

National Bank of the Republic of North Macedonia



Annual Report for 2018

Skopje, April 2019

Contents

| | |
|--|----|
| Governor's foreword..... | 4 |
| I. Monetary Policy in 2018..... | 9 |
| 1.1. Monetary policy objectives..... | 9 |
| 1.2. Monetary policy setup | 10 |
| II. International environment | 14 |
| III. Macroeconomic developments in 2018..... | 17 |
| 3.1. GDP and inflation | 17 |
| 3.2. Labor market | 19 |
| 3.3. Public finance..... | 22 |
| 3.4. Balance of payments, IIP and external debt | 25 |
| 3.5. Monetary and credit aggregates..... | 31 |
| 3.5.1. Monetary aggregates | 31 |
| Box 1. Review of the changes in the structure of the financial system deposits in 2018..... | 34 |
| 3.5.2. Lending activity..... | 35 |
| IV. Macroeconomic environment and monetary policy in 2019 - 2021 | 38 |
| V. Monetary instruments..... | 41 |
| Box 2. Developments on the Foreign Exchange Market and National Bank Interventions | 42 |
| Box 3. Developments on the interbank market for uncollateralized deposits and the secondary market | 46 |
| VI. Foreign Reserves Management..... | 48 |
| 6.1. Developments in the international financial markets in 2018 | 48 |
| 6.2. Basic guidelines for foreign reserves management..... | 51 |
| Box 4. Activities related to improving the institutional capacity for foreign reserves management | 52 |
| 6.3. Foreign reserves investment | 52 |
| 6.3.1. Asset allocation 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 performance | 56 |
| VII. Payment systems and payment services | 59 |
| 7.1. Significant activities | 59 |
| 7.2. Payment systems | 60 |
| 7.3. Payment services | 61 |
| 7.3.1. Credit transfers..... | 62 |
| 7.3.2. Payment cards..... | 62 |
| 7.4. Payment infrastructure | 63 |

| | |
|--|----|
| VIII. Issuing and managing banknotes and coins of the Republic of North 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. Implementation of cash operations standards and criteria in banks and cash centers | 68 |
| 8.6. Issuance of collector coins | 69 |
| IX. Supervision and inspection..... | 70 |
| 9.1. On-site risk-based supervision..... | 70 |
| 9.2. On-site compliance examinations | 72 |
| 9.3. Licensing of banks and savings houses in 2018..... | 72 |
| X. Statistics | 73 |
| XI. Internal audit | 75 |
| XII. Improving the National Bank institutional capacity | 76 |
| 12.1. Strategic planning | 76 |
| 12.2. Human resources management..... | 76 |
| 12.3. Research activity..... | 77 |
| 12.4. Operational risk management..... | 78 |
| 12.5. Business continuity | 78 |
| 12.6. Information security and personal data protection..... | 79 |
| 12.7. IT development | 79 |
| XIII. Other activities | 81 |
| 13.1. International cooperation | 81 |
| 13.2. Public relations | 82 |
| 13.3. Financial education | 83 |
| 13.4. Annual Report on the Activities of the National Bank Museum and the National Bank Library and Archive for 2018 | 84 |

Governor's foreword

Last year, the domestic economy recorded solid macroeconomic performance amid gradual depletion of the effects of pronounced domestic risks that have lasted for several years. While the start of the year was marked by a dose of uncertainty, the gradual stabilization of expectations brought to the fore the sound economic fundamentals, mainly seen through the solid external position and exceptionally high purchase of foreign currency on the foreign exchange market. The favorable developments in the Macedonian economy were coupled with the global economic growth. The global environment however has constantly been surrounded by risks associated with trade tensions, Brexit deal, primary commodity price movements and geopolitical risks. In such macroeconomic setup, in 2017 the National Bank of the Republic of North Macedonia (NBRNM) successfully attained its monetary policy objectives of maintaining price stability by preserving stability of the denar/euro exchange rate, thus ensuring further strengthening of the financial stability in the economy. Thus we as a central bank have done our utmost to recover the real economy.

After the stalling economy in 2017, 2018 witnessed a moderate economic growth of 2.7% that started to accelerate mainly in the second quarter of the year. Economic agents were relatively more restrained at the beginning of the year, but the gradual improvement in the environment in the next three quarters ensured annual growth that slightly exceeded our expectations in the October forecast. The reduced domestic risks along with the macroeconomic fundamentals and the structural transformation in recent last years, amid relatively favorable external environment, helped us return to the pathway to sound economic growth.

In 2018, economy accelerated against a background of conducive domestic environment, improved perceptions of foreign investors and intense export activity. As in the past years, export growth was mainly a reflection of the export activity of production facilities with foreign capital, with positive contribution of some traditional exporters from the metal processing industry for the second year in a row. Besides net exports, the growth was significantly backed by private consumption, fed by wage rise, private transfers and household lending. Favorable labor market developments also brought about higher private consumption. Namely, the multiyear downtrend of unemployment continued, supported by further implementation of active labor market measures, bringing the unemployment rate to a historic low of 19.4% in the last quarter. With small positive contribution of public consumption to GDP, gross investment was the only category that made negative contribution, mainly attributable to the weaker delivery of public infrastructure projects, with moderate positive movements in the last quarter of the year.

Last year, the current account registered low deficit of 0.3% of GDP, which is a narrowing compared to the previous year (1% of GDP). This change was entirely due to the improvement in the trade balance on goods, in line with the intensified export activity, while the net inflows in the secondary income remained relatively stable, allowing full coverage of the negative trade balance. On the financial account, despite moderate net outflows in 2017, there was a high net inflow last year, amid high amount of foreign direct investments, as well as net inflows based on the new government Eurobond issued at international markets at the beginning of the year. The share of the foreign direct investments reached its peak in GDP in the period after the global financial crisis (of 5.8% of GDP), indicating improved perceptions and confidence of investors in the domestic economy.

On the foreign exchange market, in line with the improved domestic environment, improved expectations of both, domestic and foreign entities, as well as intensified export activity, during the year we intervened only with a purchase, thus registering the highest purchase of

foreign currency so far. Consequently, high increase in the foreign reserves was registered, which were maintained at adequate level. In 2018, we continued applying active foreign reserves management even in extremely volatile international market conditions, registering slight positive return on their investment.

Inflation was relatively stable over the last year and equaled 1.5%, on average, which matches the forecast and is similar to the last year performance. By structure, moderate rise was registered in the prices of all three index components (food, energy and core inflation). The movement of the domestic inflation reflects the changes of the world prices on primary products, their indirect effects on other prices, as well as the effect on certain domestic one-time factors (including excises for tobacco products). In conditions of low and stable inflation, solid external position, favorable developments in the banking sector and stabilization in the expectations of economic agents, in 2018 we continued to gradually ease the monetary policy. The policy rate was reduced in three occasions (in March, August and December) by 0.25 percentage points, and at the end of the year, it was reduced to the historical minimum of 2.5%. As a central bank, we contributed to the economic growth, contributing towards easier conditions for financing the economic agents.

In 2018, favorable movements in the banks' deposits and credits continued even more intensively. The total deposits increased by 12.1%, which is significant acceleration compared to 2017 (5%). Positive shifts were registered in the structure of savings from currency and maturity aspect, indicating an improvement of the economic agents' expectations and strengthening of the confidence in the domestic currency. Total loans increased by 7.3%, registering moderate acceleration compared to the previous year (5.4%), with the largest contribution of household borrowings, as well as simultaneous moderate acceleration in corporate lending. The banking system remained stable, given solid liquidity and capitalization. In conditions of collection of non-performing placements in the first quarter of the year, the share of the non-performing placements reduced and equaled 5.2% at the end of the year. The activities taken to improve the banking regulations continued through the gradual adoption of Basel standards and European directives, with the emphasis last year being put on corporate governance of credit institutions, thus contributing further to the stability of the banking system.

Last year, we continued to strengthen the institutional capacity of the National Bank, by taking further activities related to adoption of standards in various spheres of central banking. In the area of statistics, the final phase of accession to the latest Data Dissemination Standard - SDDS plus the IMF was carried out during 2018, through a number of adjustment activities to the requirements of the standard. In January this year, the country joined the SDDM plus, which is one of the eighteen countries in the world that have met the requirements for statistical reporting under this standard. In December last year, in line with the recommendations in the European integration process, strategies for denarization and management and non-performing loan resolution were adopted at the state level, where the National Bank, together with other competent institutions, was actively involved in the reforms implementation process, as a result of which improvement in these areas can be expected in future. At the same time, as a central bank, during the year we were involved in various inter-institutional activities to improve the regulatory framework and the functioning of the financial system and the economy as a whole. In line with the expected innovations in the Draft Law on Payment Services and Payment Systems in 2018, we have launched internal training and preparations to better keep-up with the financial sector innovations. Digitization in the field of finance imposes a need for proper upgrading and enhanced monitoring by financial regulators, in order to optimize the benefits and minimize the potential risks in the dynamic financial environment. This is, of course, also a challenge for us as a central bank. After the activities carried out so far, we conclude that we have the institutional capacity and are fully prepared to respond adequately to the challenge. As it is suitable for a central bank institution, which

adhering to its highest international standards and best practices, through its day-to-day operations, constantly strives to make a greater investment in the future and to be not only an observer, but also a driver of modernization and promotion processes of finance and economics, within its competence.

In May 2018, we put into circulation the first polymer banknotes with denomination of Denar 10 and 50, which put the National Bank in the group of central banks that applied the most up-to-date achievements in the printing industry. Although a relatively short period of time has elapsed since they were put into circulation, we can conclude that this banknotes fully met expectations as to their acceptance in executing cash transactions, given their share in the circulation of banknotes.

Last year we continued hosting regular conferences and other public events, as forms of spreading knowledge and increasing interaction with the domestic academia. As a socially responsible institution, we have intensified our activities in the area of financial education, and the first measurement of the level of financial literacy of the adult population in the country was conducted and published in accordance with international standards. This measurement is of great importance because it identifies the key points where financial education of the population should be focused in the future, as one of the preconditions for the development of the financial system and the economy as a whole. In this context, it is particularly important that at the end of the year we formalized and strengthened the cooperation with the banking sector in the area of financial education and financial inclusion. We continued enhancing transparency and strengthening public relations through various channels of communication in order to get closer to the public, including our presence on the social media. We also paid special attention to improve communication with the mass media, seeking to bring the work of our institution closer and to give them a better insight into the data we produce in order to inform the public better and more accurately.

In recent years, marked by political uncertainty, we have faced a variety of challenges, which we have successfully addressed, thus additionally strengthening the trust in the institution and the domestic currency. There were signs of recovery in 2018, with the economy showing its vitality and ability to grow, with solid foundations and a more stable environment. In this context, also last year the National Bank maintained the price stability as well as the denar stability, while at the same time it strengthened the financial stability, providing an environment that supports the economic growth. Moreover, we made efforts to upgrade and develop the financial system, to further strengthen the international reputation, as well as the social accountability of the institution. Central bank operations around the world are constantly evolving, gaining both quantity and quality. To keep up with the trends in the central banking community, we are constantly committed to upgrading our institution's staff and improving our business processes. We believe that with the activities implemented in 2018 we are one step closer to our goal. This has been confirmed in several occasions by relevant international financial institutions, and valorized through our involvement in numerous international events and activities that draw conclusions on important international economic issues.

The stabilization of the expectations of the domestic entities, the improved perceptions of the foreign investors, the prospects for accelerating the Euro-Atlantic integration processes, together with the retained macroeconomic stability and the acceleration of the reforms in all spheres of the economy, open the prospects for further faster economy. In this context, and in the future, as a central bank, we will be maximally committed to our goals and will continue to work on our own institutional strengthening as a precondition for meeting new challenges.

The Annual Work Program of our institution for 2019 foresees numerous activities and new projects for improvement of the central bank operations in the country. We have already

started the realization of many of those activities and projects. We are aware that, in view of the medium-term projects that have already been started and which we need to finalize, the scope of planned activities and projects for the coming period may seem overwhelming, unrealistic and too ambitious. Yet knowing what the pace of work of the National Bank team is and knowing with what enthusiasm and dedication and commitment is being pursued in achieving every goal set in the institution, I am sure that everything we have planned is achievable and we are sure that we will succeed. We believe that with the implementation of the projects scheduled for this year, with the introduced innovations, changes and improvements, we as a central bank will be able to make several major steps to the European central banking family - the European System of Central Banks. This goal leads us to the path we have chosen, where we take decisive steps forward.

25 April 2019
Skopje

Anita Angelovska Bezhoska
Governor
and Chairperson
of the National Bank Council

Basic economic indicators

| <i>annual changes, in %</i> | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Real sector | | | | | | | | | | | |
| Gross domestic product * | 5.5 | -0.4 | 3.4 | 2.3 | -0.5 | 2.9 | 3.6 | 3.9 | 2.8 | 0.2 | 2.7 |
| Inflation | 8.3 | -0.8 | 1.6 | 3.9 | 3.3 | 2.8 | -0.3 | -0.3 | -0.2 | 1.4 | 1.5 |
| Unemployment rate | 33.8 | 32.2 | 32.1 | 31.4 | 31.0 | 29.0 | 28.0 | 26.1 | 23.7 | 22.4 | 20.7 |
| External sector | | | | | | | | | | | |
| Current account balance (in % of GDP) | -12.7 | -6.8 | -2.0 | -2.5 | -3.2 | -1.6 | -0.5 | -2.0 | -2.8 | -1.0 | -0.3 |
| Trade balance (% of GDP) | -29.0 | -25.1 | -22.5 | -24.4 | -25.7 | -21.4 | -20.5 | -18.9 | -18.0 | -18.1 | -16.9 |
| Foreign Direct Investment (% of GDP) | 6.0 | 2.0 | 2.2 | 4.6 | 1.7 | 2.8 | 2.3 | 2.2 | 3.3 | 1.8 | 5.8 |
| Gross external debt (in % of GDP) | 48.8 | 55.9 | 57.8 | 64.2 | 68.2 | 64.0 | 70.0 | 69.4 | 74.2 | 73.2 | 73.7 |
| Gross official reserves (millions of EUR) | 1,494.9 | 1,597.5 | 1,714.5 | 2,068.9 | 2,193.3 | 1,993.0 | 2,436.5 | 2,261.7 | 2,613.4 | 2,336.3 | 2,867.3 |
| Monetary sector | | | | | | | | | | | |
| Broad money (M4) | 11.8 | 5.7 | 12.1 | 9.5 | 4.4 | 5.2 | 10.6 | 6.9 | 6.2 | 5.1 | 11.8 |
| Total credits | 34.4 | 3.5 | 7.0 | 8.4 | 5.6 | 6.6 | 10.0 | 9.6 | 6,5** | 5.4 | 7.3 |
| Total deposits (incl. demand deposits) | 8.9 | 17.8 | 12.8 | 9.1 | 4.4 | 5.4 | 10.5 | 6.4 | 6.1 | 5.0 | 12.1 |
| Fiscal sector | | | | | | | | | | | |
| Overall balance (% of GDP) | -0.9 | -2.6 | -2.4 | -2.5 | -3.8 | -3.8 | -4.2 | -3.5 | -2.7 | -2.7 | -1.8 |
| Public debt (% of GDP) | 23.0 | 26.2 | 27.2 | 32.0 | 38.3 | 40.3 | 45.8 | 46.6 | 48.8 | 47.8 | 48.5 |
| Banking sector | | | | | | | | | | | |
| Capital adequacy ratio (%) | 16.2 | 16.4 | 16.1 | 16.8 | 17.1 | 16.8 | 15.7 | 15.5 | 15.2 | 15.7 | 16.5 |
| Non-financial sector NPLs / gross loans (%) | 6.8 | 9.1 | 9.3 | 9.9 | 10.5 | 11.5 | 11.3 | 10.8 | 6,6*** | 6.3 | 5.2 |
| Liquid assets / total assets (%) | 22.9 | 25.6 | 30.9 | 31.2 | 32.4 | 31.2 | 29.8 | 28.2 | 28.9 | 27.1 | 26.7 |

Source: NBRNM, SSO, Ministry of Finance.

* Preliminary data for 2017, estimated data for 2018.

** Corrected for write-offs.

*** Incl. write-offs effect.

I. Monetary Policy in 2018

1.1. Monetary policy objectives

Maintaining price stability is the main legally defined objective of the National Bank's monetary policy. Another objective, which is subordinate to the main objective, is to contribute to a stable and competitive market-oriented financial system. The National Bank will also support the general economic policies without jeopardizing the achievement of the ultimate objective and in line with the principle of an open market economy with free competition. From a strategic point of view, since October 1995, the strategy of maintaining stable nominal exchange rate of the denar, first against the deutsche mark (until 2001) and then against the euro is applied.

Considering these legal provisions, during 2018, the National Bank tailored its monetary policy to ensure continuity in achieving legally defined objectives. The monetary policy objectives have been successfully achieved, which can be seen through the further maintenance of the price and exchange rate stability. Foreign reserves grew and according to all indicators of adequacy remained in the safe zone. In terms of price stability, in 2018, moderate rise in domestic prices was registered, given the upward movement of energy prices, as well as more moderate increase in the base and food component of inflation. In 2018, financial stability was successfully maintained. During 2018, the National Bank continued to relax its monetary policy, amid favorable macroeconomic environment.

Chart 1
Output gap and inflation (in %)

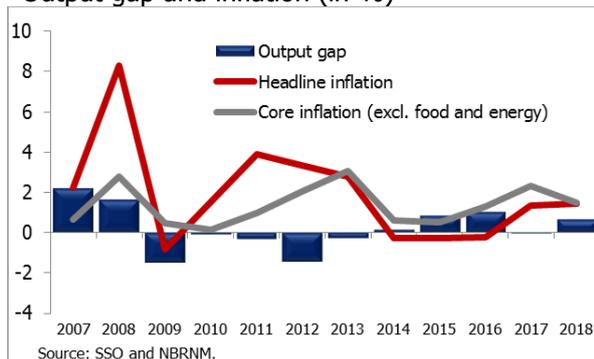
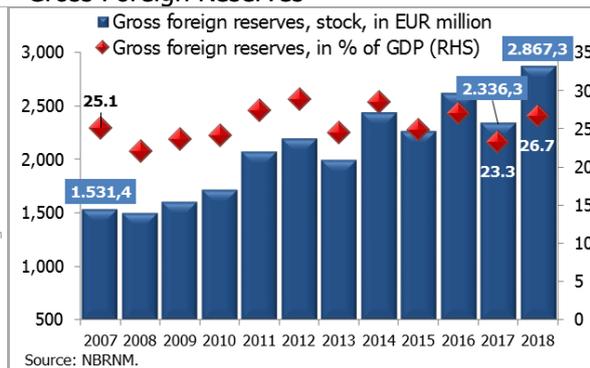


Chart 2
Gross Foreign Reserves



*Productivity gap is an indicator of the cyclical position of the economy and it is calculated as the deviation of the actual from the potential level of GDP relative to the potential level of GDP (output gap = (actual GDP - potential GDP)/potential GDP). Headline and core inflation represent an average annual growth.

Chart 3
Foreign reserves adequacy indicators

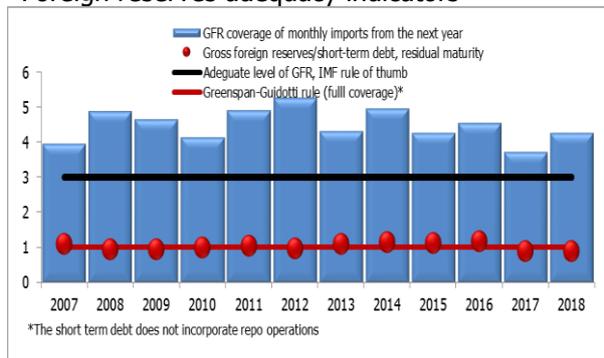
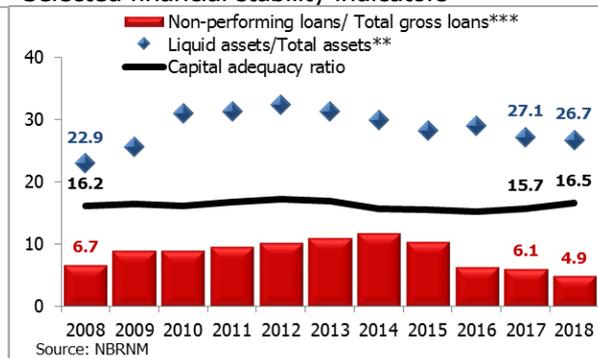


Chart 4
Selected financial stability indicators



* 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 highly 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 changes arising from regulatory changes.

