.

8.4. Expertise of suspicious / counterfeit money

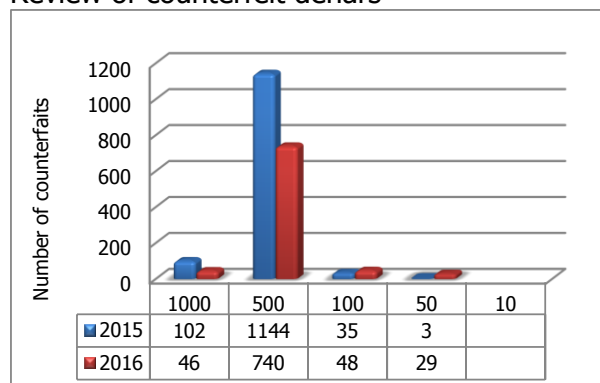
In 2016, the NBRM, as a single institution authorized to determine the authenticity of banknotes and coins denominated in denars and in foreign currencies, successfully performs expert analysis of counterfeit money. In order to strengthen the capacity for accurate detection of suspicious and counterfeit money with officers engaged in daily cash handling, in 2016, the NBRM continued with the specialized training of staff in banks and cash centers. 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 2016, of the total 927 suspicious Denar banknotes received, the expert analysis carried out found that 64 banknotes were genuine, while the remaining 863 were counterfeit banknotes. The number of identified counterfeit banknotes detected during 2016 decreased by 33% compared to 2015. Of the total number of detected counterfeit Denar banknotes in 2016, the most common is the denomination of Denar 500 (740 pieces), or 85.7% of the total number of counterfeits⁹⁵, followed by the denomination of Denar 100 (48 pieces), or 5.6% of the total number of counterfeits and the denomination of Denar 1000 (46 pieces), or 5.3% of the total number of counterfeits. The total value of Denar counterfeits in 2016 amounted to Denar 422,250.00, which is a negligible share compared with the total value of the currency in circulation.

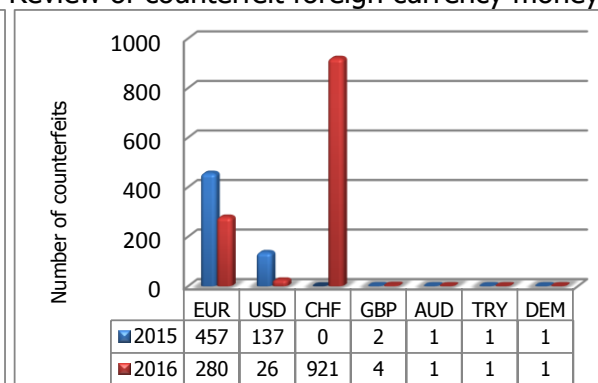
⁹⁵ The banknote in denomination of Denar 500 has the largest share in the number of counterfeit banknotes, which is exclusively due to the fact that banknotes that were organizationally put into circulation during 2015 are still delivered.

Chart 95

Review of counterfeit denars



Review of counterfeit foreign currency money



Source: NBRM.

In terms of committed expert analyses of received suspicious banknotes and coins denominated in foreign currency in 2016, of total 1246 analyses, 1234 counterfeit and 12 original money were identified. Of the total number of counterfeit banknotes, the Euro banknotes (200 pieces) and US dollars (26 pieces) prevailed.

Unlike previous years, in 2016, larger quantities of counterfeit coins in foreign currency were detected. It is a question of quantity of 1001 coin, of which even 921 piece are counterfeit coins in denomination of 5 Swiss francs and 80 pieces are counterfeit coins in euros.

The general conclusion is that counterfeit banknotes and coins are of relatively poor quality, allowing simple and easy identification and determination of their properties⁹⁶.

8.5. Issuance of collector coins

In the course of 2016, the NBRM enriched the existing collection of collector coins ("Icons of Saints", "Zodiac Signs" and "Angel's Day") with additional six new issues, as follows: "St. Nicholas the Wonderworker" and "St. Matrona of Moscow" from the "Icons of Saints" series; "Vladimir Mother of God" from the new "Mother of God Icons" series; "Year of the Rooster - Rooster with an Angel" and "Year of the Rooster - Rooster Wind Spinner" from the new "Lunar Calendar" series and "Sancta Teresia de Calcutta" as a special issue.

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 in the country, as well.

Due to the increased interest in these coins and enabling their greater availability for procurement, in the course of 2016, the NBRM concluded a contract with the National Institution "Memorial House of Mother Teresa", Skopje for commission of collector coins. In 2016, 402 pieces of collector coins were sold.

⁹⁶ The expert analysis of the technique of making counterfeit banknotes found that they are mostly made on a plain paper without enough security features, by using computer technique (scan and print) or color copy machine.