Source: NBRNM and SSO.

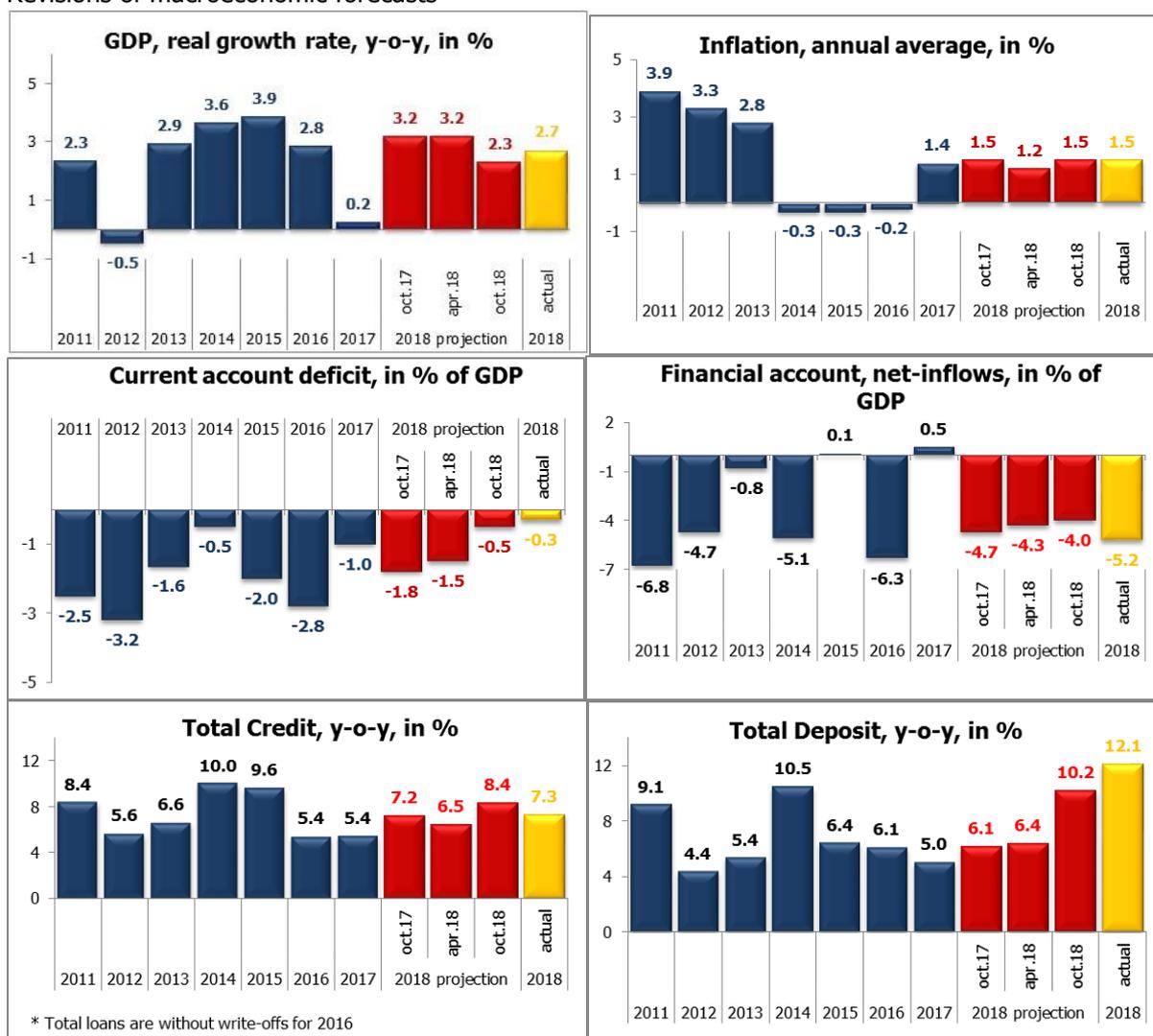
1.2. Monetary policy setup

In 2018, the National Bank continued to relax its monetary policy. The key interest rate was reduced in three occasions, in March, August and December, by total of 0.75 percentage points, reducing to 2.50%. Furthermore, in March, the interest rates on 7-day and overnight deposit facilities reduced by 0.2 and 0.1 percentage points, to 0.3% and 0.15%, respectively. Monetary easing reflected the solid external position of the economy and the gradual stabilization of economic agents' expectations. In such circumstances, the movements on the foreign exchange market were favorable during the year and enabled continuous interventions with the purchase of foreign currency and increase in the foreign reserves. Favorable developments were also observed in the dynamics and structure of the banks' deposit base.

The environment for conducting monetary policy in 2018 was more favorable than in the previous year, given the less pronounced risks to the domestic environment. On the foreign exchange market, the movements were continuously favorable, which enabled interventions with the purchase of foreign currency by the National Bank, the highest ever. The purchase of excess foreign currency on the foreign exchange market took place amid an increased supply of foreign currency by the corporate sector. Household savings continued to grow, but increasingly in domestic currency, leading to stable expectations and increased confidence of economic agents. The prudent fiscal policy also contributed to the favorable environment, given the lower budget deficit in 2018. Despite the lower risks to the domestic environment, however, during 2018, the external environment was marked by uncertain and volatile movements, which required caution when conducting monetary policy.

Favorable external sector performance, given the stable domestic context and the absence of inflationary pressures, created a favorable environment in the domestic economy for achieving solid economic growth. In such an environment, economic growth in 2018 accelerated (especially since the second quarter) and was moderately above expectations, supported by both export activity growth and domestic demand. Growth in 2018 was also widespread in many economic sectors, indicating a more comprehensive recovery of the real sector.

Chart 5
Revisions of macroeconomic forecasts



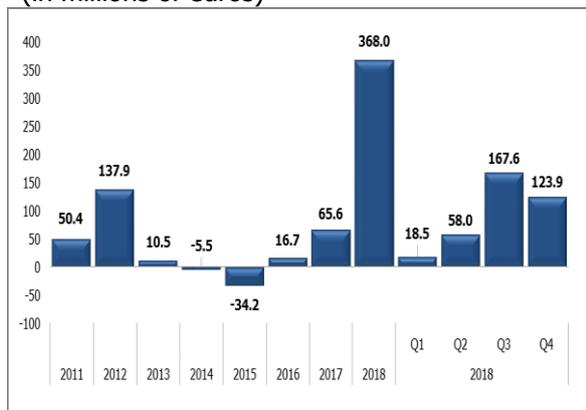
Source: NBRNM and SSO. Forecasts for all indicators refer to the macroeconomic forecasts of the NBRNM.

The general price level in 2018 registered an average annual growth of 1.5%, similar to the growth in the previous year. The increase in inflation mostly stems from the growth of core inflation, with lower positive contribution from food and energy prices. During the year, the National Bank did not make significant revisions to the inflation forecast and the performance is mainly in line with the forecasts.

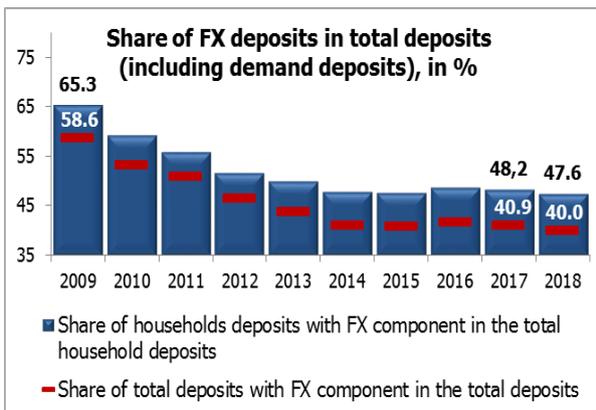
Foreign reserves increased during 2018, remaining in the safe zone throughout the year. By factor, the increase in foreign reserves is largely a result of the National Bank's interventions on the foreign exchange market by purchasing a significant amount of foreign currency, as well as of transactions for the account of the government (mainly as a result of the sixth Eurobond issued on international financial markets). The movements in the balance of payments were favorable, so the financial flows in 2018 were sufficient to enable full financing of the current account deficit, as well as for significant growth in foreign reserves during the year.

Chart 6

NBRMS interventions on the foreign exchange market with banks
(in millions of euros)



Level of euroization with deposits



Source: NBRM

In conditions of stable expectations and favorable risk perceptions of the economic agents, favorable movements were also observed in the private sector savings. As a result, in 2018 the total deposits registered an increase, which was largely due to the growth of denar deposits and long-term deposits. This is especially true for households, given that the degree of euroisation of household deposits continued to decline throughout the year, while growth in long-term savings was constantly present. Overall, the significant acceleration of household savings growth led to the largest contribution of this sector to the growth of total deposits in 2018.

The banks' solid solvency and liquidity position, the growth of funding sources, increased competition in the banking sector, stable environment and changes in the monetary policy are contributing factors for banks to increase supply of loans. Thus, in 2018, the credit flows registered faster growth compared to the previous year, but slightly more moderate relative to the expectations with the October forecasts. Favorable developments in the structure of credit growth were registered, i.e. increased lending to the corporate sector.

Given the application of fixed nominal exchange rate of the denar against the euro, changes in interest rates in the euro area, as the anchor economy, play certain role in the monetary policy setup in the country. In 2018, the European Central Bank (ECB) did not make changes to the policy rate, i.e. it remained at a record low (0.00%). Simultaneously, under the influence of favorable domestic factors, the National Bank reduced the interest rate to 2.5% in several occasions¹. Consequently to this change, the interest rates of both central banks narrowed from 3.25 p.p. to 2.5 p.p. Observing the banks' interest rates in the domestic economy, the spread between the denar deposit interest rate and the foreign currency deposits interest rate in 2018 had a minimal decline (from 1.3 p.p. to 1.2 p.p.) as a result of the downward movement of the denar deposit interest rate.

¹ According to the further positive developments in economy, in March 2019 the National Bank additionally reduced the key interest rate to 2.25%.

Chart 7
 Spread between the policy rates of the NBRNM and the ECB, in percentage points

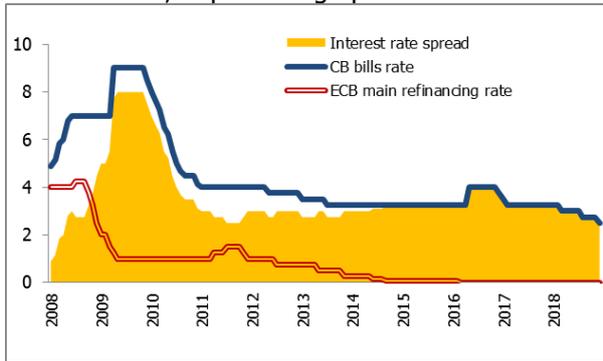
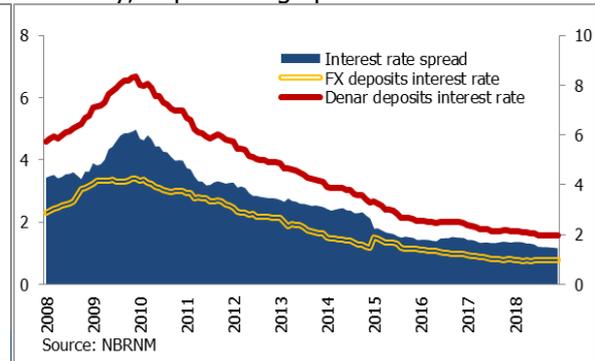


Chart 8
 Interest rate spread of the banks in the domestic economy, in percentage points



NBRM policy rate: interest rate on CB bills.
ECB policy rate: interest rate on ECB's main refinancing operations

II. International environment²

Favorable trends in the global economy continued in 2018 despite generally more pronounced political uncertainty in global terms, increased trade tensions and pronounced volatility in financial markets. The growth rate of real GDP worldwide is estimated at 3.7% (3.8% in 2017). Analyzed by group of countries, growth slowdown is registered in some developed and emerging economies, especially in the second half of the year. Thus it is estimated that the growth in the euro area decelerated in 2018 and reduced to 1.9% (from 2.5% in 2017), which mainly relates to temporary factors in the area of car industry, especially evident at the end of the year. Poor investments and trade activity, partially as a result of the uncertainty related to the Brexit process, also explain the lower real growth in the UK, while the growth deceleration was registered in Japan, as well. On the other hand, the GDP growth in the USA intensified and reached 2.9% (as opposed to 2.2% in 2017), underpinned mainly by the fiscal stimulus due to tax reforms. Within the group of emerging and developing economies, the most evident is the growth of the Chinese economy, mainly reflecting the lower export in conditions of growing trade protectionism in global terms. In the medium run, the global growth risks are mainly unfavorable and related to the increase in the protectionism in trade, tightening of the financial flows, as well as geopolitical tensions and uncertainty, including those that arise from the Brexit negotiations.

Chart 9
Global economic growth (in %)

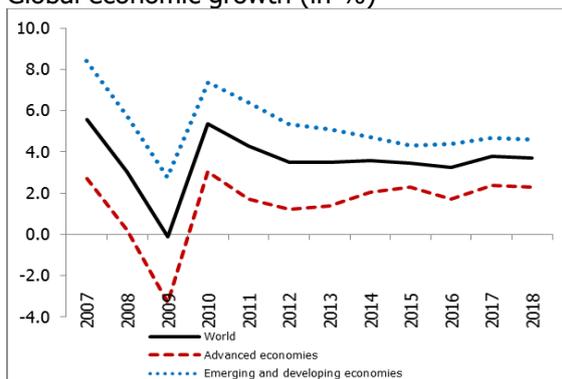


Chart 10
GDP growth in developed countries (in %)

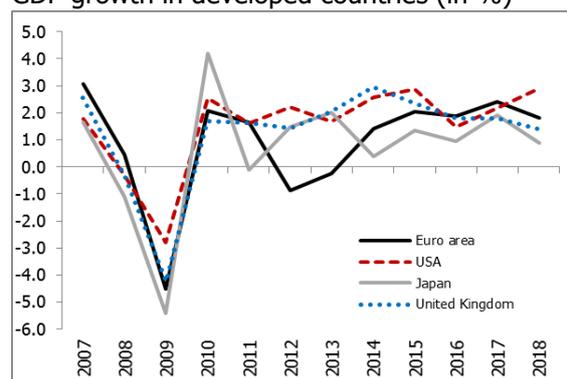
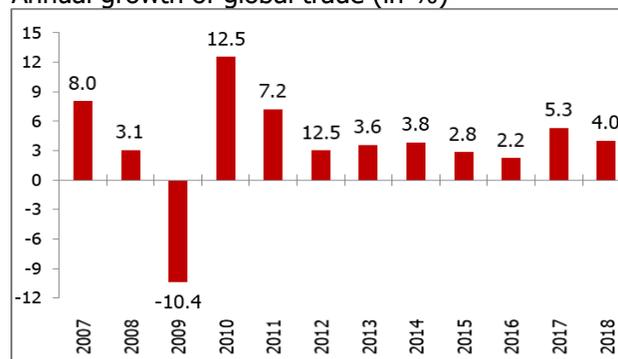


Chart 11
Annual growth of global trade (in %)



Source: World Economic Outlook, October 2018 and update January 2019, IMF

² The analysis is based on the IMF's 'World Economic Outlook, update October 2018 and January 2019; the World Bank's World Economic Outlook, January 2018; the quarterly reports of the National Bank of the Republic of Macedonia.

The average annual inflation rate in the world in 2018 is estimated at 3.8%³, which is acceleration of inflation compared to 2017, when it was 3.2%. The inflation acceleration is more evident in the emerging economies, where the inflation rate increased from 4.3% in 2017 to 4.9%⁴ in 2018. In developed countries, inflation accelerated moderately in 2018, with the annual rate reaching 2% (1.7% in 2017). The higher price levels globally largely reflect the rise in oil prices during 2018.

In terms of the specific quantitative indicators reflecting the external environment of the Macedonian economy, in 2018 it is estimated that the growth of foreign effective demand is slightly lower and equals 2% (2.3% in 2017), largely as a result of the decelerated growth of the German economy. In 2018, foreign effective prices increased by an average of 2.1% (1.9% in 2017), on average, with the highest positive contribution being the increase in prices in Germany, Serbia and Bulgaria, while other countries contributed more moderately.

Chart 12
Foreign effective demand

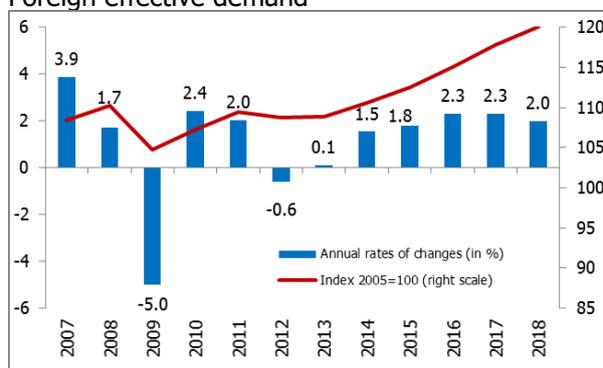
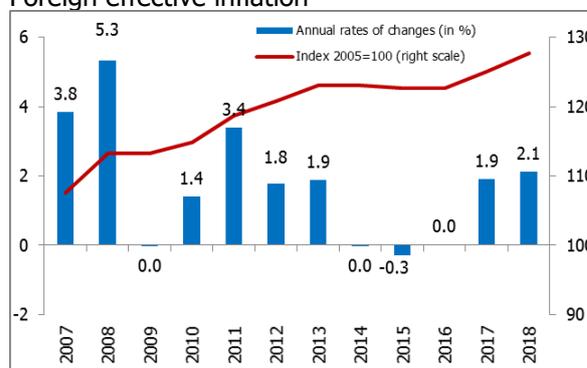


Chart 13
Foreign effective inflation



Source: NBRNM calculations⁵.

At the primary commodity markets, in 2018 energy prices significantly increased, while food prices moderately declined. As for the entire 2018, the average oil price was higher by 25% than the average price in 2017, equaling Euro 60.2 per barrel. By dynamics, the oil price registered an increase almost during entire year, which in conditions of relatively stable global demand, is related with lower supply, as a reflection of geopolitical tensions between USA and Iran⁶ and lower oil production after extension of the contract between OPEC+ countries.^{7 8} On the other hand, the euro food prices⁹ fell by 4.4%, while the metal prices remained on the level similar to the one in 2017 (minimal growth of 0.8%).

³ Data on global inflation is taken from the October 2018 World Economic Review database.

⁴ Data on inflation in emerging and developed economies is taken from the January 2019 World Economic Review database.

⁵ Foreign effective demand is the sum of weighted GDP indices of the major trading partners of our country. 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 our country 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 2013 - Q3 2016. The calculation of this indicator includes Bulgaria, Germany, Greece, France, Italy, Austria, Slovenia, Croatia and Serbia.

⁶ On 6 July 2018, the US President made a decision to impose additional sanctions on Iran, which entered into force on 4 November (after those imposed on 8 May 2018), which will mainly hit the oil sector.

⁷ The OPEC+ group includes all OPEC countries, plus 10 non-OPEC countries: Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Sudan and South Sudan.

⁸ On 7 December 2018, a meeting of OPEC member states was held in Vienna, where it was decided to reduce oil production by an additional 1.2 million barrels a day in the first 6 months of 2019.