IX. Statistics

The official statistical data which are prepared by the NBRM are intended to inform the public of the financial and macroeconomic environment and trends in the economy, as well as its relations with the rest of the world.

During 2016, the NBRM continues to move in the projected path of gradually achieving the strategic goals in the area of statistics, such as: (1) continuous adherence to international and European statistical standards, for the purpose of further harmonization of the existing statistics and the introduction of new statistical surveys; and (2) enrichment of the scope and depth (detail) of publicly available statistical data, taking into account the reporting burden, as well as a faster and easier access of external users to the data.

For this purpose, the NBRM continued to improve the quality and detail of the external, monetary and financial accounts statistics, with further steps towards their harmonization with the latest statistical standards. Consistent adherence to the data quality principle in the process of statistical production, in accordance with the European Code of Good Practices, as well as the progress of the national statistical system in the period 2010–2016 were thoroughly documented and analyzed within the Peer Review evaluation process for the Republic of Macedonia, conducted by Eurostat. Alongside, regular publication of statistical press releases was launched, as part of NBRM's efforts to promote the communication with the users of statistical data.

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

- in the area of external statistics, efforts were made to improve the coverage and quality of data, but also to enrich the available data. Thus, in the balance of payments and the international investment position, the coverage of data was improved in the items: direct investments (through the inclusion of detailed data on trade credits) and portfolio investments (through inclusion of comprehensive data on resident investors' investments in securities issued on foreign financial markets). Also, in order to improve the methodology for estimating private transfers in the balance of payments, activities were undertaken to conduct a new survey on private transfers. Regarding the enrichment of the available data, the NBRM started with: (1) regular semi-annual production of the report on investments in securities within the official foreign exchange reserves, by countries (SEFER), and its dissemination to the IMF; and (2) regular semi-annual production of data on portfolio investment, assets i.e. the Coordinated Portfolio Investment Survey (CPIS), and its dissemination to the IMF. Starting regular CPIS reporting provided for fulfillment of the criteria for membership in the IMF SDDS plus standard for data dissemination, thus bringing the Republic of Macedonia closer to meeting all of the necessary requirements for joining this standard;
- the implementation of the medium-term project on developing a single statistical data warehouse for external statistics continued, aiming to provide for optimal management of statistical databases in the NBRM, as well as prospective dissemination of more detailed data to Eurostat and other international organizations, but also to other external users;
- after the introduction of the statistics on residents' investments in securities abroad, in 2016, further progress was made by enriching the available data set with the issued securities on the domestic market (in accordance with the signed agreement for data exchange with the Central Securities Depository);

- in the area of monetary statistics, further harmonization with the latest international standards has been made, i.e. a new time series of the monetary data set has been prepared according to the latest IMF Monetary Statistics Manual from 2016, with an improved sectoral and currency breakdown by financial instruments and a new methodology for the broad money aggregate, to be published during 2017. At the same time, within the long-term project on establishing an integrated reporting system for the needs of statistics and supervision, several activities were undertaken to define an optimal strategy for creating a new system and familiarization of all participants in this process, including the banks, with this project;
- in the area of financial accounts statistics, efforts were made to improve the quality of the data on the initially prepared version of the financial account, as well as to determine the most appropriate data sources and to develop a methodology. Within the activities for establishing new data sources for the needs of the financial account, the data set was enriched with more detailed data on the financial assets and liabilities of the non-financial companies. Also, in cooperation with the MF, a new reporting form for budget users was introduced in order to obtain more detailed data on the government sector;
- within the strategic commitment for improving the quality of communication with reporters, a number of activities were undertaken. Alongside regular training organized for the reporters, specific training for budget users was organized in cooperation with the Ministry of Finance (MF), on the new quarterly reports on the stock and the flows of their financial assets and liabilities. Also, trainings for companies were organized, in cooperation with the State Statistical Office (SSO) and the chambers of commerce, for their members, in order to raise the awareness of statistics as a public good and the importance of their contribution to quality statistical data. Also, in 2016, a survey on the possibility of introducing electronic reporting on credit operations with non-residents was conducted;
- in terms of communication with users, a significant step forward was the introduction of regular press releases for the basic statistical data sets, for which the NBRM is responsible for, published simultaneously with the data dissemination. Also, regular dissemination of the time series on direct investments - flows (inward and outward), by country and by activity, has started. In November 2016, within NBRM's financial education activities, the Second Workshop for journalists was organized, presenting, among other subjects, NBRM's statistical function, as well as providing guidance on how to read and analyze the available statistical data;
- in terms of the efforts for appropriate implementation of the international statistical classifications, the NBRM has adjusted the relevant by-laws with the new National Classification of Institutional Sectors, thereby completing the process of implementing a unified sectorization with the SSO;
- toward the end of the year, the activities related to the project on building an analytical tool for internal analysis and a statistical web portal started, which is to improve data accessibility and will facilitate the access of external users to statistical data.

To perform its statistical function, the NBRM cooperates with other authorized bodies for statistical surveys. The cooperation with the SSO and the MF was additionally strengthened through the establishment of the interinstitutional working groups on financial accounts statistics and the excessive deficit procedure⁹⁷. The solid cooperation between the NBRM, the SSO and the MF was strengthened through further improvement of the mutual

⁹⁷ The Excessive Deficit Procedure (EDP) is a separate data set that the EU Member States and candidate countries for membership should submit to Eurostat, referring to the debt and deficit of the government sector, according to set standards for its calculation.

coordination in the part of the statistical function and increased volume of data exchange, which was supported by signing a new Annex to the Memorandum of Understanding and Cooperation in the area of macroeconomic and financial statistics.

X. Supervisory and regulatory function of the NBRM

Within its supervisory function, the NBRM conducts permanent indirect monitoring and direct, full-scope or targeted controls of banks and savings houses operations, whereby their soundness, stability, risk of the operations and compliance with the regulations is assessed. While conducting supervisory controls, the concept of risk-based supervision is applied, with ultimate objective to define the risk profile of each bank and the required capital level for covering the risks to which it is exposed. Also, the NBRM is responsible for controlling the financial institutions which provide fast money transfer services and currency exchange operations.

In October 2016, amendments to the Banking Law were adopted, which refer to the introduction of capital buffers, strengthening capital requirements, introduction of the leverage rate, strengthening banks' corporate governance and strengthening corrective measures that can be undertaken by the NBRM. In order to apply these amendments properly, the NBRM Council adopted a few by-laws, thereby allowing further compliance of the domestic regulation with the reforms of the international capital standard (so-called Basel 3) and with the European regulation package for operation and prudential requirements for banks.

Improving the quality and efficiency of the supervisory function is a strategic objective of the NBRM. Hence, during 2016, two missions of technical assistance by the World Bank Financial Sector Advisory Center were realized, whose objective was to assess the efficiency of the banking supervision conducted through analysis of current supervisory models and the efficiency of the licensing activities. These missions led to defining several recommendations for improving and strengthening off-site and on-site supervision and licensing.

In order to achieve higher effectiveness and efficiency while assessing credit risk in commercial banks, in 2016, an applicative software for performing on-site controls was developed. The introduction of the second module of the software, which will generate indicators of the assessment of the exposure level to individual risks of commercial banks, is underway.

During 2016, a tool for self-assessment of risks present in the information security of commercial banks was developed, which was submitted to the commercial banks. Through this activity, results by individual banks were reviewed, whereby action plans and strategies for the banks were developed.

10.1. Performing supervision and oversight

During 2016, pursuant to the annual control plan, the NBRM performed regular supervisory controls (on-site risk controls) in 13 banks and 1 savings house and inspection controls (on-site controls of compliance with the regulations) in all 15 banks and 3 savings houses. In the reporting period, a thematic control was also conducted in all three savings houses in terms of the IT-systems setup and compliance with the regulation on information systems security. In the reporting period, regular control activities were conducted over three fast money transfer service providers, 35 subagents, as well as over 33 authorized exchange offices.

10.2. On-site risk controls

Banks in the Republic of Macedonia are usually performing traditional banking activities and the credit risk mostly defines their risk profile⁹⁸. Hence, this risk, especially its management quality, as well as the exposure level, are most often subject to on-site control assessments. Also, in individual banks, there was an assessment of the adequacy of their money laundering prevention systems, the management of the legal risk, the management of the operational risk and assessment of the banks' corporate governance. In the reporting period, the information security adequacy was assessed in five commercial banks.

The controls have shown that banks adequately manage the risks they are exposed to and they are largely responsive to the corrective measures undertaken by the NBRM.

In order to improve the existing rules and practices for credit risk management in banks, several recommendations are given by the NBRM which mainly refer to: strengthening the customers' credit analyses, strengthening the monitoring of the proper use of the extended loans to legal entities and the housing loans to households, improving the systems for identifying and monitoring the connected entities and the management of the concentration risk, reducing the exposure in individual costumers within the legally determined exposure limits, increasing the impact of the organizational part for risk management in the credit process, improving the procedures when extending loans for refinancing with the households segment, as well as improving the method for determining the total indebtedness of the households at the system level. Furthermore, recommendations were given to improve the credit exposure classification process by increasing the impact of the creditworthiness and credit history of the client, improving the early warning criteria when extended loans are monitored, improving the way of identifying and managing the restructured loans, strengthening of the data recording and monitoring of the loans extended with the exception, as well as recommendations for improving the operations of the internal audit function and strengthening of the internal controls in the households segment.