⁹ Food prices in US dollars registered minimal increase of 0.3% in 2018. Such movements are largely a result of the euro / US dollar exchange rate differences, i.e. on average, the higher value of the euro against the US dollar in 2018.

Chart 14
Monthly movement of prices of primary energy and non-energy sources (euro, index: 2010=100)

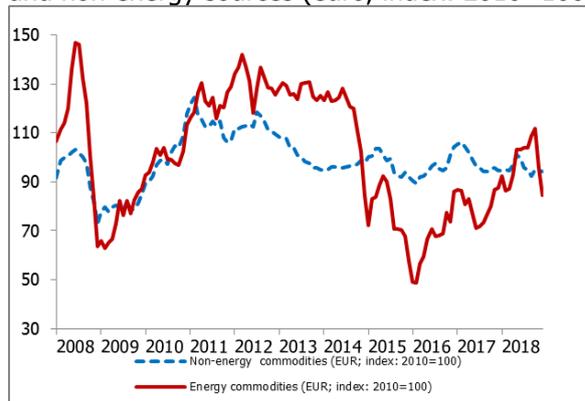
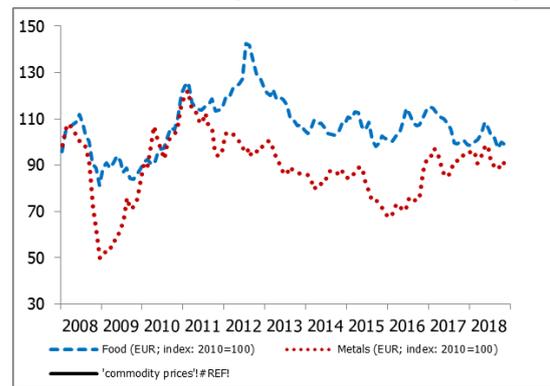


Chart 15
Monthly movement of prices of crude oil, metals¹⁰ and food (euro, index: 2010=100)



Source: World Bank's database on primary commodity prices.

In 2018, central banks of developed countries pursued divergent monetary policies. Thus, in conditions of strong growth of economic activity and favorable movements on the labor market, the FED continued to raise the key interest rate. During the year, the interest rate was increased on four occasions, thus at the end of 2018 it ranged from 2.25 to 2.5% (higher by 1 p.p. compared to the end of 2017). Bank of England also made changes to the monetary policy in 2018. Namely, at the August meeting, the Bank of England raised the policy rate by 0.25 percentage points and at the end of 2018 it reached 0.75%. Such a change in the interest rate is associated with the acceleration of the inflation rate and the exceeding of the inflation target. During 2018, the ECB continues to pursue an adjustable monetary policy, amid unchanged interest rates and a gradual reduction in the volume of the quantitative easing program,¹¹ which ended in December 2018. However, at the regular meeting in December, the ECB emphasized that the monetary policy in 2019 will remain relatively accommodative, and the liquidity level in the banking sector will be maintained through further reinvestment of due securities. The Bank of Japan did not alter the monetary policy setup, keeping the interest rate at -0.1% in 2018.

¹⁰ Metals Price Index is a composite index, which includes prices of copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium.

¹¹ At its regular meeting in September 2018, the European Central Bank decided to keep the current interest rate while continuing the quantitative easing program, but lower by the end of 2018, at Euro 30 billion per month until September 2018 and Euro 15 billion per month from October to the end of 2018.

III. Macroeconomic developments in 2018

3.1. GDP and inflation

After stagnation in 2017, in 2018 the economy returned to the path of solid growth, with real GDP increasing by 2.7%. Favorable performance was especially evident in the second quarter¹², in conditions of stabilized domestic environment, stable expectations and stronger confidence of the economic agents, as well as maintenance of the dynamic export activity. The performance in the export sector reflected a favorable external environment, with positive effects on some of the traditional exporters and a further increase in the degree of utilization of some of the export-oriented foreign capital facilities.

Chart 16
GDP and foreign effective demand (annual real growth rates, in %)

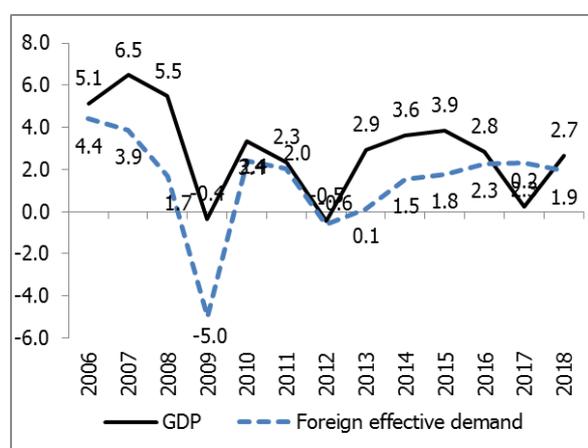
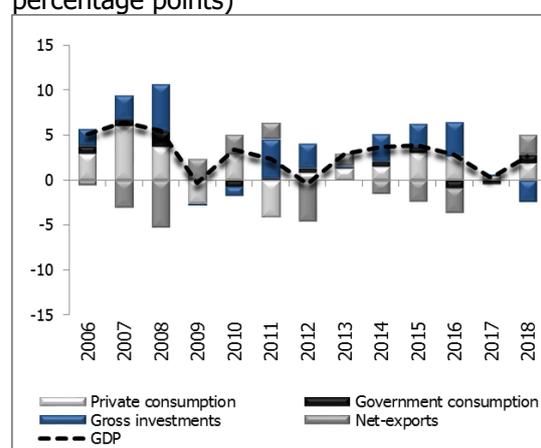


Chart 17
GDP (real growth, in %) and GDP expenditure components (contributions to growth, in percentage points)



Source: State Statistical Office and Eurostat, NBRNM calculations GDP data for 2017 are preliminary, and data for 2018 are estimated.

From the production side, in 2018, most of the activities registered an increase in value added. The highest positive contribution to the overall economic growth was made by trade, transport and catering activities. Activity acceleration and consequently, higher contribution to the total growth in 2017 was registered in industry, mainly as a result of favorable performance in manufacturing industry related to production in the activities larger export capacities with foreign capital. The activity in construction recovered in 2018, and as a result this activity registered slight increase, as opposed to decrease which was registered in 2017. The improvement in construction sector are mainly related to the growth in buildings construction, while the civil engineering registered a decrease, related to poor performance larger public infrastructural projects in 2018. The increase in value added is characteristic also for most of the services sector.¹³ On the other hand, the reduced activity and slight negative contribution in the total economic growth was registered in agriculture and information and communication activity.

¹² In 2018, the dynamics of the real GDP was as follows: first quarter -0.9%, second quarter 3.0%, third quarter -3.0% and fourth quarter 3.7%.

¹³ Within the services sector, in 2018, higher value added was registered in real estate, professional, scientific and technical activities and administrative and auxiliary services, as well as arts, entertainment and recreation, and other services. On the other hand, lower value added was registered in public administration and defense, social insurance, education, health and social welfare, while the value added in financial activities and insurance activities remained almost unchanged compared to 2017.

Chart 18
Contribution to the real annual GDP growth
(in percentage points)

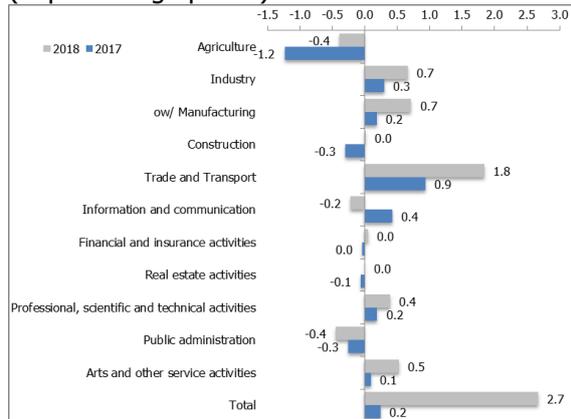
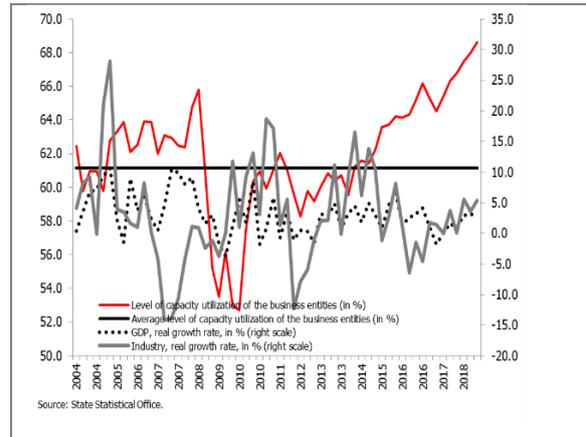


Chart 19
GDP, industry and capacity utilization



Source: State Statistical Office and NBRNM calculations GDP data for 2017 are preliminary, and data for 2018 are estimated.

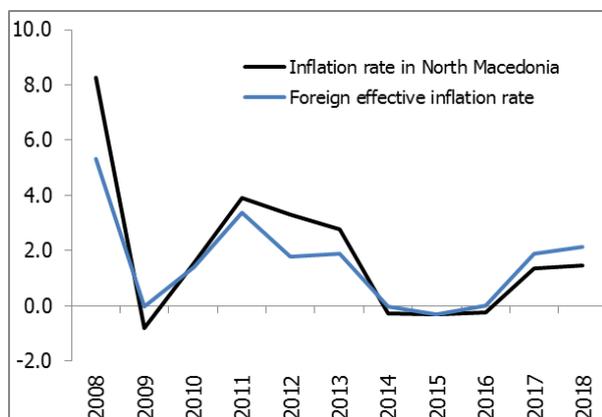
From the viewpoint of aggregate demand, after four years of negative contribution, the net export this year made positive contribution to the domestic economy growth, while the exports remains as component with the highest individual contribution to the growth. As in the previous period, the increase in exports is mainly a reflection of the export activity of the new production facilities, with positive contribution also being made by traditional exporters from metal processing industry domain. Also this year, the domestic demand made positive contribution to the economic growth. Namely, in conditions of solid growth of private consumption, supported by the growth of all components of disposable income, as well as in conditions of increase in private consumption, the poor contribution of the domestic demand arises from the severe drop of gross investments¹⁴. The fall in direct investments is mostly related to poorer performance of public infrastructural projects, as well as due to smaller volume of government capital investments from the budget.

The increase in consumer prices was moderate also in 2018, with the annual inflation rate being maintained at the level of 1.5% (1.4% in the previous year), given growth of prices within all three index components, food, energy and core inflation. This performance of the domestic inflation reflects the changes in the world prices of primary products, their indirect effects on other prices, as well as influence of certain domestic factors (increase in excises on tobacco products air traffic prices). Except slight inflation deceleration in the last quarter, during entire 2018 the increase in consumer prices was stable¹⁵, amid absence of pressures on the inflation from the moderate increase in domestic demand and slight positive output gap.

¹⁴ In 2018, the gross investments in the first, second and the third quarter registered a decrease of 9.3%, 16.4% and 8.5%, respectively, while in the fourth quarter they increased by 1.6%, thus contributing positively to the growth of the domestic economy in the last quarter.

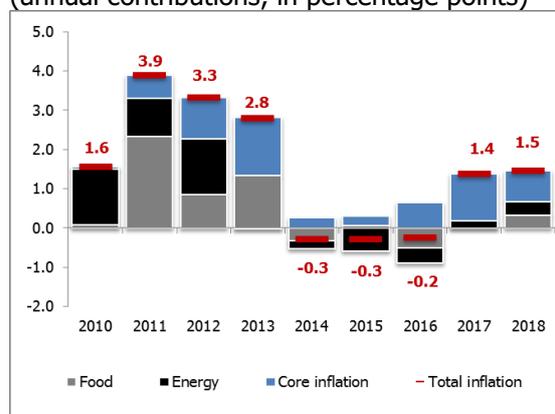
¹⁵ In 2018, the inflation was as followed: first quarter 1.5%, second quarter 1.5%, third quarter 1.6% and fourth quarter 1.2%.

Chart 20
Domestic inflation and foreign effective inflation,
annual growth rates (in %)



Source: State Statistical Office, Eurostat and NBRNM calculations.

Chart 21
Volatile component (food and energy) and long-term component of inflation
(annual contributions, in percentage points)



From the viewpoint of key components of consumer price index, the highest positive contribution to the annual growth accounts for the basic component (increase of 1.5% and contribution of 0.8 p.p. in the total inflation) mostly as a result of higher tobacco prices¹⁶ and air traffic prices. Simultaneously, the food prices went up by 0.9% (with a share of 0.3 p.p. in the total inflation), mirroring mainly the higher vegetable and meat prices. The energy component increased by 2.6% (with a share of 0.3 p.p. in the total inflation), which is due to the increase in domestic prices of oil derivatives, in conditions of high increase in oil prices on world markets, as well.

3.2. Labor market

In line with positive developments in real economy, in 2018, most of the labor market indicators point to continuation of favorable trends.¹⁷ In addition, implementation of the active employment measures continued in 2018¹⁸, as additional support to the employment growth. In 2018, the number of employees increased by 2.5%, similar to the growth in 2017. Moreover, the employment rate increased by 1 percentage point, to 45.1%. Analyzed by sector, in 2018 the increase in employment mostly links with *industry*, largely reflecting the positive developments in manufacturing industry. The *services* sector also made significant contribution, which derives from most activities, with the most positive developments being in the areas of professional, scientific and technical activities, hotels and restaurants, as well as health and social care activities. Construction contributed additionally to the employment growth, in line with the gradual recovery of the activity in this sector during 2018. On the other hand, although the number of employed in agriculture in 2017 was stable, in 2018 their number decreased.

¹⁶ The annual growth of tobacco price reflects the increase in the prices of cigarettes in April, May and July, in the eve of the increase in excise duties on cigarettes at the beginning of July 2018. The increase in excise duties of 0.20 denars/a piece is envisaged for each year, until 1 July 2023.

¹⁷ Labor market analysis was made using quarterly labor force surveys, that is, the annual indicators for 2018 were derived as an average of the published quarterly data.

¹⁸ In 2018, the Ministry of Labor and Social Policy and the Employment Agency continued to implement active measures and programs aimed to increase employment.

Chart 22
Selected labor market indicators (in %)

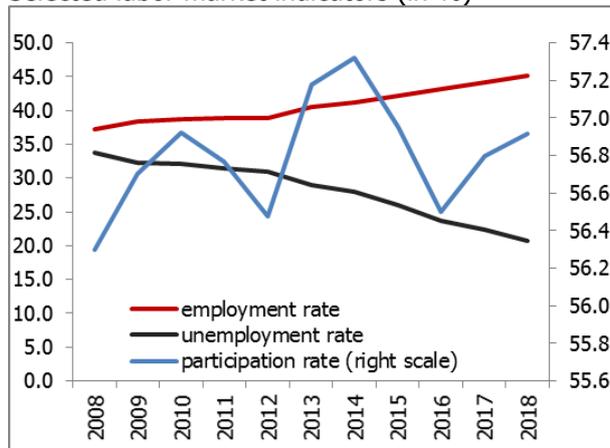
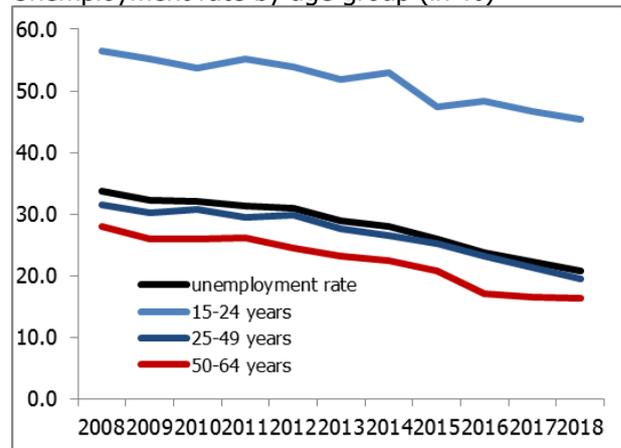


Chart 23
Unemployment rate by age group (in %)



Source: State Statistical Office and NBRNM calculations

Favorable movements during the year have also been registered on the labor supply side. The total active population increased by 0.4%, which amid a decrease in the inactive population of 0.1%, resulted in a small upward adjustment of the activity rate (of 0.1 percentage points) to 56.9%. The positive developments both on the demand and on the supply side of the labor supply contributed to reduce the unemployment, with the unemployment rate in 2018 being reduced to historically lowest level of 20.7% (an annual decrease of 1.6 percentage points). The decrease in the overall unemployment rate is explained by the lower unemployment in all age groups, with a significant decrease being registered in persons aged 15 to 24 years and from 25 to 49 years.

The increase in average paid wages continued in 2018 as well, but more intensified compared to the previous year, partially due to the legal provision to raise the minimum net wage level¹⁹ from September 2017 and additional growth of 1.4% in July 2018²⁰, while the increase in the wages was also registered in the public sector²¹. Thus, nominal net and gross wages²² registered an annual growth of 5.9% and 5.7%, respectively (as opposed to more moderate growth of 2.6%, respectively in 2017). Upward correction of net wages was registered in almost all sectors of activity²³, with especially high growth being registered in mining and quarrying (18.6%), information and communications (14.6%), manufacturing (10.9%), accommodation facilities and food services (10.6%) and activities related to real estate (9%). In conditions of more moderate growth in the general level of consumer prices of 0.3%, net and gross wages registered a real growth of 4.4% and 4.2%, respectively.

¹⁹ On 19 September 2017, the amendments to the Minimum Wage Law of the Republic of Macedonia were adopted. According to the amendments, the minimum wage in the country, starting with the payment of the wage for September 2017, was determined for all sectors in the economy at a gross amount of Denar17,130 or Denar12,000, net. Prior to these amendments, the minimum net wage amounted to Denar 10.080, with the exception of the departments of manufacture of textiles, manufacture of clothing and manufacture of leather and similar leather products, where it is lower and amounted to Denar 9.000 in 2016.

²⁰ The amount of minimum wage according to the Law on Minimum Wage (Official Gazette of the Republic of Macedonia No. 126/18) which is paid for the period from July 2018 to March 2019 is Denar 17,370 in gross amount, i.e. Denar 12,165 net wage, in accordance with the regular adjustment with the increase for the previous year of the average wage paid in the country, the consumer price index and the real GDP growth (with one third of the growth of each indicator, respectively).

²¹ Also, during 2018, there was a 10% increase in wages for the Army employees starting with the January wage, as well as an increase in wages in health, education and kindergartens by 5% starting with the September wage.

²² 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 concern wages paid.

²³ Lower wages were paid only in the sectors of transport and storage and professional, scientific and technical activities.

Chart 24
Average gross and net wages
(annual growth, in %)

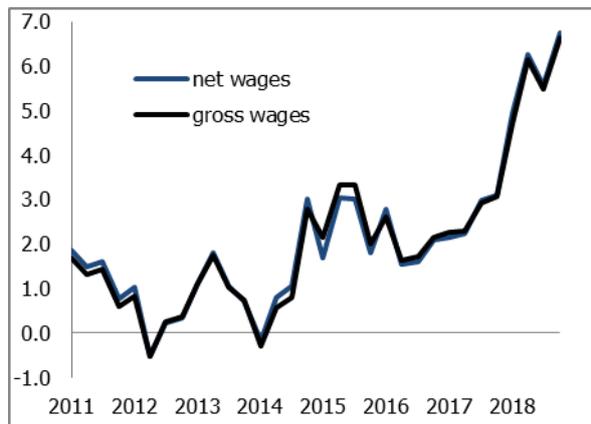
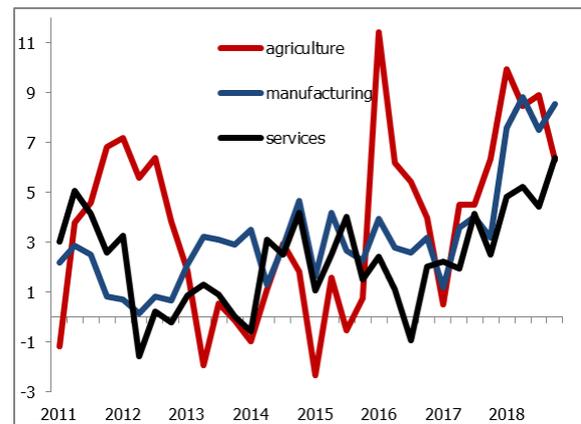


Chart 25
Average net wages, by sector
(annual growth, in %)



Source: State Statistical Office and NBRNM calculations

From the aspect of competitiveness indicators²⁴, certain improvement in 2018 is registered. Namely, during the year, labor productivity remained at the level of the previous year (despite the fall of 1.9% in 2017), in conditions of identical growth of value added with the employment growth. By sector, the negative contribution of the agricultural sector (due to the larger decrease in value added compared to the decline in employment) is completely neutralized by the positive contribution of the services sector and industry. In line with the wage and productivity trends, the unit labor costs in 2018 were up by 6%, as labor costs increased in all three sectors.

Chart 26
Labor productivity
(contributions to the annual growth, in percentage points)

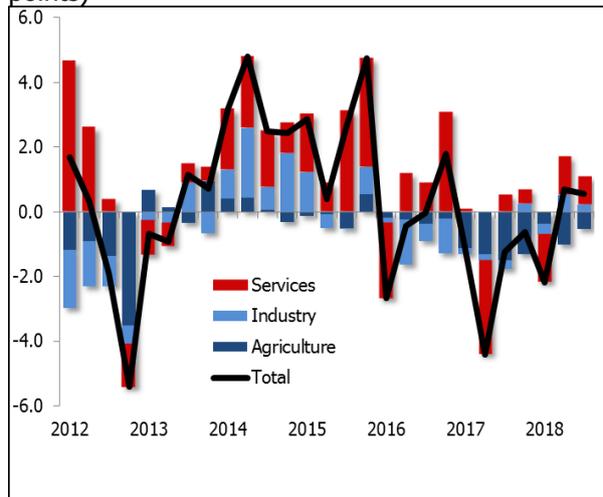
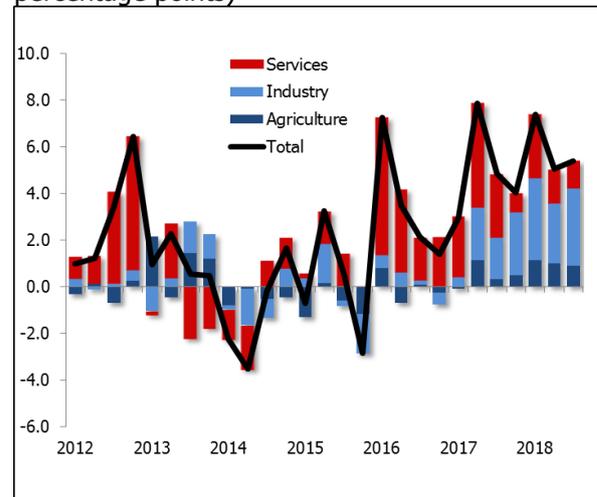


Chart 27
Unit labor costs
(contributions to the annual growth, in percentage points)



Source: State Statistical Office and NBRNM calculations

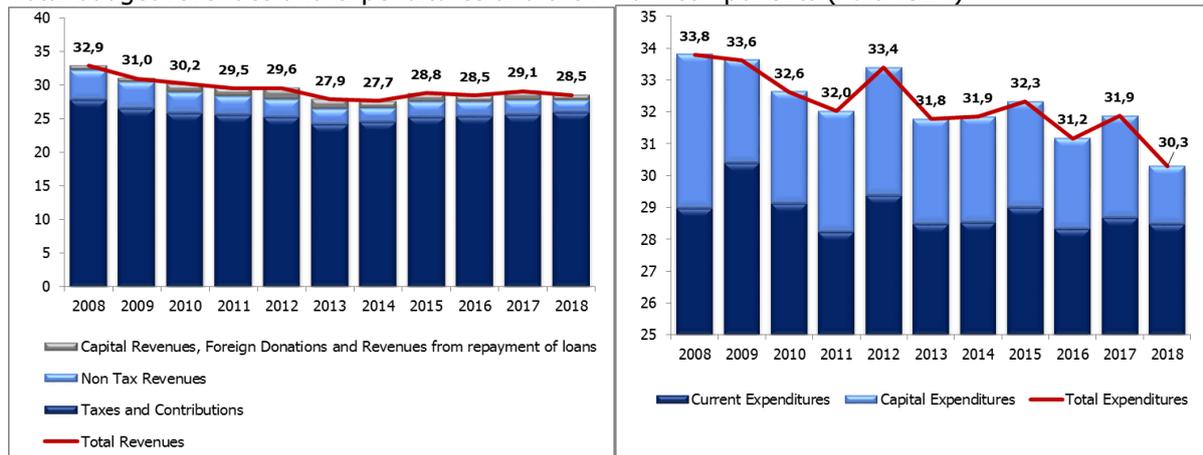
²⁴ Productivity and unit labor costs for the overall economy are calculated using SSO's data on GDP, number of employees and average gross wages. Total productivity is a weighted sum of productivity of each sector. Within each sector, the productivity is calculated as a ratio between the value added in that sector and the number of employees.

3.3. Public finance

In 2018, the Budget of the Republic of North Macedonia registered a deficit of 1.8% of GDP, which was lower compared to last year (2.7% of GDP in 2017). The share of budget revenues in GDP in 2018 remained relatively stable on annual basis and equaled 28.5%, while the share of budget expenditures in GDP declined slightly on annual basis (from 31.9% to 30.3%).

Chart 28

Total budget revenues and expenditures and their main components (% of GDP)



Source: Ministry of Finance and NBRNM calculations.

For 2018, the budget deficit was initially projected at the level of Denar 18,233 million or 2.8% of GDP. At the end of the year, budget revision was made, envisaging reduction of the total budget revenues and expenditures by 0.5% and 0.6%, respectively (or by Denar 1,028 and 1,209 million, respectively), with the budget deficit remaining almost unchanged²⁵. In terms of tax revenues generated as planned at the beginning of the year, the decrease in total budget revenues was largely due to the downward correction of revenues that budget users generate on their own accounts (non-tax revenues). At the same time, amid lower spending with capital expenditures at the beginning of the year and certainty for lower performance than the original annual Budget plan, these budget expenditures were reduced and funds were diverted to support municipalities financially.²⁶ With regard to the structure of deficit financing, the revision envisaged correction to external debt repayments, which increased, given the early repayment of part of external debt (Euro 91.7 million) at the beginning of 2018 that falls due in 2020, while slight reduction was also made in the amount of external borrowing. In line with these changes, the amount of government deposits with the National Bank decreased.

Indicators of the current budget balance²⁷ and primary balance²⁸ in 2018 indicate lower performance compared to the previous year, similar to the total budget deficit. Thus, the

²⁵ With the budget revision, adopted in November 2018, the budget deficit reduced from Denar 18,233 million to Denar 18,052 million.

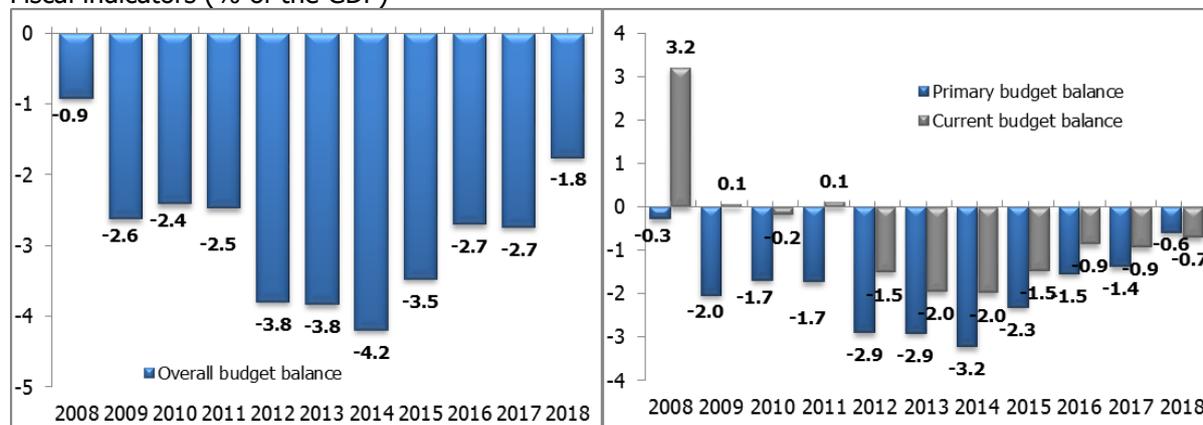
²⁶ According to the Law on Financial Support to the Units of Local Self-Government and Units of Beneficiaries established by the Units of Local Self-Government for financing past due and unpaid liabilities, on 30 November 2018 funds in the amount of Denar 3,033 million were transferred from the Budget of the RNM to the accounts of the units of local self-government with the National Bank.

²⁷ Current budget balance is the difference between current revenues (tax revenues and non-tax revenues) and current budget expenditures (for wages and fees, goods and services, transfers and interests).

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

current budget deficit and primary deficit in 2018 equal 0.7% and 0.6% of GDP, respectively, which is lower than the previous year (0.9% and 1.4% of GDP, respectively).

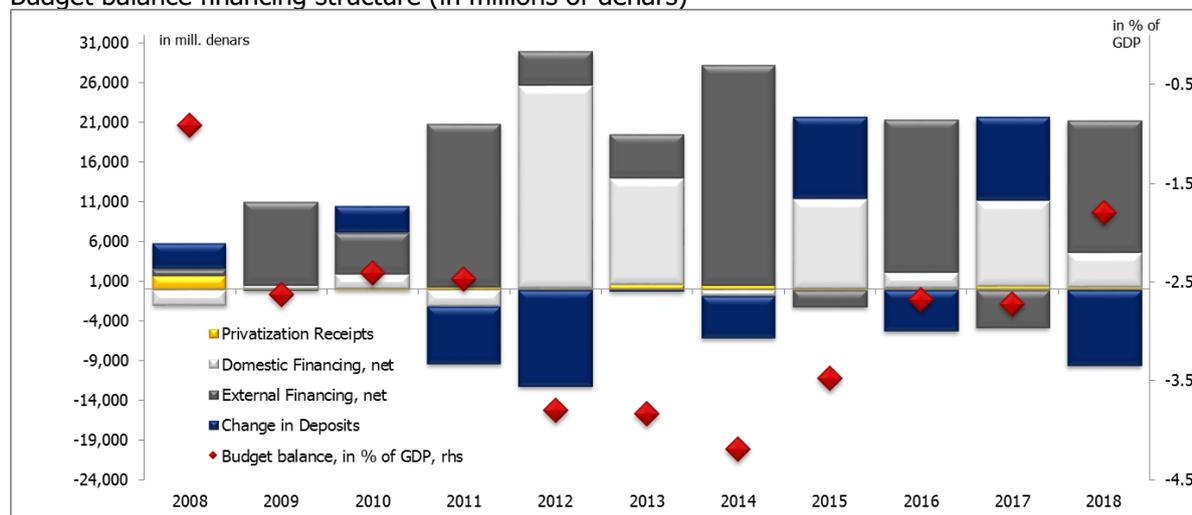
Chart 29
Fiscal indicators (% of the GDP)



Source: Ministry of Finance and NBRNM calculations.

The budget deficit was mostly financed by external sources, through the issue of Eurobond on the international financial markets in 2018, with a portion of the foreign assets being retained as deposit on the government account with the National Bank.²⁹ The financing of the budget deficit was also partially financed through new issues of government securities on the domestic financial markets, with a 30-year government bond being issued for the first time in April 2018.

Chart 30
Budget balance financing structure (in millions of denars)



Source: Ministry of Finance and NBRNM calculations.

In 2018, the total amount of due liabilities based on continuous government securities equaled Denar 52,298 million. During the year, through the auctions of sale of continuous government securities on the primary market, securities in the amount of Denar 56,922 million were sold, thus net domestic debt amounted to Denar 4,624 million, being significantly less

²⁹ In January 2018, the sixth Eurobond in the nominal amount of Euro 500 million, a maturity of 7 years and an annual interest rate of 2.75% was issued. One part of these foreign assets was used for early repayment of part of the external liabilities that fall due in 2020.

compared to the net borrowing in the previous year (Denar 11,214 million). Most of the new issues of government securities were with longer maturity than the maturity of the securities that fall due, which contributed to the increase in the average maturity of the issued government securities, and thus to the deepening of this segment of the financial markets, as well as to increase the share of government bonds in the debt structure. Favorable developments were registered also in the debt currency structure, which was evident through increase in the portfolio of government securities without currency structure. In 2018, the newly issued domestic government debt had lower interest rates.

Chart 31
Interest rates on government securities (in %)

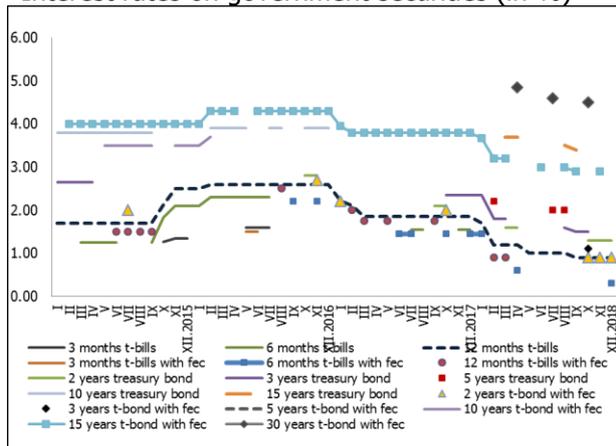
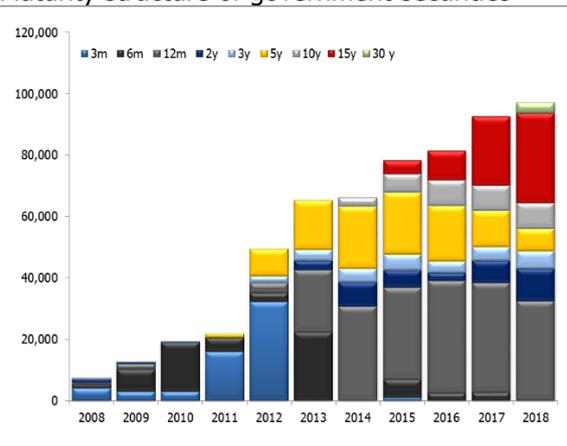


Chart 32
Maturity structure of government securities



Source: Ministry of finance and NBRNM.

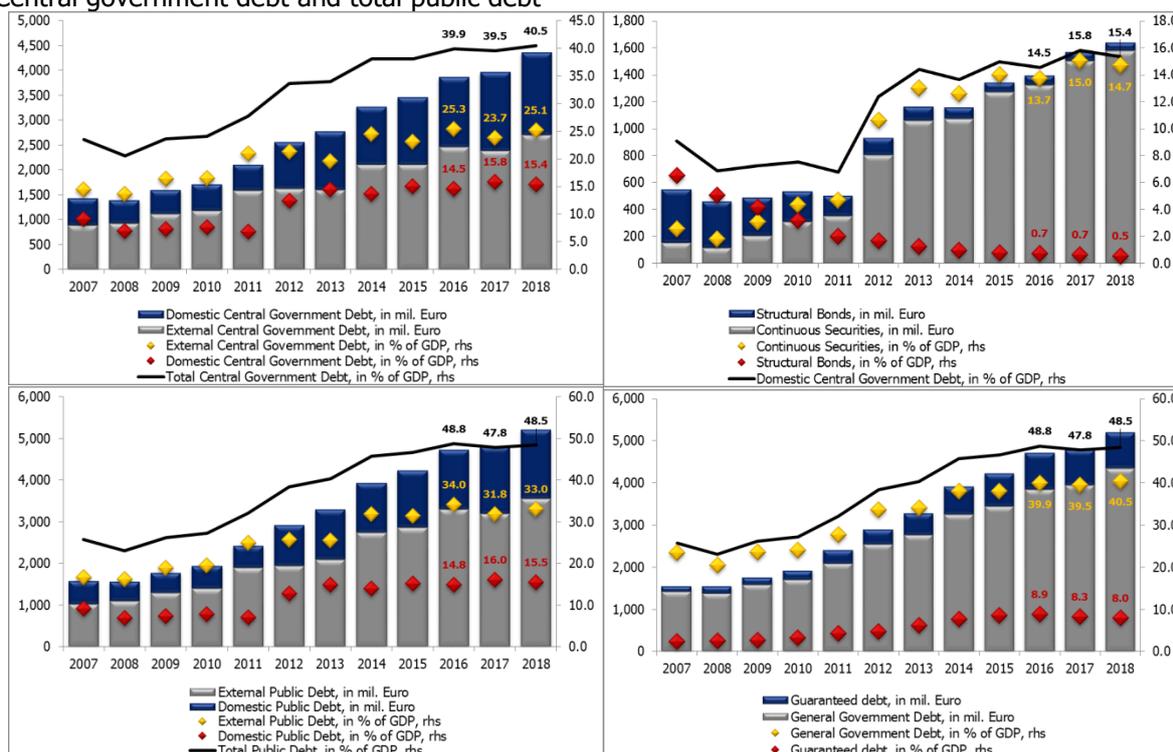
At the end of 2018, the central government debt³⁰ totaled Euro 4,344.4 million, which is an annual increase of 9.7%, given the increase of its share in the GDP from 39.5% to 40.5%, annually. The annual increase in the government debt is entirely due to the increase in the external debt (from 23.7% to 25.1% of GDP), amid slight increase in domestic government debt (from 15.8% to 15.4% of GDP). At the end of the year, the total public debt³¹ equaled Denar 5,202 million, thus being higher by 8.7% annually, given its higher share in the GDP on annual basis from 47.8% to 48.5%. The annual rise in the total public debt is mostly due to the higher government debt³² (given increase in the external debt of the central government), while the guaranteed debt of the public enterprises and joint stock companies in state ownership registered minimal growth. Consequently, the share of the government debt in the total public debt went up from 82.7% to 83.5% in 2018, while the share of the guaranteed debt in the total public debt went down from 17.3% to 16.5% in 2018, given a share of the GDP of 40.5% and 8.0% of the government and guaranteed debt, respectively. In 2018, the share of external public debt in GDP increased by 1.1 p.p. at annual level, accounting for 33.0% of GDP, while the share of domestic debt fell by 0.5 p.p., accounting for 15.5% of GDP.

³⁰ Refers to the debt of the central government including public funds, excluding municipalities (Source: Ministry of Finance).

³¹ The public debt is defined under the Law on Public Debt (Official Gazette of the Republic of Macedonia No. 165/14), according to which it is the sum of the government debt and the debt of public enterprises established by the state or municipalities, municipalities within the city of Skopje and the city of Skopje, and companies that are entirely or predominantly owned by the state or by the municipalities, the municipalities within the city of Skopje and the city of Skopje, for which the Government has issued a state guarantee.

³² Government debt is defined as a sum of debt of the central and the local government.

Chart 33
Central government debt and total public debt

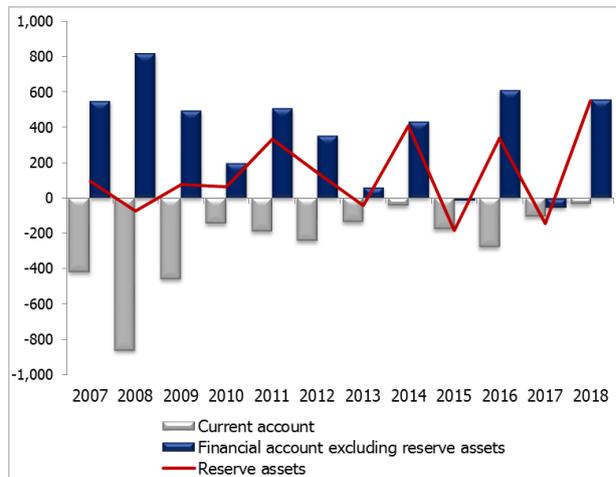


Source: Ministry of Finance and NBRNM calculations.