In terms of measures and actions performed by banks for preventing money laundering and financing of terrorism, the recommendations refer to the following: improvement of internal policies and procedures, strengthening of the measures for identifying and verifying the identity of the legal entities' beneficial owner, improvement of the customer due diligence and transactions for more appropriate determination of the customers' risk level, supplementing reports that are submitted to the managing bodies, strengthening the indicators for identifying potential suspicious transactions, balancing the size of measures and actions undertaken with the customers' risk level and extending of the scope of controls which are conducted by the Internal Audit Department in banks.

In order to improve the management of legal and reputation risk, recommendations are given regarding the improvement of the operation of the organizational part in the banks that deals with compliance of the bank with the regulations in terms of strengthening the process of monitoring changes which would be caused by the legal amendments in individual segments of the operation, as well as greater involvement of this organizational part when monitoring customers' complaints and in the process of preparation of loan contracts. In the controls where subject was an assessment of the banks' involvement in legal actions where it was sued, an adequate reserve for potential losses from possible

⁹⁸ The analysis of risks in the banking sector is covered in the Report on the risks in the banking sector in 2016.

litigations was determined. In banks where corporate governance was assessed, there was a determination of existence of an adequate organizational structure and risk management processes and internal control mechanisms in place, which were constantly strengthened.

In order to increase information security, recommendations are given in terms of strengthening internal controls and limiting access to databases, further improving system reliability, improving the application solution testing process before their release into production, completing the audit trail system, replacing or upgrading the outdated system software, especially in the part of electronic banking and implementation of IT-audit by the internal audit. In banks where subject was determining the undertaken activities in relation to previously imposed measures in the part of the IT risk, it was assessed that there is a responsiveness in most of the controlled institutions.

Also, in order to improve the established rules and practices for the operational risk management, recommendations are given pertaining to increase in the awareness of this risk, improvement of the internal policies and procedures and identification processes, reporting and risk assessment.

10.3. On-site controls of compliance with regulations

On-site controls of compliance with regulations, or so-called inspection controls were mainly related to assessment of banks and savings houses operations pursuant to the Law on the National Bank of the Republic of Macedonia, the Law on Foreign Exchange Operations, the Law on Consumer Protection in Consumer Loan Agreements, the Law on Providing Fast Money Transfer Services and the Law on Payment Operations. All controlled subjects operated in accordance with the regulations. Certain weaknesses in some banks are determined in relation to the manner of calculation and allocation of compulsory reserve requirement.

On-site controls of non-banking financial institutions i.e. authorized 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 Providing Fast Money Transfer Services and the Law on Prevention of Money Laundering and Terrorist Financing. Inspections on the authorized exchange offices showed difference of the documents of the turnover with the cash in the cash desk. As for the operations of providers of fast money transfer, part of them are recommended to expand the customer due diligence, in the light of the provisions from the Law on Prevention of Money Laundering and Terrorist Financing.

10.4. Licensing of banks and savings houses in 2016

Within the regular activities in the area of licensing of banks and savings houses in accordance with the Banking Law, during 2016 the NBRM conducted 87 procedures for issuing approvals. Procedures conducted during the year are shown in the table below.

Table 4
Licensing procedures conducted in 2016

| Type of license/approval (banks) | issued | rejected | halted |
|---|---------------|-----------------|---------------|
| Approval for acquiring shares in a bank | 2 | | 1 |
| Approval for start of conduct of financial activity | 3 | / | / |
| Approval for changing a name | 2 | / | / |
| Approval for changing a head office | 2 | / | 1 |
| Approval for statute amendment | 22 | / | 1 |
| Approval for appointment of a Supervisory Board member | 35 | / | 2 |
| Approval for appointment of a Management Board member | 17 | / | 1 |
| Type of license/approval (savings hoses) | issued | rejected | halted |
| Approval for appointment of a manager | 1 | / | / |
| Approval for agreement amendment/ statement on foundation | 2 | / | / |
| Approval for changing a head office | 1 | / | / |
| Total | 87 | / | 6 |

XI. Internal audit

In 2016, the Internal Audit Department (DVR) fully implemented its work program. Through a systematic assessment 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 2016, 22 regular audits and 1 extraordinary audit were carried out for 33 working processes, giving 43 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 2016, 88% of the recommendations were implemented.

In addition to the regular, the internal audit had additional activities through application of the Quality Assurance and Improvement Program. From this aspect, in the course of 2016, a revision and updating of the list of working processes that may be subject to audit was made, in accordance with the redefined working processes in the NBRM, acting according to the findings of the Report on Periodic Self-Assessment of the Operation of the DVR in 2015, conducting the Questionnaire on the Satisfaction of the Organizational Units where audit was carried out, as well as other activities of educational character.

The operation of the Internal Audit Department was closely supervised by the Audit Committee, which held four meetings during 2016.