3.4. Balance of payments, IIP and external debt

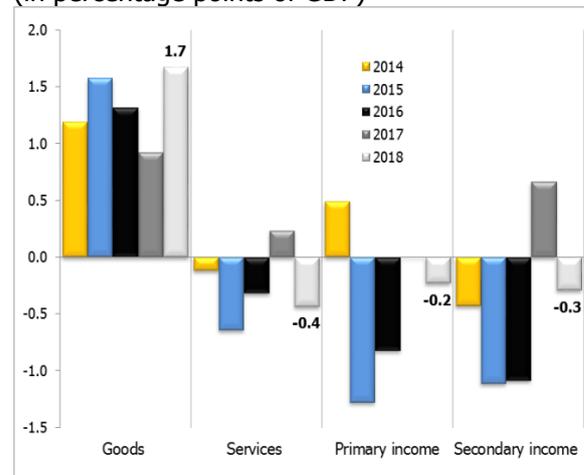
The favorable developments in the balance of payments continued in 2018, amid more stable domestic environment, stabilization of the expectations of economic agents, as well as favorable changes in the structure of the domestic export. The current account deficit decreased, for the second consecutive year, reducing to a record low of 0.3% of GDP (by 0.7 percentage points of GDP lower compared with the previous year). This change is entirely due to the improving trade balance in goods, mainly due to the stronger export activity of the industrial facilities with foreign capital. The financial account of the balance of payments registered significant net inflows, largely in the form of foreign direct investments, as well as from the government borrowing on the international financial markets. In such circumstances, the financial flows in 2018 enabled full financing of the current account deficit, as well as significant growth in foreign reserves during the year.

Chart 34
Current, capital and financial account
(in millions of euros)



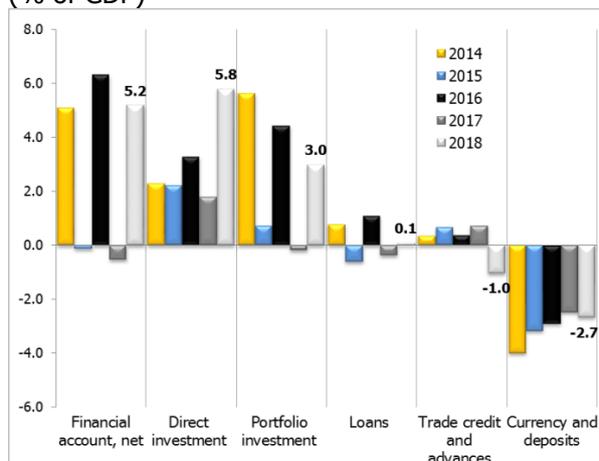
Source: NBRNM.

Chart 35
Contribution of individual components in the
annual change in the current account
(in percentage points of GDP)



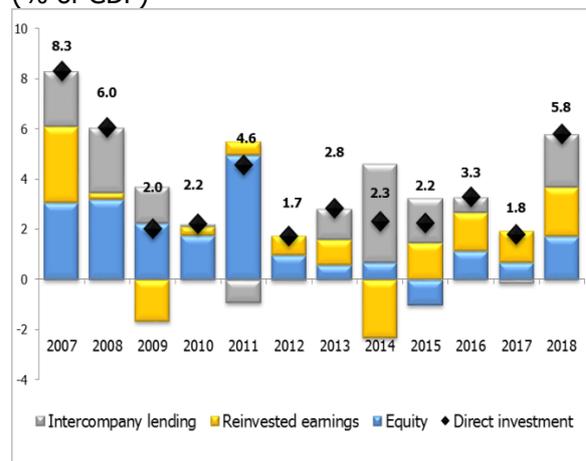
In 2018, the trade surplus of services decreased by 0.4 percentage points of GDP, which is mostly due to a one-off effect (high one-time outflow of funds in the category compensation for using intellectual property in the last quarter), which was only partially offset by the higher net inflows in transport and manufacturing services on physical inputs owned by others. After the growth in the previous year, the surplus in the secondary income registered small annual narrowing (of 0.3 percentage points of GDP), mainly due to the lower net inflows of official government transfers, given the relatively stable net inflows of private transfers. However, compared in absolute terms, net inflows in secondary income in 2018 increased, mainly reflecting the growth of the purchase of cash from the currency exchange market and enabled full coverage of the negative trade balance. The deficit in primary income moderately expanded (by 0.2 percentage points of GDP), mainly due to the shifts in the income from investments.

Chart 36
Financial account
(% of GDP)



Source: NBRNM.

Chart 37
Direct investment
(% of GDP)



In 2018, the financial account of the balance of payments registered high net inflows of 5.2% of GDP, compared to the moderate net outflows in the previous year. The major contribution to the favorable trends in the financial account was made by foreign direct

investments, which reached their highest share in GDP in the period after the global financial crisis (of 5.8% of GDP), indicating improved perceptions and confidence of investors in the domestic economy. The realized direct investments have mainly favorable structure, with a higher share of the non-debt component, enabled by the growth of reinvested earnings and share capital, amid significant net inflows on the basis of intercompany debt. The net inflows in the debt and non-debt components of foreign direct investments are higher than the flows registered in the previous year. According to the analysis by activity, most of the investments of direct investors were made to manufacture of motor vehicles and metal and machine products³³. The government borrowing, covered by the net flows in portfolio investments, was also an important source of inflows in the financial account in 2018. Namely, the reduced uncertainty and improved perceptions and expectations for the domestic economy created a favorable environment for government borrowing on the international financial markets, on favorable terms³⁴. Part of the total amount of the issued Eurobond was used for early purchasing by the government of part of the Eurobond issued in 2015. Net debt of other sectors³⁵ in the form of long-term loans amounted to 1% of GDP, largely derived from borrowing of public enterprises, to construct road infrastructure. Such performances were partially offset by the growth of net-assets in the category currency and deposits, mainly due to the increased funds of other sectors and to a lesser extent, from the corporate sector deleveraging based on trade credits.

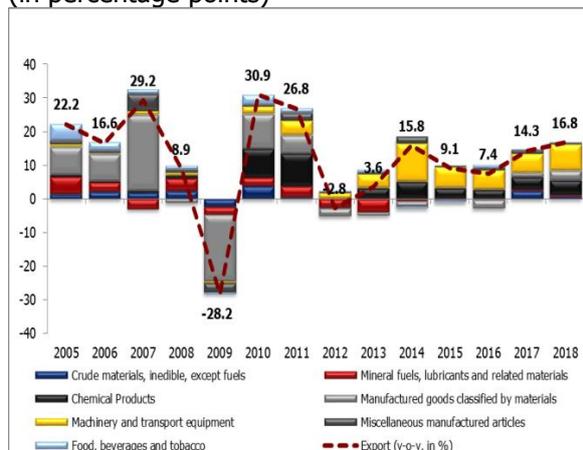
In 2018, the foreign trade deficit decreased by 0.4% or by 1.3 percentage points of GDP annually. The export activity of goods continued to grow at a double-digit annual growth rate of 17%. The largest contribution to these shifts in the export sector was made by the export of machinery and transport equipment and the export of chemical products, mainly from export oriented industrial facilities in foreign ownership. However, in 2018, significant positive impulse to the export growth was also given by part of the traditional activities, primarily the export of the metal processing facilities. Export performances were also reflected on the import side, with the raw materials necessary for operation of the new foreign facilities and the metal industry being the most significant factor for import growth. Additional contribution was also made by investment imports, imports for private consumption, as well as energy imports - mainly due to the price effect on oil derivatives, conditioned by the increase in world oil prices, amid a slower growth of imported quantities. Such trends in the individual import categories led to a total growth in imports in 2018 of 12.4%, annually.

³³ The statement should be interpreted with a precautionary approach, since it is based on preliminary data on the trends of direct investments for 2018. In accordance with the methodology and policy of publishing these data, in the period of preparation of the Annual Report, distribution of activities by most of the direct investments, which are in the form of reinvested profit and part of the debt instruments, is not available.

³⁴ In January 2018, the sixth Eurobond in the amount of Euro 500 million with maturity of 7 years and an interest rate of 2.75% was issued on the international capital market.

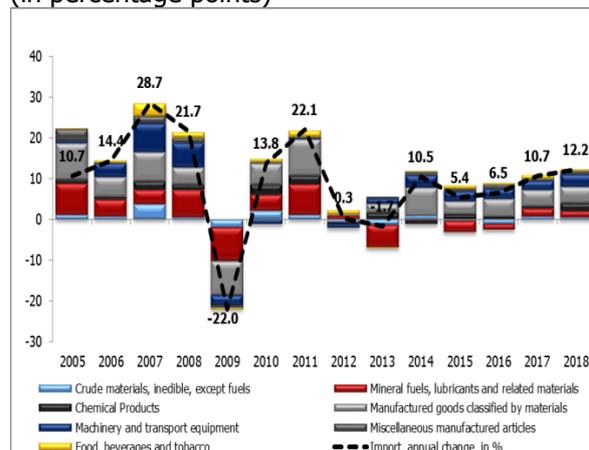
³⁵ Other sectors category includes banks and non-banking corporate sector.

Chart 38
Contributions to the annual export growth
(in percentage points)



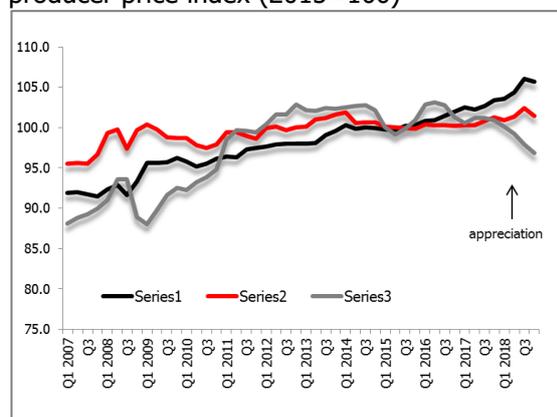
Source: SSO (State Statistical Office)

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



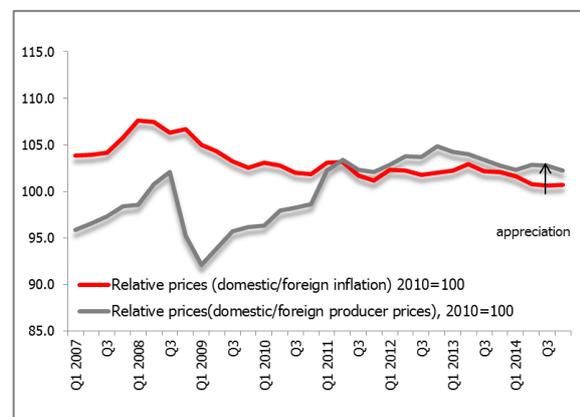
The analysis of the indicators for the changes in the price competitiveness of the Macedonian economy³⁶ indicates divergent movements compared to the previous year. REER deflated by consumer prices appreciated by 0.9%, while REER deflated by producer prices depreciated by 2.4%. These annual changes with both indices reflect the favorable movements in relative prices, while the change in the nominal effective exchange rate acted in the opposite direction, i.e. towards appreciation of REER.

Chart 40
NEER and REER, without primary commodities
calculated according to the consumer price and
producer price index (2015=100)



Source: NBRNM.

Chart 41
Relative prices
(2015=100)



The REER indices calculated according to the unit labor costs³⁷ indicate deterioration in the price competitiveness of the domestic economy in 2018. Namely, the REER index calculated with weights based on the total foreign trade appreciated by 4.0%, given the appreciation of the NEER of 2.6% and an annual growth in relative labor costs of 1.3%. Annual appreciation was registered in the REER index calculated by using weights based on the

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

³⁷ The REER indices based on the unit labor costs are NBRNM internal calculations and do not represent a formal statistical survey. The calculation uses the data on the unit labor costs indices at a level of the entire economy, published by the ECB and the Bureau of Labor Statistics of the United States. Data based on internal calculations are exceptions, such as the data for Switzerland, Russia, Turkey and Serbia, whereby the calculated indices for these countries refer only to the industrial sector.

foreign trade without primary products, by 3.0%, conditioned by the appreciation of the NEER (by 2.1%) and the growth of the relative labor costs (by 0.9%).

Chart 42
REER (calculated according to the unit labor cost index, 2015=100)

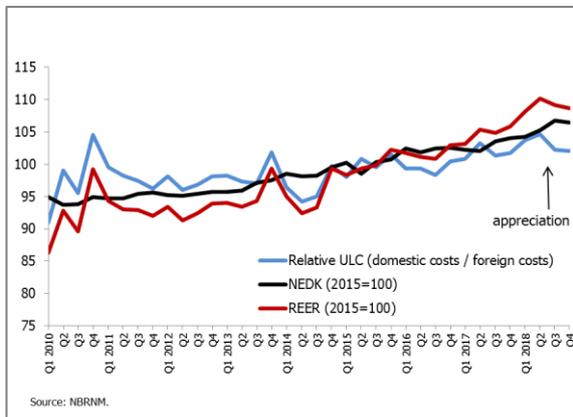
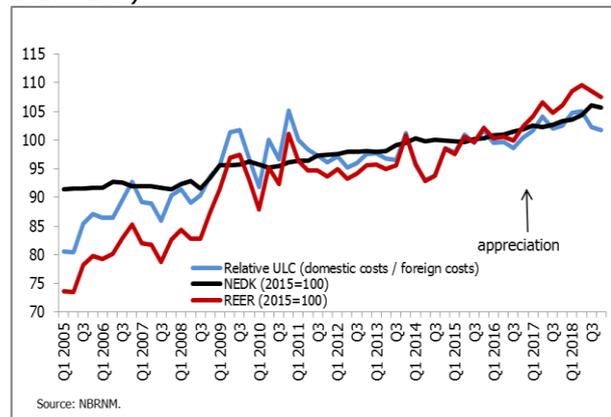
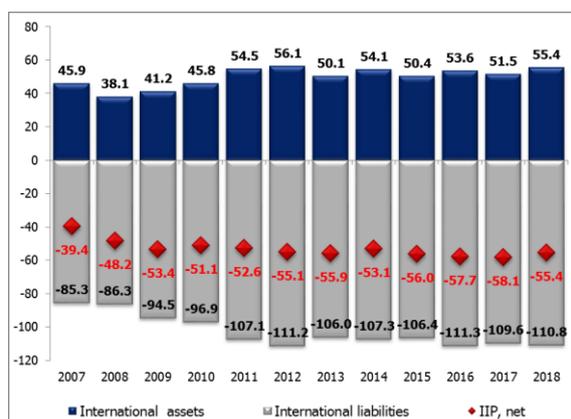


Chart 43
REER, without primary commodities (calculated according to the unit labor cost index, 2015=100)



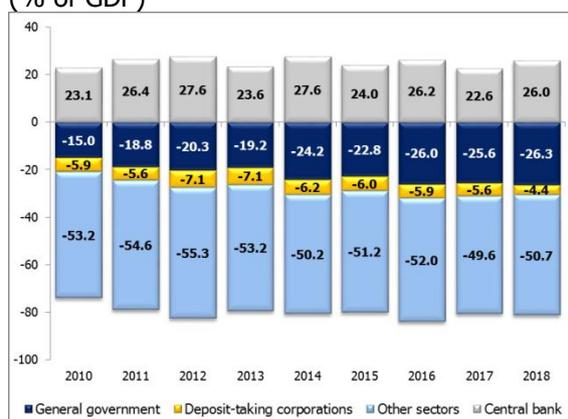
The international investment position (IIP) at the end of 2018 was negative and amounted to Euro 5,945.6 million, or 55.4% of GDP, which is a narrowing of 2.8 percentage points of GDP, compared to the previous year. The favorable annual change arises from the higher growth of international assets relative to the growth of international liabilities (by 3.9 and 1.1 percentage points of GDP, respectively).

Chart 44
International Investment Position (% of GDP)



Source: NBRNM.

Chart 45
International investment position, by sector (% of GDP)



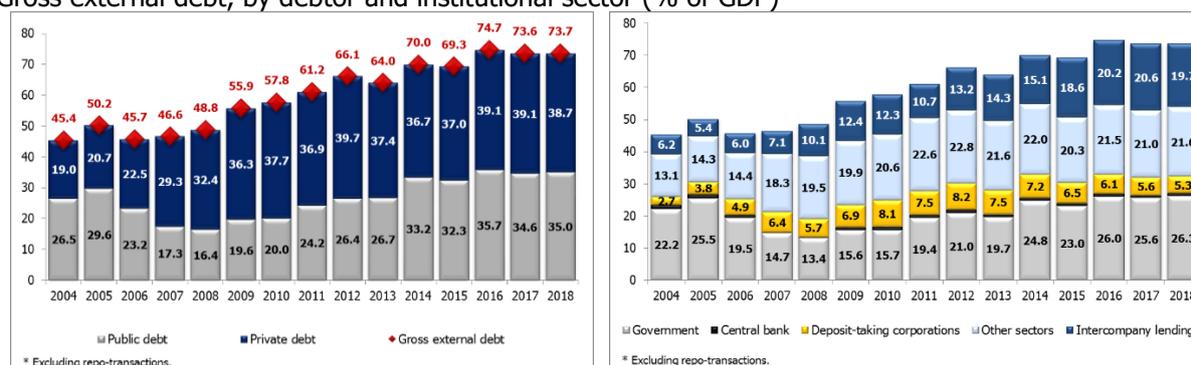
Sector-by-sector analysis of the international investment position indicates an improved net position of the central bank (amid a significant increase in foreign reserves) and depository institutions. On the other hand, deterioration in the external position was registered in the category other sectors, due to the increase in net liabilities to foreign direct investors and based on long-term financial loans. In 2018, there was an increase in the negative net external position of the government, due to the higher net-indebtedness to external creditors

on the basis of portfolio investments, reflecting the effect of the issuance of the sixth Eurobond on the international financial markets³⁸.

At the end of 2018, the gross external debt amounted to Euro 7,907.5 million, or 73.7% of GDP, which, according to relative indicators, is an almost unchanged amount compared to the end of 2017. The higher public debt was offset by the fall of the private sector debt. The growth of the external debt of the public sector is due to the higher liabilities based on portfolio investments of the central government and the borrowing of public enterprises in the form of long-term loans. On the other hand, the reduction of intercompany debt as a result of the lower liabilities to direct investors contributed to the annual fall in private debt.

Chart 46

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



Source: NBRNM.

In general, the external indebtedness indicators of the national economy generally show that the gross external debt is in the safe zone. The only indicator that still classifies the economy in the group of highly indebted countries is the gross external debt to GDP ratio. However, an important feature of the gross external debt, which contributes to reduce the vulnerability of the economy, is the high structural share of the liabilities based on intercompany debt and based on trade credits, which are more stable sources of funding. The analysis of the dynamics of external debt indicates different conclusions about the changes in the solvency compared with 2017. Thus, favorable developments were registered in the indicators for the shares of gross debt and interest repayment in exports of goods and services and other inflows, while the ratio between gross debt and GDP and the share of the repayment of gross debt³⁹ in exports worsened. Liquidity indicators registered a moderate annual improvement, with the exception of the share of short-term debt in total debt.

At the end of 2018, net external debt, as an additional indicator of the external position of the economy, amounted to Euro 2,647.1 million, or 24.7% of GDP. On an annual basis, net external debt decreased by 3.8 percentage points of GDP, resulting from the reduction in the net debt of the public and private sector (of 3 and 0.8 percentage points of GDP, respectively).

³⁸ In January 2018, the government borrowed on the international financial markets through the issuance of the sixth Eurobond, in the amount of Euro 500 million with maturity of 7 years and an interest rate of 2.75%. Part of the total amount of the sixth issued Eurobond was used for partial early purchasing by the government of the Eurobond issued in 2015.

³⁹ The movement of the indicator for the share of the repayment of gross debt in exports of goods and services and other inflows to some extent reflects the partial early purchasing by the government of the fourth Eurobond issued in 2015.

Table 1
External debt indicators

| | Solvency | | | | Liquidity | | |
|--|---|--|--------------------|--|--|---|--|
| | Interest payments/ Export of goods and services and other inflows | Gross debt/ Export of goods and services and other inflows | Gross debt/ GDP | Debt servicing/ Export of goods and services and other inflows | 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 | 30.27 |
| 31.12.2005 | 2.66 | 147.0 | 54.2 | 11.1 | 1.67 | 1.04 | 26.67 |
| 31.12.2006 | 3.44 | 131.3 | 49.8 | 21.7 | 1.95 | 1.34 | 28.98 |
| 31.12.2007 | 2.78 | 119.3 | 51.3 | 19.4 | 1.35 | 1.08 | 39.82 |
| 31.12.2008 | 2.66 | 116.9 | 54.1 | 10.2 | 1.29 | 0.95 | 35.19 |
| 31.12.2009 | 2.43 | 131.0 | 57.8 | 11.8 | 1.29 | 0.94 | 32.86 |
| 31.12.2010 | 3.22 | 140.4 | 59.7 | 13.9 | 1.49 | 0.99 | 27.93 |
| 31.12.2011 | 3.12 | 148.4 | 64.6 | 16.8 | 1.78 | 1.18 | 25.22 |
| 31.12.2012 | 2.92 | 142.1 | 67.6 | 13.1 | 1.64 | 1.03 | 26.66 |
| 31.12.2013 | 2.51 | 137.3 | 67.3 | 15.8 | 1.64 | 1.08 | 23.31 |
| 31.12.2014 | 3.01 | 149.1 | 74.0 | 17.2 | 1.82 | 1.13 | 22.32 |
| 31.12.2015 | 2.68 | 143.8 | 73.2 | 20.0 | 1.69 | 1.13 | 21.32 |
| 31.12.2016 | 2.37 | 149.4 | 79.3 | 14.9 | 1.65 | 1.16 | 21.93 |
| 31.12.2017 | 2.69 | 139.1 | 76.9 | 12.7 | 1.32 | 0.89 | 23.94 |
| 31.12.2018 | 2.20 | 132.4 | 78.0 | 15.7 | 1.40 | 1.03 | 25.82 |
| <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: NBRNM.

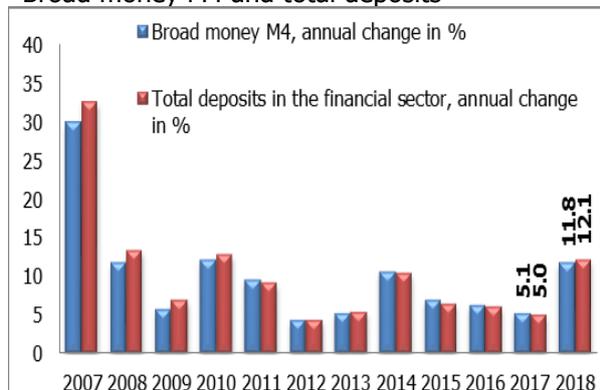
3.5. Monetary and credit aggregates

3.5.1. Monetary aggregates

In 2018, there was a substantial acceleration in the annual growth of the money supply and the total deposits in the financial sector⁴⁰. The acceleration of the monetization in the economy is in line with the reduced uncertainty, the continuity of favorable developments in the labor market, the favorable external position of the economy and the strengthening of economic activity. Positive shifts were registered in the structure of savings from currency and maturity aspect, indicating an improvement of the expectations of economic agents and strengthening of the confidence in the domestic currency.

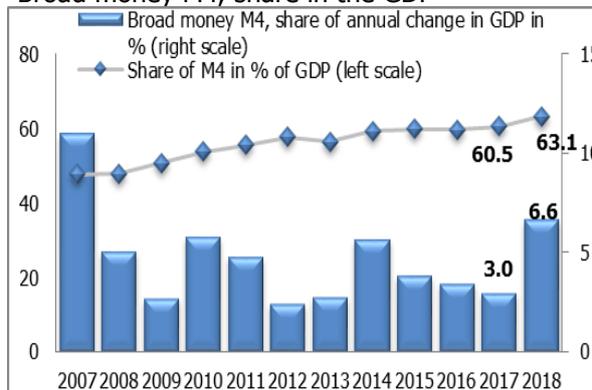
Chart 47

Broad money M4 and total deposits



Source: NBRNM.

Broad money M4, share in the GDP



⁴⁰ Data refer to non-government deposits in banks and savings houses, funds of other financial institutions on the accounts with the National Bank and funds of local government authorities on the accounts with the National Bank. The data are consistent with the methodological changes of the National Bank from June 2018. For more information on the methodological changes visit: http://www.nbrm.mk/monetarna_statistika_i_statistika_na_kamatni_stapki.nspj.

In 2018, broad money measured through M4 grew by 11.8%, which is a substantial acceleration compared with the growth in the previous year (5.1%). Positive contribution to the money supply growth was made by all three components, currency in circulation, demand deposits and total deposits. The contribution of deposits was higher compared to last year, at the expense of the contribution of the other two more liquid components of the broad money. Adequately to the accelerated monetary growth, the indicator for the share of the annual change in the money supply relative to GDP at the end of the year equaled 6.6% and increased compared with the previous year (3.0%). The share of the money supply in GDP continued to grow and amounted to 63.1% at the end of the year, compared to 60.5% in the previous year.

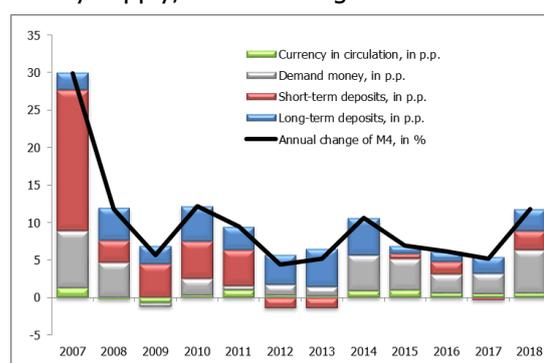
Table 2
Money supply components - balance and changes

| | Balance as of | | | Annual change | | |
|--|-----------------------|---------|---------|---------------|------|------|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| | in millions of denars | | | in % | | |
| Currency in circulation | 28,193 | 29,968 | 32,233 | 7.2 | 6.3 | 7.6 |
| Demand money | 86,641 | 96,288 | 117,616 | 11.0 | 11.1 | 22.1 |
| M1 | 114,834 | 126,256 | 149,849 | 10.0 | 9.9 | 18.7 |
| Short term denar deposits up to 1 year | 51,085 | 47,834 | 49,487 | -2.6 | -6.4 | 3.5 |
| Short term foreign currency up to 1 year | 104,347 | 106,566 | 114,501 | 6.9 | 2.1 | 7.4 |
| M2 | 270,266 | 280,656 | 313,837 | 6.2 | 3.8 | 11.8 |
| Long term denar deposits over 1 to 2 years | 35,119 | 37,407 | 38,132 | 2.0 | 6.5 | 1.9 |
| Long term foreign currency over 1 to 2 years | 16,814 | 18,926 | 21,466 | 10.7 | 12.6 | 13.4 |
| M3 | 322,199 | 336,989 | 373,436 | 6.0 | 4.6 | 10.8 |
| Long term denar deposits over 2 years | 20,128 | 22,647 | 29,369 | 9.0 | 12.5 | 29.7 |
| Long term foreign currency over 2 years | 12,385 | 13,295 | 14,010 | 7.2 | 7.3 | 5.4 |
| Total deposits* | 239,878 | 246,675 | 266,965 | 4.4 | 2.8 | 8.2 |
| Total depos | 326,519 | 342,963 | 384,581 | 6.1 | 5.0 | 12.1 |
| M4 | 354,712 | 372,931 | 416,814 | 6.2 | 5.1 | 11.8 |

*without demand deposits

Source: NBRNM.

Chart 48
Money supply, annual change and structure



In conditions of a stable macroeconomic environment and increased confidence, the savings of economic agents in 2018 increased by 12.1%, which especially accelerated from the second quarter of the year, and was significantly higher compared with the previous year (5.0%) and the highest in the last seven years. Observed by sector, generator of the growth are household deposits with contribution of 6.4 percentage points, while the contribution of corporate and other sectors deposits⁴¹ is positive, but smaller (2.5 and 3.3 percentage points, respectively). There is significant contribution of other sectors deposits, which is significantly higher compared with the previous year (for more details see the box). Analyzed by currency, the total deposit growth mostly arose from denar deposits (including demand deposits), with contribution of 8.9 percentage points, amid a slower growth of foreign currency deposits, with contribution of 3.3 percentage points. Such performances reflect the stable expectations of economic agents, as indicated by the changes from the aspect of the maturity structure of the deposit base, with further increase in the contribution of time deposits.

⁴¹ Other sectors deposits include deposits of other financial institutions, local government deposits and deposits of non-profit institutions serving households with banks, as well as denar transferable deposits of other financial institutions and local government with the National Bank.

Chart 49
Total deposits (with demand deposits), annual change and contribution to the change from sectoral aspect

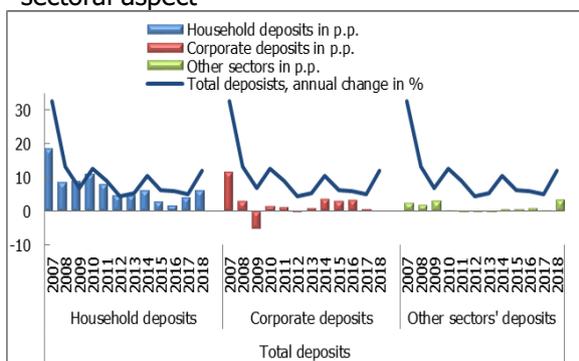


Chart 50
Total household deposits, annual change and contribution to the change by maturity and currency structure

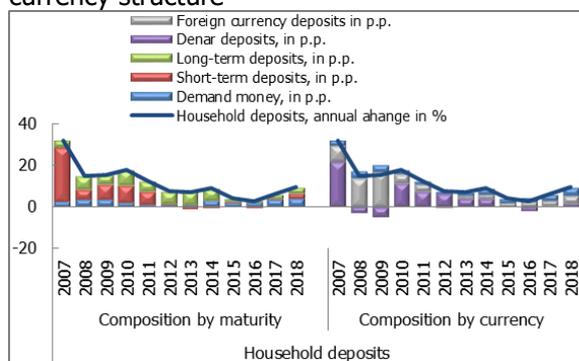
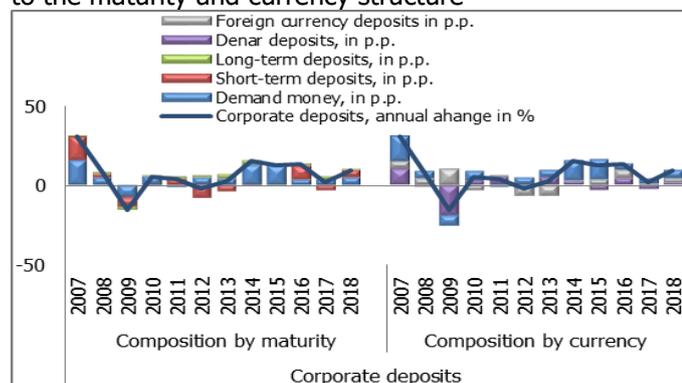


Chart 51
Total corporate deposits, annual change and contribution to the maturity and currency structure



Source: NBRNM.

Household deposits⁴² in 2018 registered an annual growth of 9.5%, which is a moderate acceleration compared to the growth of the previous year (6.1%). Analyzing the maturity structure, the growth resulted from all components. However, in 2018, there was significant reduction of the contribution of demand deposits, at the expense of the larger contribution of savings in the short and in the long run. Positive shifts were also registered in the currency structure of household savings, where the largest contribution to the annual growth was made by denar deposits (with demand deposits). The growth of corporate deposits in 2018 amounted to 9.5% (2.1% in the previous year), mostly due to demand deposits and short-term deposits. Observing by currency, denar deposits (including demand deposits) explain most of the growth of total corporate deposits, amid smaller positive contribution of foreign currency deposits. Taking into account such performance, the degree of euroization, measured by the share of deposits with foreign currency component in total deposits, in 2018 moderately decreased to 40% (40.9% in the previous year). Also, an improvement was observed in the share of household deposits with foreign currency component in total household deposits, which registered a slight decline (from 48.2% in the previous year to 47.6% in 2018).

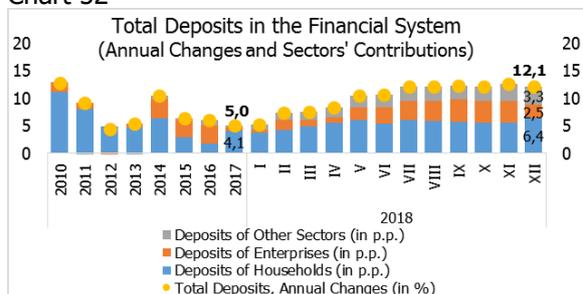
⁴² The data on the deposits include also the demand deposits.

Box 1. Review of the changes in the structure of the financial system deposits in 2018

The financial system deposits in the Republic of North Macedonia in 2018 registered a solid annual growth of 12.1%, which is higher by more than twice compared with the growth in the previous year (5.0%). Observing the sector structure, in 2018, the main generator of the increase in the financial system deposits was also the household sector, contributing 6.4 percentage points, with positive contribution of the other sectors deposits within the financial system and the corporate deposits (3.3 and 2.5 percentage points, respectively). At the end of 2018, the household sector had the largest share in the financial system deposits, with a share of almost 2/3, while the share of the corporate deposits amounted to 25%. The share of other sectors is relatively small and equals 9%, but compared with the previous year, it increased by 2.2 percentage points (mainly as a result of other financial institutions), at the expense of the reduction of the share of the household and the corporate sectors.

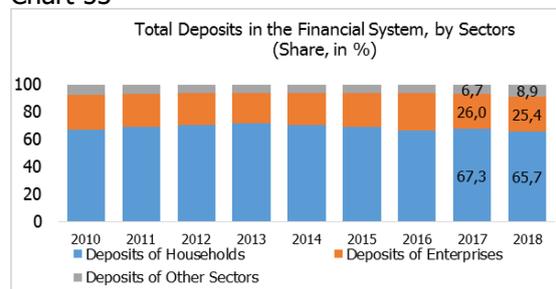
Total deposits in the financial system

Chart 52



Source: NBRNM

Chart 53

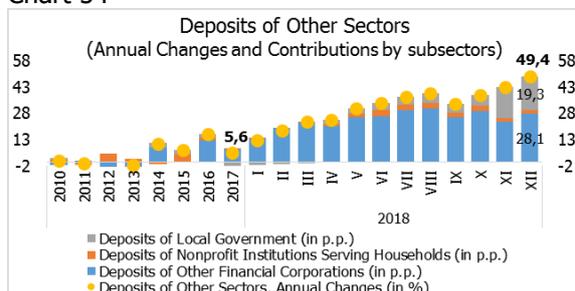


Source: NBRNM

Deposits of other sectors of the financial system in 2018 increased by almost 50%, on an annual basis. This category of deposits includes deposits of other financial institutions, deposits of local government authorities and deposits of non-profit institutions serving households. The largest contribution (of 28 percentage points) to the growth of the total deposits of other sectors was made by the sub-sector other financial institutions, and an increase in the contribution towards the end of the year was also registered in the sub-sector local government⁴³.

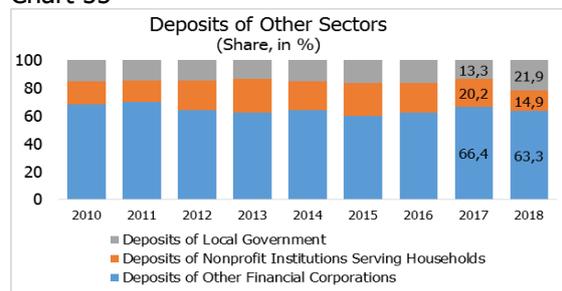
Total deposits of other sectors

Chart 54



Source: NBRNM

Chart 55



Source: NBRNM

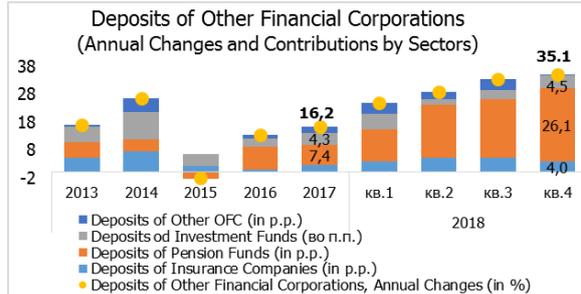
Deposits of the sub-sector **other financial institutions** dominate in the total deposits of other sectors, with a share of around 60%. This sub-sector includes deposits of pension and

⁴³ The growth of the deposits with the sub-sector local government is mostly due to the transfer of funds from the RNM Budget, in the amount of Denar 3,033 million, into the accounts of local government authorities with the National Bank. This transfer was made in accordance with the Law on Financial Support to the Local Government Units and the single beneficiaries established by the local government units for financing of overdue liabilities (Official Gazette of the Republic of Macedonia No. 209).

investment funds, deposits of insurance companies, and starting from 2014, this sector also includes deposits of financial companies and providers of financial leasing. Deposits of other financial institutions in 2018 continued to grow at a faster pace, whereby at the end of the year, their stock was higher by 35%, on an annual basis. Analyzing the structure, the growth of deposits of other financial institutions is mostly due to the increase in deposits of **pension funds**, with contribution of 26 percentage points, while growth, but more moderate, was also registered in deposits of investment funds and deposits of insurance companies (contribution of 4.5 and 4.0 percentage points, respectively). With the growth of deposits of pension funds, their share in the total deposits of other financial institutions continued to grow and reached 45% at the end of 2018.

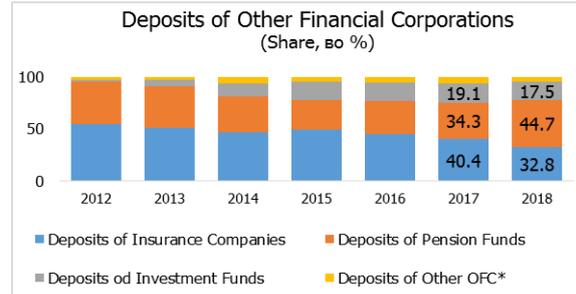
Total deposits of other financial institutions (OFIs)*

Chart 56



Source: NBRNM

Chart 57



Source: NBRNM

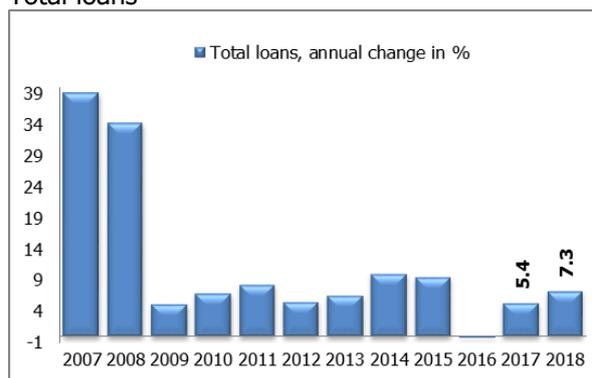
*Starting from 2014, data on other financial institutions also contain deposits of financial companies and providers of financial leasing. The deposits of these institutions are included in the category deposits of other financial institutions.