XII. Improving the institutional capacity of the NBRM

12.1. Strategic planning

In May 2016, the new Strategic Plan of the National Bank of the Republic of Macedonia for the period 2017 – 2019 was adopted. The Strategic Plan is laid down on the basis of the mission, the vision and the organizational values of the NBRM, taking into account the macroeconomic environment and key challenges, and contains the main strategic goals for the next three years.

Based on the adopted strategic goals, in December 2016, the Plan of Activities of the National Bank of the Republic of Macedonia for 2017 was adopted, which unites the planned program activities of the organizational units in the NBRM and simultaneously enables coordination of the activities, better assessment of the planned and expected results, as well as adequate allocation of available resources for more efficient realization of the strategic goals.

12.2. Managing operational risks

Starting from the Operational Risk Management Policy of the National Bank of the Republic of Macedonia, the NBRM establishes a system of coordinated, comprehensive and systematic operational risk management in order to identify events that may affect the functioning of the National Bank, maintenance of the exposure to risks within acceptable limits and effective accomplishment of the objectives.

Given the established framework for operational risk management, and based on the functional and systemic connection of the activities, in the course of 2016, a revision of the register of the business processes and projects was made. Then, using some extreme scenarios, critical working processes and projects whose functioning has great importance to the activities, financial result and reputation of the NBRM were selected, work procedures were updated and risk sources were identified. After the identification of the main operational risks in the activities, an assessment of the risk level based on the probability and possible consequences amid their occurrence was made. Considering the fact that the operational risk assessment was made in the course of 2016, many of the strategies and measures for risk management are included within the program activities for 2017.

12.3. Ensuring business continuity

In accordance with the Business Continuity Policy, the National Bank conducts a structured and regular process of planning, updating and testing of measures necessary to ensure continuity of business processes in times of crisis.

In the course of 2016, an update of the Business Continuity Plans (BCP) was performed for 143 business processes. Furthermore, in order to confirm the feasibility of the business continuity plans of critical business processes, during 2016, activities were conducted for preparation of necessary documentation, staff training and testing the business continuity plans of twenty 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 annual Report on the implementation of the Business Continuity Policy of the National Bank of the Republic of Macedonia for 2016 and also adopted conclusions according to which the Business Continuity Plan of the National Bank of the Republic of Macedonia was updated.

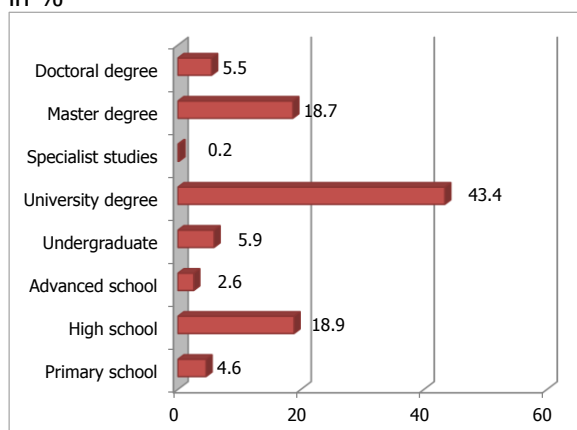
12.4. Human resources management

The NBRM constantly takes care of creating highly educated staff that will adequately meet the challenges of successfully achieving the goals of the operation. This is done through a continuous training process of its employees, in order to increase the expert knowledge and strengthen their skills, as well as through further upgrading of the human resources management system.

In 2016, the average number of NBRM employees is 428 full-time and 8 fixed-term employees. In 2016, the 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 44.1 year in 2016, despite the median age of 44.6 years in 2015. In 2016, the National Bank began to present the qualification structure according to the National Qualifications Framework of RM (NQF), which is in line with the European Qualifications Framework (EQF). According to Chart 1, the highest percentage was registered in university education, with 73.7% (of which the highest percentage was registered in the four-years' studies and Master's studies with 43.4%, i.e. 18.7%, respectively).

Chart 96
Qualification structure of employees in the NBRM for 2016 in %



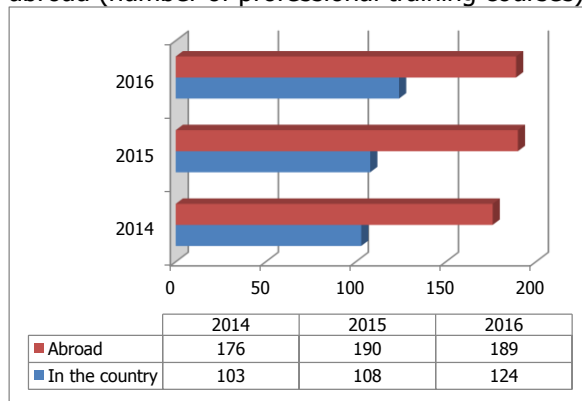
Source: NBRM; as of 31 December 2016.