3.5.2. Lending activity

Amid rapid growth of the banks' deposit potential and more favorable domestic environment, the banks' lending activity in 2018 registered solid growth of 7.3%, which was higher than last year (5.4%). Growth was driven by loans to the household sector, with positive shifts registered in the lending to the corporate sector, where an acceleration in the growth was registered. In order to further support lending, the National Bank during 2018 reduced its policy rate on three occasions, sending out a signal to banks that there is room for further relaxation of the lending terms⁴⁴. The indicator for the share of the annual growth of total loans in GDP at the end of 2018 amounted to 3.3 percentage points, compared to 2.5 percentage points in 2017, while the share of loans in GDP remained relatively stable and amounted to 48.8%.

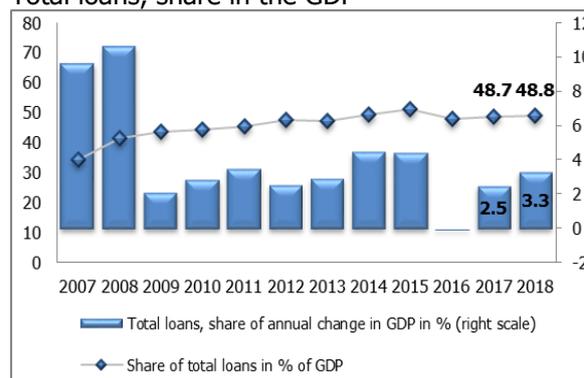
⁴⁴ During 2018, the interest rate on CB bills was reduced in March, August and December, by 0.25 percentage points, respectively, i.e. from 3.25% to 2.50%.

Chart 58
Total loans



Source: NBRNM.

Chart 59
Total loans, share in the GDP



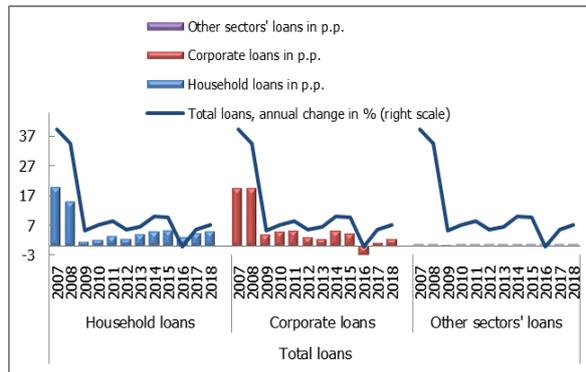
Analyzed by sector, the largest contribution to the total credit growth in 2018 was made by loans to the household sector (contribution of 4.8 percentage points). The contribution of corporate loans is smaller (2.3 percentage points), while loans to other sectors⁴⁵ in 2018 made insignificant contribution (0.1 percentage points). It is important that the lending to the corporate sector registered growth intensification, compared with the previous two years, as confirmed by the banks' risk perceptions. Namely, according to the National Bank lending surveys, in 2018, for the first time in a longer period, the factor expectations for the total economic activity contributes to ease the lending terms with the corporate sector. In terms of lending to households, the analysis according to the individual types of loans indicates that the annual growth of loans to households also in 2018 results from the growth of consumer and housing loans, which also registered moderate growth acceleration. At the end of the year, the interest rate⁴⁶ on total loans to households decreased by 0.3 percentage points compared with the previous year and equaled 6.1%, while the interest rate on total corporate loans declined by 0.5 percentage points and equaled 4.6%. In the newly approved loans, the interest rates on household and corporate loans decreased by 0.3 percentage points and 0.4 percentage points and equaled 5.0% and 4.3%⁴⁷ at the end of the year, respectively.

⁴⁵ Other sectors loans include loans to other financial institutions, local government loans and loans to non-profit institutions serving households.

⁴⁶ Data on interest rates are in accordance with the methodological changes of the National Bank from June 2018. For more information visit: http://www.nbrm.mk/monetarna_statistika_i_statistika_na_kamatni_stapki.nsp.x.

⁴⁷ Regarding the interest rates on newly approved loans, one should have in mind that they are characterized with variable movements. Volatility of interest rate on newly approved loans results from the fact that they are determined by the volume of newly approved loans (which can vary from month to month) and their interest rate.

Chart 60
Total loans, annual change and sectoral structure



Source: NBRNM.

Chart 61
Total household loans, annual change and structure by use

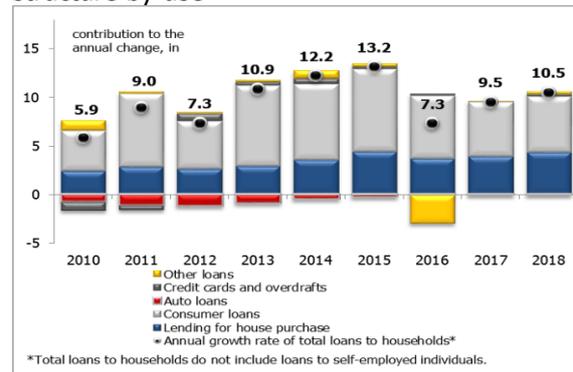
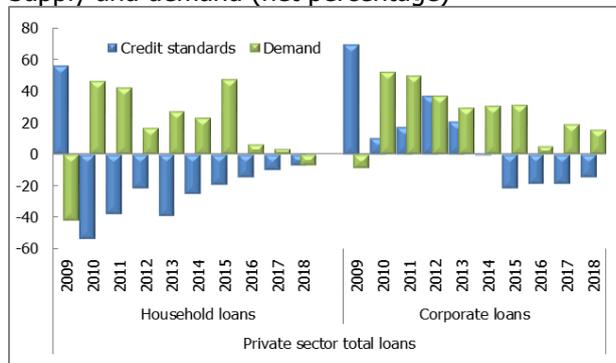


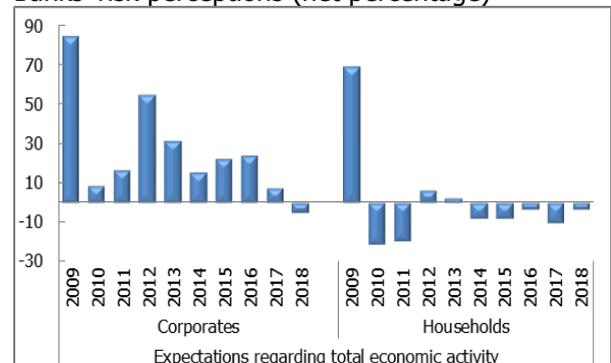
Chart 62
Supply and demand (net percentage)*



*In terms of credit standards, negative net percent means easing of the credit standards. In terms of demand, negative net percent means reduced demand.

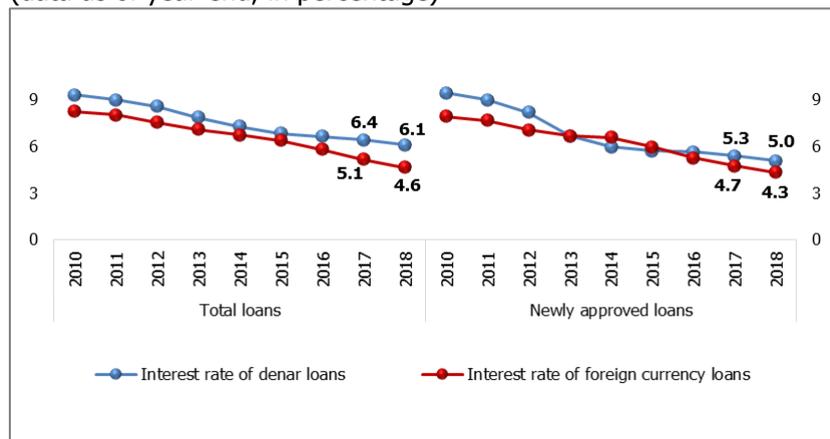
For more details on the lending surveys, visit the NBRNM website.
Source: Lending Survey, NBRNM.

Chart 63
Banks' risk perceptions (net percentage)*



* As for the households, it presents the average of the net percentage of the risk factors that influence the credit standards when extending housing and consumer loans.

Chart 64
Interest rates on total loans, by sector
(data as of year-end, in percentage)



Source: NBRNM.

IV. Macroeconomic environment and monetary policy in 2019 - 2021⁴⁸

In the period ahead, the National Bank's monetary policy will seek to maintain price stability as a primary monetary objective defined pursuant to the legal provisions. 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. To achieve the legally defined goal, the National Bank will continue to apply strategy of targeting the nominal exchange rate of the denar against the euro, bearing in mind the importance of the exchange rate for maintaining price stability and stable inflation expectations of economic agents. The operational monetary policy framework, as before, will be founded on a flexible basis in order to maintain an adequate level of liquidity in the banking system and balance on the foreign exchange market. Thus, the monetary policy will contribute to maintain the overall macroeconomic stability, as a key factor in creating favorable environment for sustainable economic growth.

According to the National Bank's October 2018 forecasts, the monetary policy in the period 2019-2021 would be conducted in a relatively favorable and stable environment. The economic growth would accelerate, primarily influenced by domestic demand, and in circumstances of expectations for revival of the investment activity and acceleration in the growth of private consumption. It is expected that the foreign reserves, according to all adequacy indicators, will be kept in the safe zone. Regarding price stability, inflation will be moderate and will be around the historical average of 2%. The National Bank will continue to closely monitor the achievement of the projected path of foreign reserves and foreign exchange market developments, amid simultaneous monitoring of all present risks in order to timely adjust the monetary setup.

The implementation of the projected macroeconomic framework is associated with risks which in the medium run mostly arise from the possibility for further escalation of the global trade protectionism, the possibility for faster tightening of global financial conditions and the effects especially on the emerging economies, the effects of the process of establishing new relations between the EU and the United Kingdom, as well as the geopolitical developments. The risks arising from the domestic environment are mainly associated with the political context in the country and are assessed as less pronounced. Any materialization of the aforementioned risks will mean change in the environment for the monetary policy conduct, in comparison with the main expectations. Positive risk, which is not embedded in the forecasts for the period ahead, is the progress in the Euro-Atlantic integration process, which can certainly have beneficial effects on the economy.

Observing inflation, the environment of stable prices and absence of significant inflationary pressures is maintained in the period of forecasts. In 2019, moderate acceleration in the inflation rate is expected, which would amount to around 2% according to the October forecasts. It is expected that the price growth in 2019 will be largely encouraged by the growth of the food component of inflation, amid expectations for growth of world prices of primary food products. Positive contribution to the increase in the inflation is expected from core inflation, amid expectations for further growth of domestic demand, as well as from the energy component of inflation, in accordance with the October assumptions for a moderate rise in oil prices on world markets. In the next two years (2020 and 2021), inflation would remain at the level of 2019 and would amount to around 2%, with further growth of domestic economic

⁴⁸ This section gives a review of the macroeconomic forecasts of the National Bank from October 2018.

activity and growth in world prices. The main risk to the inflation forecast is associated with the uncertainty about the future dynamics of market prices of primary commodities, and above all the uncertainty of the change in the oil price, for which the current estimations indicate its fall (instead of the October expectations for growth) in 2019.

Regarding the economic activity, for 2019 and 2020, economic growth rates are expected to accelerate to 3.5% and 3.8%, respectively. It is expected that the growth will arise from exports and investments, which corresponds to the expectations for increased activity of foreign companies from the free export-oriented economic zones, positive developments in the traditional export capacities, entry of new companies and further, but slower, growth of the foreign effective demand. The favorable economic environment would contribute to a further gradual growth of private consumption, through a steady growth of wages and employment, and additional impact is expected from the credit support of the banks. For the afore mentioned two years, the domestic investment activity is expected to recover, amid expectations for intensification of the cycle of public infrastructure investments, and the stable domestic political environment would also have a positive impact on the propensity of the private sector to invest. For 2021, it is expected that the domestic economy will keep on increasing, at a rate of real growth of around 4%.

In conditions of solid liquidity and solvency of banks and amid expectations for a stable domestic environment, the increase in the banks' deposit potential would contribute to greater financial support to the domestic economy, through the banking sector. The growth in total loans in 2019 is forecasted at the level of 8.5%, which on average will be maintained also in the following period (2020-2021). The forecasted credit growth reflects the factors on both the demand and the supply side. Thus, amid sound solvency and liquidity position of banks, with a more stable environment and sufficiently available assets for financing, it is expected that banks will provide greater credit support for both the households and the corporate sector. It is assessed that the growth in disposable income and favorable expectations will further support credit demand. Also, it is assumed that the potential and the propensity for saving in the banks will increase, and hence the growth of the deposit base of 7.7% in 2019. In the period ahead (2020-2021), it is expected that the growth of deposits will be 8.6%, on average. There are still downward risks around the forecast of the credit and deposit growth. Weaker potential recovery of the economy than expected and the presence of uncertainty caused by domestic factors can lead to greater restraint for saving, limited sources of funding for banks, exacerbation of risk perceptions and reduced willingness for borrowing by the private sector.

It is expected that the external position of the country, observed by the current account deficit, will be relatively favorable. The current account deficit would remain low and would average around 1.6% of GDP for the period 2019-2021. Namely, it is predicted that the balance of goods and services will improve in 2019, and then it will remain relatively stable. It is assessed that the strong utilization of the capacities of the new foreign companies will continue to provide support to the trade balance, coupled with positive performances of part of the traditional export sectors and the increased surplus in services. The surplus of secondary income would continue to decrease gradually and moderately, in the absence of shocks that would affect its dynamics, while the deficit in the primary income is expected to widen. The current account deficit, in the period 2019-2021, would be financed through financial flows in the form of foreign direct investments and through indebtedness of the public and the private sector abroad, which will also ensure further growth of foreign reserves and their maintenance 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, the movements of the world prices and the domestic political environment.

In the fiscal area, in the next medium-term period, it is expected that the implementation of prudent fiscal policy will continue, with further consolidation of the budget deficit and relatively stable level of public debt⁴⁹. Fiscal policy is an important factor that affects the monetary policy setup, with the policy nexus being a key factor for achieving sustainability of the external position of the country and maintaining macroeconomic stability. The budget deficit would be financed in combination from domestic and external sources, whereby government deposits with the National Bank would be maintained at the adequate level. This fiscal framework envisages slight increase in the government debt by 2020 and its slight decrease in 2021. The fiscal policy setup is accompanied by risks which, as in the monetary policy, arise from the domestic environment, but also from the external environment. The National Bank will continue to regularly monitor the current movements and present risks and, accordingly, will evaluate and adjust the monetary policy setup.

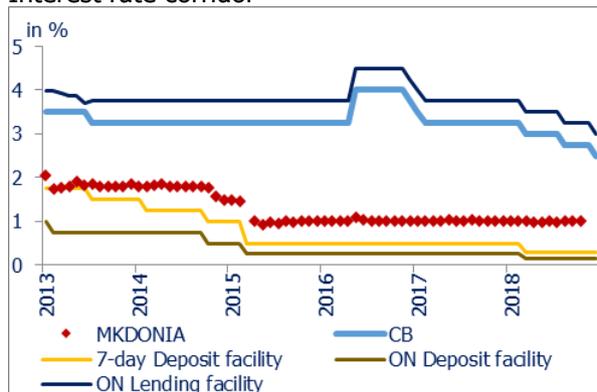
⁴⁹ Fiscal policy forecasts have been taken from the Fiscal Strategies of the Ministry of Finance.

V. Monetary instruments

During the operational implementation of the monetary policy, despite the growth of the banks' liquidity, the National Bank during 2018 maintained the stock of the main instrument at the same level, thereby creating a room for channeling the excess liquidity to the private sector. Besides reducing the interest rate on the main instrument on three occasions, lower interest rates were also applied to standing facilities with the National Bank.

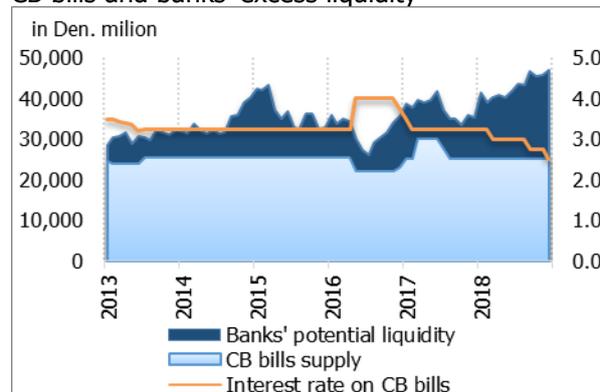
In 2018, the National Bank cut the key interest rate applied on CB bills⁵⁰ by 0.75 percentage points on a cumulative basis on three occasions (in March, August and December), at the historically lowest level of 2.5%. As a result of the decrease of the policy rate, lower interest rates were applied on both the repo auctions for providing liquidity⁵¹ and the overnight credit facility⁵². An additional easing of the monetary conditions was also signaled through the interest rates on the deposit facilities with overnight and seven-day maturity⁵³ which were reduced once, in March by 0.1 and 0.2 percentage points, at the level of 0.15% and 0.30%, respectively. The reduction of the interest rates on the monetary policy tools and the maintenance of the amount of the main instrument at the same level created a room for allocating the relatively high and growing banks' excess liquidity to the private sector, by the credit channel support to the economy.

Chart 65
Interest rate corridor



* 7DF - seven-day deposit facility; OD - overnight deposit facility; OL - overnight credit facility

Chart 66
CB bills and banks' excess liquidity⁵⁴



⁵⁰ At the auctions of CB bills, which are held on the first day of the reserve requirement maintenance periods, volume tender was used (offered amount of the CB bills and fixed interest rate).

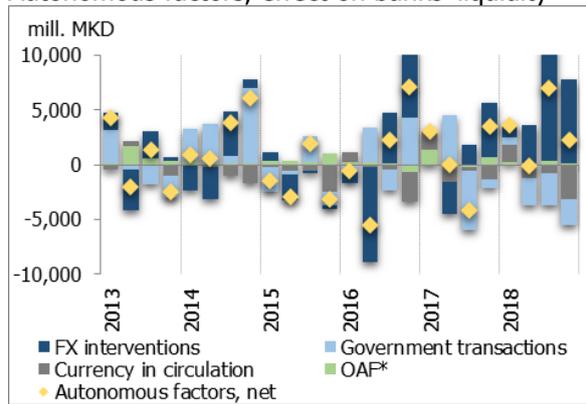
⁵¹ Auctions for providing seven-day liquidity are conducted once a week, i.e. every Friday. The interest rate on this instrument is equal to the interest rate on the CB bills.

⁵² The interest rate on the overnight credit facilities is higher by 0.5 percentage points relative to the interest rate on the CB bills.

⁵³ The overnight deposit facilities are available to the banks every day, while the deposits with seven days maturity are available to the banks once a week, i.e. every Wednesday.

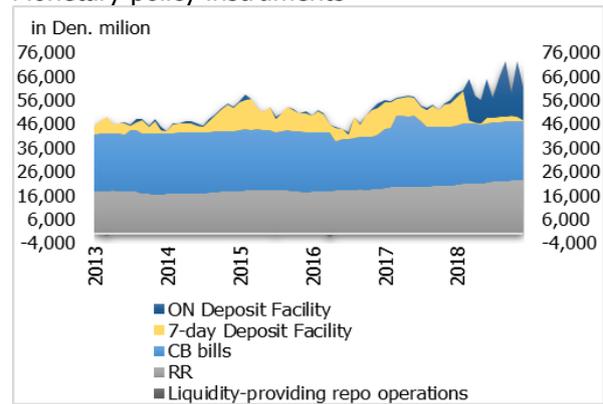
⁵⁴ The surplus of banks' liquidity refers to the first day of the reserve requirement maintenance period when the CB bills auction is held and represents the sum of the stock of the banks' accounts with the National Bank, the matured CB bills and deposit facilities with the NBRM on that day as well as the claims on the money market, reduced by the money market liabilities and the level of the reserve requirement for the forthcoming period.

Chart 67
Autonomous factors, effect on banks' liquidity



* OAF – other autonomous factors
Source: NBRNM.