Professional development, employee evaluation and remuneration are processes that affect career development of the NBRM employees. Last year, departments were given a professional advice to improve the annual employee evaluation process in order to ensure impartial application and provide feedback to employees about their performance. This system is used as a tool for greater engagement, productivity and utilization of knowledge and creative potential in the institution. As every year, these processes require intensive development of the professional and soft skills of the employees and managers in the institution.

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. During 2016, 313 professional training courses were organized in the country and abroad.

Compared to the previous year, the number of professional training courses in the country increased by 14.8%, while the number of professional training courses abroad was almost unchanged. The number of employees who attended professional training course increased by 8.2%, compared to the previous year. 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 cooperation programs.

Chart 97
Professional training held in the country and abroad (number of professional training courses)



Source: NBRM; as of 31 December 2016.

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, encouraging 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.

12.5. Research activity

In 2016, the NBRM's research activities were directed towards areas important for support of the decision-making process and timely consideration of future challenges, in order to achieve the basic goals of the operation and further strengthening institutional capacity. During 2016, several research projects were carried out that were related to the impact of GDP components on unemployment, income and price elasticity of exports and imports, the connection of the economic and financial cycle, models and approaches for short-term inflation forecast, the corporate sector deleveraging, the role of banks with foreign capital, the communication in the area of the monetary policy, firms' response to shocks, assessing the optimal level of foreign reserves, studying the possibilities of dynamic provisions with bank placements, as well as two papers in the field of numismatics. In addition, during the year, seven research projects were developed, whose realization is in progress, mainly in the field of: the interactions between the main macroeconomic sectors, financial stability and the banking system. The research program for the period 2017 - 2018, adopted in mid-2016, pointed to further activities within the basic research areas, and was supplemented with several new projects.

On 7 and 8 April 2016, traditionally, on the occasion of celebrating the anniversary of the monetary independence of the Republic of Macedonia, the Fifth Research Conference was organized: "Economic and Financial Cycle Spillovers: Reconsidering Domestic and Cross Border Channels and Policy Responses". The Conference was organized in six sessions, including a panel discussion about the policies of senior officials of central banks, academic and research institutions. 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 an annual award for best paper written by a young researcher in the field of macroeconomics and banks and banking systems.

The Researchers' Club, which is open to researchers outside the NBRM, continued operating as a part of the activities to support the development of research and analytical activity. During 2016, four quarterly sessions of the Club were held, at which several research papers were presented and reviewed that addressed the following research topics: labor market and youth unemployment, anticipation of economic cycles, determinants of banks' non-performing loans by sectors, corporate sector capital, foreign direct investments and economic growth, the Macedonian Policy Analysis Model (MAKPAM) of the NBRM, income and price elasticity of exports and imports and communication in the area of monetary policy. During the year, the NBRM organized separate lectures by distinguished international experts on topical issues in the central-banking operations. In the course of 2016, in order to exchange experiences in the area of research activity, the NBRM realized technical cooperation with the Central Bank of Morocco, especially in the area of transferring experiences regarding the NBRM MAKPAM construction. In November 2016, the NBRM hosted a seminar on advanced econometric techniques held by the Bank of England, attended by representatives from the central banks of the regional countries. Employees of the NBRM participated in many conferences and international events with their papers and presentations.

12.6. IT development

In the course of 2016, in the area of information technology (IT) more than 6,800 working cases were processed. Of these, the majority, or 61%, were requests for IT services, 28% relate to resolving incidents, while 11% account for the regular maintenance of information infrastructure and its improvement. The IT Department maintains more than 150 servers, 400 workstations, 190 applications (largely software solutions developed within the NBRM, and a small part procured by external suppliers), as well as a large range of other IT assets used by the employees of the Bank every day.

During 2016, several projects were carried out: a new module has been put in service in MIPS for payments in euros, there was an introduction of new virtualization servers and a new system for backup copy and data storage, a new system for central upgrading of the personal computer software, code control software when developing applications, service for control of the user passwords from external entities (banks) that are connected with the NBRM, etc. The new servers significantly increased the Bank's capacity, the new system for backup copy and data storage increased the information return speed, and the password control service enabled users easier management of their user accounts in the NBRM. Several projects for regular maintenance were completed, such as: improvement of the connection to the world bank network SWIFT, replacement of the vaccine software, increase in the security of IT systems by introducing new equipment, and others.

In addition, it is noteworthy that in the course of 2016, the first Service Level Agreement was signed between the IT Department and the Payment Systems Department in the NBRM, thereby determining the level at which the services from the IT Department should be available. This improves the management of information technology in the NBRM through increased predictability, whereby the involved parties know the expected level at which the IT services should be available, including also the duration of the maximum downtime of IT equipment for a certain department. Also, the configuration management database was largely completed, thereby achieving easier management of IT equipment.

In the period from 31 May to 3 June 2016, an IT-forum was organized: "IT-infrastructure in central banks". The IT-forum was attended by 30 participants from 15 countries and 19 presentations were presented. The IT-forum provided an excellent opportunity to learn more about managing IT infrastructure in central banks, through discussions, exchange of experiences and presentations on how central banks manage user access, application development, mobile operation, disaster recovery locations and business continuity.

XIII. Other activities

13.1. International cooperation

During 2016, 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 2016, the cooperation with the IMF in the area of statistics continued for the purpose of improvement of the statistics within the competence of the NBRM. Regarding the cooperation with the World Bank, two technical assistance missions were carried out in the area of the banking supervision, which was carried out by FinSAC.

On 11 and 12 February 2016, the NBRM hosted the fifteenth meeting of the Bank for International Settlements for Monetary Policy in Central and Eastern Europe, attended by senior representatives of twenty European central banks, including the NBRM. The main discussion topics were the macroeconomic prospects globally, as well as in the countries of Central and Eastern Europe, the effects of the implementation of monetary policies, as well as the long-term growth models. At the same time, during 2016, three international conferences were organized: the Fifth Research Conference, the Ninth Conference on Payment Systems and an IT-forum.

Within the bilateral cooperation, the NBRM continued the long-term technical cooperation established with De Nederlandsche Bank, Deutsche Bundesbank, as well as other central banks of the EU and the countries in the region. In addition, the basis for long-term technical cooperation with the National Bank of Belgium was established, within which several projects were realized. The cooperation with the European Central Bank (ECB) was carried out within the established regional approach for cooperation between the ECB and the central banks of the Western Balkans countries.

Within the process of accession of the Republic of Macedonia to the European Union, during 2016, the NBRM actively participated 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).

Regarding the pre-accession assistance from the EU (IPA), two projects were completed this year. In the first project, "Further Harmonization with EU Acquis in the Field of Movement of Capital and Payments and Financial Services - Securities Markets and Investment Services", the NBRM was included in the first component that refers to compliance with the Payment Services Directive. In the second, the twinning-project "Further Strengthening of Institutional and Organizational Capacities in the Process of European Integration", which aimed to determine the previous level of compliance of the national with the European legislation, the NBRM was included in the chapters "Free Movement of Capital and Payments" and "Economic and Monetary Policy". Toward the end of 2016, the project "Building an Internal Analytical Tool and a Statistical Web Portal for External Users" started to be implemented, the realization of which is expected to improve the availability of statistical data whose preparation is within the competence of the NBRM,

by providing more efficient and easier access to available data for internal and external users.

Financial support was provided within the IPA Multi-beneficiary Statistical Co-operation Programme for participation of representatives from the NBRM in the regular meetings and committees of Eurostat in the field of balance of payments statistics.

Within the EU-funded TAIEX instrument, during the year, seven projects were successfully completed in various areas of central-banking operations.

13.2. Public relations

In 2016, the NBRM made efforts for transparent and timely informing of the public on various aspects of its operations. 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, the information on the application of the monetary policy instruments, the information on new data and publications, in both Macedonian and English language. On the website, the contents of the NBRM's operations were regularly updated.

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 electronic addresses for questions and answers in the field of statistics and supervision.

The annual, quarterly, monthly and other reports on the operations are published in an electronic form on the website of the NBRM, in Macedonian and in English. Additionally, the Annual Operations Report is published also in printed form, in Macedonian and in English. Starting from 2015, annual and quarterly reports on the operations are being translated into Albanian, and translated reports are published on the website of the NBRM.

To monitor the new trends in the manner of communication of the central banks with the public, and in order to approach the public and to improve the citizens' informedness about the institution activity domain, its role and the importance it has in the domestic economy, from 2016, the NBRM is present also on the social networks, with an official site / profile of the institution on the social networks: Facebook, Twitter and YouTube. In addition to the regular press releases, the regular data and publications that are published on the website of the NBRM, the social networks were used to start an activity for promoting materials that have an educational role for the population, not only in familiarizing with the work of the NBRM, but also with the current situation in the country, which is connected to the objectives and tasks of the institution.

13.3. Financial education

In the area of financial education in 2016, several activities were conducted aimed at familiarization of the population in the Republic of Macedonia with finance and economics.

The financial education of the population, as one of the important functions of the modern central banks, had a central place in celebrating 70 years of central-banking

activities in the Republic of Macedonia. In this context, the NBRM conducted an extensive Financial Education Program for primary school students. The Program included 4,331 student, accompanied by 358 teachers from 87 primary schools from all over the country. The first part of the Program included one-day visits of primary school students to the National Bank Museum and Mint, where students had the opportunity to be acquainted with the primary functions of the NBRM through interactive presentations. For part of the primary schools from the most remote and poorly populated areas, the visit was provided and organized by the NBRM. The second part of the Program included an organized caravan, within which 10 primary schools from 10 municipalities were visited.

As part of the financial education program, within the celebration of the jubilee, the NBRM made and released two films: National Bank – 70 years service to the Macedonian society: a short informative documentary dedicated to the history of the NBRM, and Meet the Central Bank: a short informative and educational film, which in a simple and easily understandable language presents the most important aspects of the central bank's objectives and functions.

On 10 February 2016, the Memorandum of Cooperation in the field of social and financial education was signed between the NBRM, one private school and an international organization that provides manuals for this purpose. The purpose of introducing financial education in primary and secondary education is to strengthen financial skills and potential in children from an early age. The pilot project, which started to be applied first with the students from 1st grade from this school, ended successfully and after the evaluation, the project continued with the students from 2nd to 9th grade. In the new school year 2016/2017, financial education continued in 2nd grade. In the future, the results of the Project are planned to be presented to the Bureau for Education Development and other schools, in order to increase the impact and interest to introduce this program in other schools in the country.

For the fourth consecutive year, the "Global Money Week" was marked from 14 to 20 March 2016, under the motto "Take Part, Save Smartly!", within the global initiative organized by the Child and Youth Finance International from Amsterdam, Netherlands, and organized by the Coordinating Body of the Regulatory Authorities for Financial Education in Macedonia, led by the NBRM. In this light, there were organized visits from the primary and secondary schools to the NBRM.

On 7 October 2016, the NBRM, in cooperation with the European Fund for Southeast Europe, developed three educational booklets: "From Denars to dreams!", "What should we know before taking a loan" and "Do you manage your money or is it your money that manages you?". The booklets are small practical guides, available in Macedonian and Albanian language that provide information related to savings, loans and money management in easily comprehensible and simple way. They were distributed to all commercial banks across the country. The idea of publishing these educational materials is to help citizens make informed financial decisions.

On 20 October 2016, the Memorandum of Cooperation in the field of financial education and inclusion was signed between the NBRM and the Alliance of Microfinance Organizations. The cooperation will include policy-making, research and analyses, joint activities to raise public awareness and promotion of financial education and inclusion, organizing educational activities and exchange of relevant expertise.

On 26 October 2016, the Memorandum of Cooperation in the field of promoting financial education was signed between the NBRM and the Economic Chamber of Macedonia. The signing of this Memorandum represents another step forward in the promotion of the long-time successful institutional cooperation. The role of the Chamber, through the companies within the Chamber, is to inform and encourage the business community to support the implementation of projects in the field of financial education, pursuant to their possibilities and interests. The NBRM will support the financial education projects of the Chamber (through their Education Center and the Business Center for Training and Education) for implementing educational activities, such as: lectures, seminars, workshops, round tables, conferences, internal trainings and other events.

On the occasion of the World Savings Day, 31 October, the NBRM together with the Ministry of Finance and the Insurance Supervision Agency, handed out the awards for the most successful art and literary works that entered into competition for the primary and secondary schools, on the following topics: "I can save, too" and "What does insurance of home and family mean to me". At the competition, 402 works arrived, and the best 15 received diplomas and money prizes. Also, 44 pupils and 7 schools were given certificates for the creative and innovative ideas of children associated with savings and insurance.

On 15 November 2016, the Second Workshop for Journalists was held on the premises of the NBRM. There was a greater interest by the larger media, and some media participated for the first time. The lectures were in areas of the interest of journalists, and mainly related to the use and interpretation of monetary and financial indicators, external statistics, etc.

13.4. Activities of the Museum, Library and Archive of the NBRM

Within the museum activity of the NBRM, during the past year, the Museum of the NBRM, in addition to the current working tasks, carried out several activities related to education of children and youth through organized visits to the existing museum exhibition, as well as preparation and publication of a children education brochure. Also, the Museum was actively involved in marking the 70th anniversary of the institutionalized central banking in the Republic of Macedonia by participating in the preparation of informative and educational films and a temporary museum exhibition. At the same time, the research work, which includes studying and interpreting different aspects of the numismatics and monetary history of Macedonia, continued, and at the same time representatives of the Museum attended international events in the field of museum activity.

Regarding the activities of the Library and Archive of the NBRM, in parallel with the current tasks, the service of domestic and international interlibrary borrowing of printed publications was introduced in the Library of the NBRM for the first time. In addition, within the celebration of the 70th anniversary of central banking, two bibliographic publications were prepared and published: of central banking in the Republic of Macedonia in the 70-year period and of research thought in the NBRM in the period from the monetary independence. In the scope of the archive operation, the selection and research of archive material continued in the State Archive of the Republic of Macedonia. Last year, the Agreement for cooperation with the National Bank of Serbia was signed, which enabled continuation of the research activities for selecting archive material relevant to the central-banking operations in the Republic of Macedonia, located in the National Bank of Serbia.