Chart 68
Monetary policy instruments



In 2018, the banking system had a relatively high growth of denar liquidity, which was efficiently managed by the National Bank by applying the set of monetary instruments⁵⁵, in order to achieve the main monetary policy objectives. Namely, in the first quarter of the year, the banks' excess denar liquidity registered a moderate upward trend with almost equal contribution of: seasonally lower demand for currency in circulation, government transactions related with the agriculture subsidies in the second month of the year and the National Bank interventions on the foreign exchange market with purchasing the excess foreign liquidity, which was unusual for this time of the year. In the remaining three quarters, the banks' denar liquidity continued to grow, but at a faster pace. The largest contribution was made by the relatively higher purchase of the excess foreign currency on the FX market by the National Bank (a total of Euro 349.5 million in the period April - December), which was realized in terms of continuously higher FX supply by the export-oriented companies, moderately better developments on the foreign exchange market in the transactions with the other clients, as well as growth of the banks' foreign assets related to their extension of credits with a FX component (box Foreign Exchange Market). The impact of the FX interventions on the banks' denar assets was partially reduced by the steady increase in currency in circulation (except in the first quarter), which was also supported by the withdrawal of funds through government transactions.

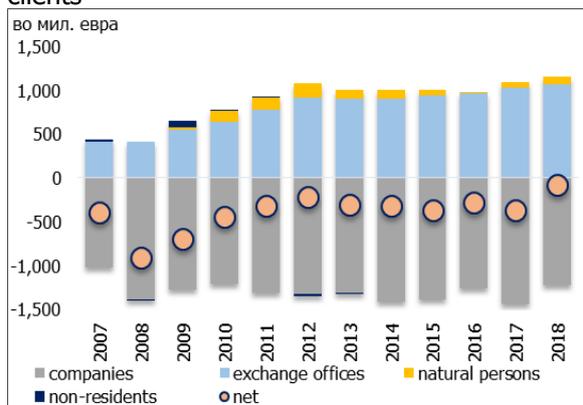
Box 2. Developments on the Foreign Exchange Market and National Bank Interventions

In 2018, the foreign exchange market⁵⁶ remained dominant segment of the domestic financial markets, having in mind that the total turnover amounted to Euro 8,902 million (81% of the GDP). The favorable developments on the foreign exchange market in 2018 are also perceived through the fact that the banks in the transactions with their clients registered the lowest net sale of foreign currency, of Euro 73 million.

⁵⁵ In 2018, in terms of solid liquidity position, the banks did not use funds from the National Bank through the overnight loan facilities and repo operations for providing liquidity in the banking system.

⁵⁶ The foreign exchange market within this analysis encompasses the transactions between the banks and their clients and interbank trading.

Chart 69
Net sale of foreign currency of banks for their clients



Source: NBRNM

Chart 70
Annual change in the supply of and demand for foreign currency, by clients

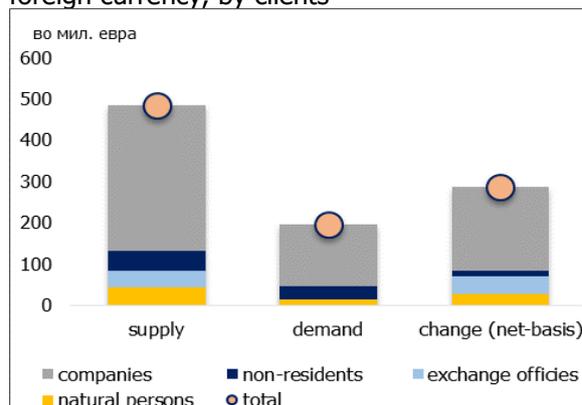
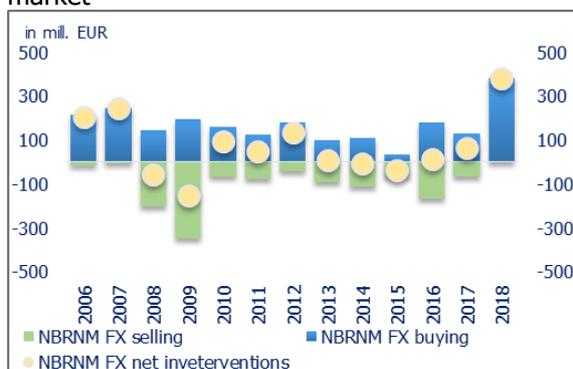
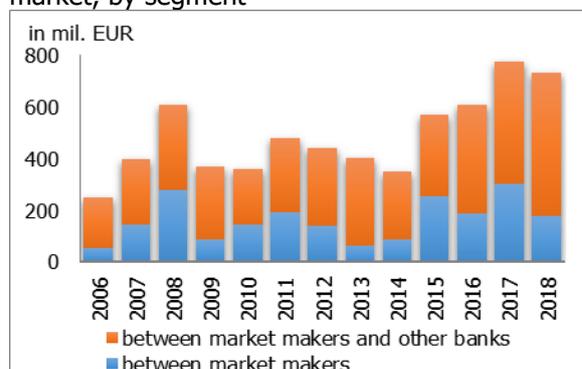


Chart 71
NBRM interventions on the foreign exchange market



Source: NBRNM

Chart 72
Turnover on the interbank foreign exchange market, by segment



These performances were driven by the banks' transactions with the private corporate sector, where, amid fast growth of the supply relative to the increased demand for foreign currency on a net basis, the banks sold the lowest amount of foreign currency in the last eight years (Euro 1,226 million, which is by Euro 203 million less on an annual basis). In 2018, although in a relatively lower amount, the banks constantly made a higher net purchase of foreign currency on an annual basis also in the transactions with natural persons and exchange offices, which indicates stabilization of their expectations. Actually, the total foreign exchange supply of these entities reached Euro 1,163 million (higher by Euro 69 million compared to 2017) and together with the growth of the banks' foreign assets from other inflows (mainly from foreign currency deposits) enabled full offsetting of the demand for foreign currency of the corporate sector and directing the excess foreign currency to the interbank market. There was also an additional supply of foreign liquidity in order to adjust the banks' FX positions, which resulted from their investments in securities and lending to the private sector, with FX clause in both categories. Given that the favorable developments on the foreign exchange market prevailed throughout the year and were manifested by a constantly higher supply of foreign currency on the interbank market, the National Bank during the year made interventions with the market makers only on the purchasing side, which reached the highest annual amount of Euro 368 million. Banks also actively traded on the interbank foreign exchange market, where in conditions of high foreign currency liquidity, the volume of the turnover of foreign currencies was lower on an annual basis. In terms of the structure of interbank trading, despite the fall in the total turnover, 2018 is marked by increased trading between the market makers and the other banks, indicating a further strengthening of the role of the market makers on this market segment.

During 2018, the National Bank continued to offer CB bills⁵⁷ in an unchanged amount (Denar 25.000 million). By limiting the placements in the main instrument, and bearing in mind the growth of denar liquidity, the National Bank continuously encourages the banking system to intensify the financing of the private sector. However, banks placed a significant portion of the surplus of liquid assets also in the deposit facilities with the National Bank, as a favorable instrument for managing liquidity flows within the reserve requirement maintenance periods. In such circumstances, the deposit facilities with the National Bank at the end of 2018 reached Denar 28,880 million⁵⁸. In terms of maturity, banks used overnight deposits in a larger amount, while the funds placed in seven-day deposit facilities were negligible.

Also in 2018, the National Bank used the reserve requirement, which, beside its main function - managing the money supply, also had a macro-prudential feature. The National Bank did not make changes in the ratios and the reserve requirement base, but in October it introduced a remuneration rate for the reserve requirement in euros⁵⁹. Namely, remuneration rate that is applied on the reserve requirement in euros is equal to the ECB's overnight deposit facility interest rate, valid on the last day of the period of the maintenance period⁶⁰.

From macro-prudential perspective, in order to encourage the long-term sources of funding for banks, during 2018, the differentiated reserve requirement ratios which are determined according to the maturity of banks' liabilities, continued to be applied. Also, the temporary non-standard measure, aimed at encouraging the credit financing of systemically important sectors⁶¹, was used. The normalization of the expectations and the gradual increase in the confidence of economic agents, in 2018, led to increased preferences for saving in domestic currency and accordingly, to stabilization of the share of denar deposits in total liabilities of banks. Such changes were largely driven by the corporate sector and households. At the same time, application of differentiated reserve requirement ratios by maturity, which aims to encourage long-term savings, resulted in the highest growth of long-term liabilities of banks since 2015. This change, which is driven by denar liabilities to households with maturity over 2 years, is a confirmation of positive shifts in the banks' liabilities with higher maturity, as a stable source of credit activity.

Regarding the measure for credit support to certain sectors of the economy, in 2018, the amount of newly approved loans increased by Denar 408 million. Analyzing the structure, the annual change in the loans extended to the targeted sectors is mainly driven by the loans extended to the domestic producers of electricity, which registered a steady, but moderate annual growth in recent years of implementation of the measure. On the other hand, in 2018, loans extended to net exporters registered a minimal downward correction, which is in part perhaps due to the improved liquidity of export-oriented companies, which continuously registered an increased net supply of foreign currency on the foreign exchange market.

⁵⁷ In order to further support the long-term process of denarization of the banks' liabilities, the offered amount of CB bills was allocated according to the individual banks' share in the total liabilities in domestic currency without currency clause. At all auctions, the demand for CB bills by banks was at a level of the offered amount.

⁵⁸ Registered on 28 December 2018 and represented the historically highest level of the instrument.

⁵⁹ The National Bank does not apply reserve requirement remuneration in denars.

⁶⁰ At the same time, remuneration is applied on the surplus of assets allocated over the reserve requirement in euros on the foreign exchange account in euros in MIPS at a rate equal to the interest rate on the ECB's overnight deposit facility applicable as of the last day of the reserve maintenance period, decreased by 0.15 percentage points.

⁶¹ It refers to net exporters and the domestic producers of electricity.

Chart 73
Contribution to the annual growth of banks' liabilities by currency



Source: NBRNM.

Chart 74
Annual growth of banks' long-term liabilities to households

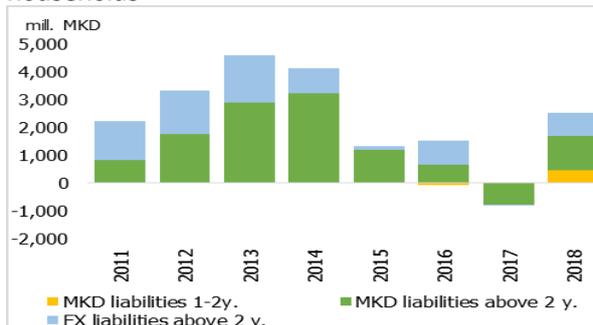
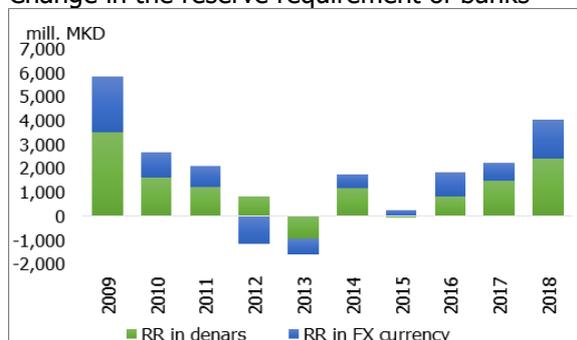
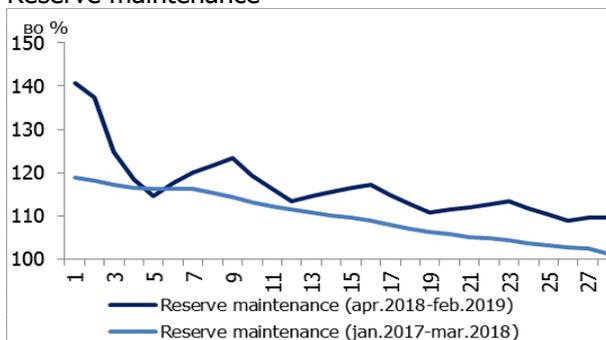


Chart 75
Change in the reserve requirement of banks



Source: NBRNM.

Chart 76
Reserve maintenance



The strong growth in the banks' denar and foreign liabilities, combined with the liquidity effect of the implementation of the non-standard measures, contributed to a relatively high mop-up of the liquidity through the reserve requirement in denars. Namely, in 2018, the growth of the reserve requirement in denars of Denar 2,420 million was the highest and doubled compared with the previous two years, so that this liability of the banks reached Denar 22,260 million at the end of the year. The stronger growth of the liabilities in domestic currency, which are dominated by the short-term liabilities to households and the liabilities to the corporate sector, made the largest contribution to the higher reserve requirement in denars, while the effect of the increase in foreign liabilities in 2018 was more moderate⁶². The change in the banks' foreign liabilities, which was relatively weaker than the denar liabilities, but stronger compared with previous years, contributed to the highest annual growth of the obligation for reserve requirement in euros (Denar 1,603 million in counter-value), which reached Denar 16,451 million at the end of the year.

With respect to the dynamics of reserve maintenance, in 2018, the banks continued to accumulate surplus liquidity at the beginning of the periods. However, since the April reserve requirement period, there was a significant excess liquidity on the banks' accounts with the National Bank as well as cyclical changes to the reserve maintenance during the period. These changes were mainly driven by the banks' preferences for holding a portion of the excess funds during the working days on their accounts with the National Bank and the stronger placements of funds in the overnight deposit facility on the last working day of the week.

⁶² The banks maintain 30% of the amount of the reserve requirement calculated on the banks' liabilities in foreign currency with denar liquidity.

Box 3. Developments on the interbank market for uncollateralized deposits and the secondary market⁶³

In 2018, the banks managed short-term liquidity, relying on the interbank market for uncollateralized deposits. This is confirmed by the fact that despite the reduction in the turnover (of 14% on an annual basis, to Denar 39,345 million) of this market segment, the average daily indebtedness of banks was slightly higher (by 6%, to Denar 601 million). Besides the improved denar liquidity of the overall banking system and separately by individual banks, the main factor that contributed to the reduced volume of trading in interbank uncollateralized deposits in 2018 was the changed maturity structure of traded uncollateralized deposits. Namely, in 2018, the banks provided most of the short-term needs for denar liquidity from the uncollateralized deposits with maturity of up to one week, whose share in the total turnover was historically the highest (73%) (contrary to the past ten years when the overnight loans had the highest share in the total trading of around 72%). Dynamically, given that the growth of the excess denar liquidity intensified in the second quarter of the year, the demand for uncollateralized deposits from mid-2018 to the end of the year decreased, which resulted in almost twice lower monthly trading and indebtedness of the banks on this market compared to the average for the previous few years⁶⁴.

The interest rates on the interbank market for uncollateralized deposits in 2018 had a moderate downward adjustment compared to the reducing of the key interest rate of the National Bank. Thus, the average interbank interest rate from all transactions (MBKS) at the end of the year amounted to 1.09% and was lower by 0.04 percentage points compared to the level in December 2017, which was mostly a result of the reduction of the interest rate on the uncollateralized deposits with maturity of 1 week of 0.05 percentage points, at a level of 1.13%. The interest rate on overnight uncollateralized deposits, which were traded occasionally, was relatively stable and maintained around 1%. The interbank interest rate on overnight transactions (MKDONIA) was also maintained at this level by October. Since the beginning of November, given the smaller number of reference banks that participate in the calculation of SKIBOR and MKDONIA⁶⁵ and amid high denar liquidity, there were no transactions carried out on the interbank market for uncollateralized deposits which are used for calculation of MKDONIA.

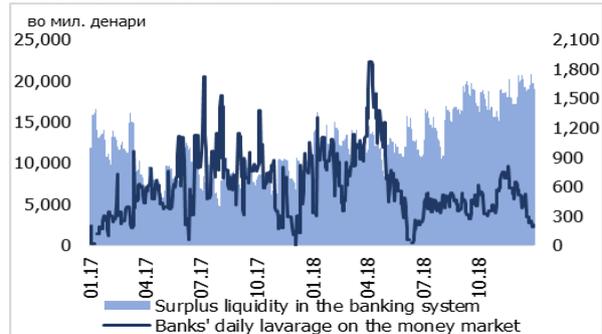
Chart 77
Turnover on the interbank uncollateralized deposit market



Source: NBRNM

On the secondary market in 2018, the upward trend in the volume of traded securities stopped, given that the total turnover (Denar 6,784 million) was almost twice lower, compared to the previous

Chart 78
Excess liquidity in the banking system and indebtedness of banks



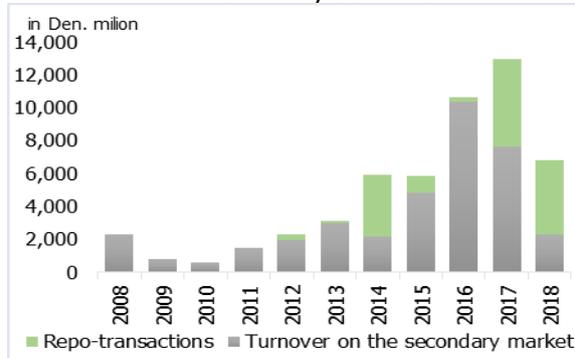
⁶³ Money market analysis in Macedonia includes the following segments: the uncollateralized deposit market, secondary market of short-term securities and long-term government securities (excluding structural bonds), secured deposits market (repo market).

⁶⁴ The average monthly turnover with uncollateralized deposits averaged about Denar 2,441 million, while the average daily indebtedness in the period May-December amounted to Denar 435 million.

⁶⁵ On 1 October 2018, new rules for calculating and publishing the interbank interest rate on the deposit market (SKIBOR), adopted by the Macedonian Banking Association in August 2018, started to be applied. According to the new rules, the number of reference banks has been reduced from eleven to six, due to change in the criteria for the selection of reference banks: the criterion for the size of a bank large or middle-size was replaced by the criterion systemically important bank which was met by less banks, and the criterion of individual bank for its minimal share in the total turnover with uncollateralized and collateralized deposits was maintained.

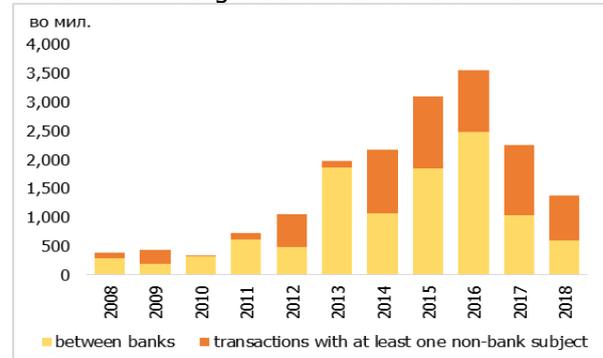
year. Regarding the types of transactions, the largest contribution was made by the smaller volume of outright trading. Namely, the secondary market reported outright purchase and sale of securities of Denar 2,289 million lower by 70% on an annual basis, with the largest contribution of 58 percentage points being made by the reduced trading of banks with CB bills⁶⁶.

Chart 79
Turnover on the secondary securities market



Source: NBRNM

Chart 80
Structure of outright securities transactions



Outright transactions with government securities in 2018 amounted to Denar 1,379 million (fall of 40% on annual basis) and were almost entirely conducted with government bonds (Denar 1,362 million). The extension of the average maturity of the issued government securities and further diversification of the ownership structure, mainly explained the largest share of government bonds in the turnover. With respect to the participants, in 2018, banks concluded only three interbank outright transactions with government bonds (of Denar 600 million), while transactions on behalf of their clients were more numerous (of Denar 778 million) driven by the investment and other motives of clients related to the ownership of these securities.

In the process of the liquidity management, the banks were also active on the interbank repo market segment, where the turnover (Denar 4,437 million), still remained solid despite the moderate decline on an annual basis. Dynamically, repo transactions were present only in the first half of the year, while in the remaining period these types of transactions were not present on the money market given the excess liquidity.

⁶⁶ The three transactions in the amount of Denar 910 million were concluded at the beginning of the year, i.e. shortly before the beginning of the pronounced upward trend of banks' liquid assets.

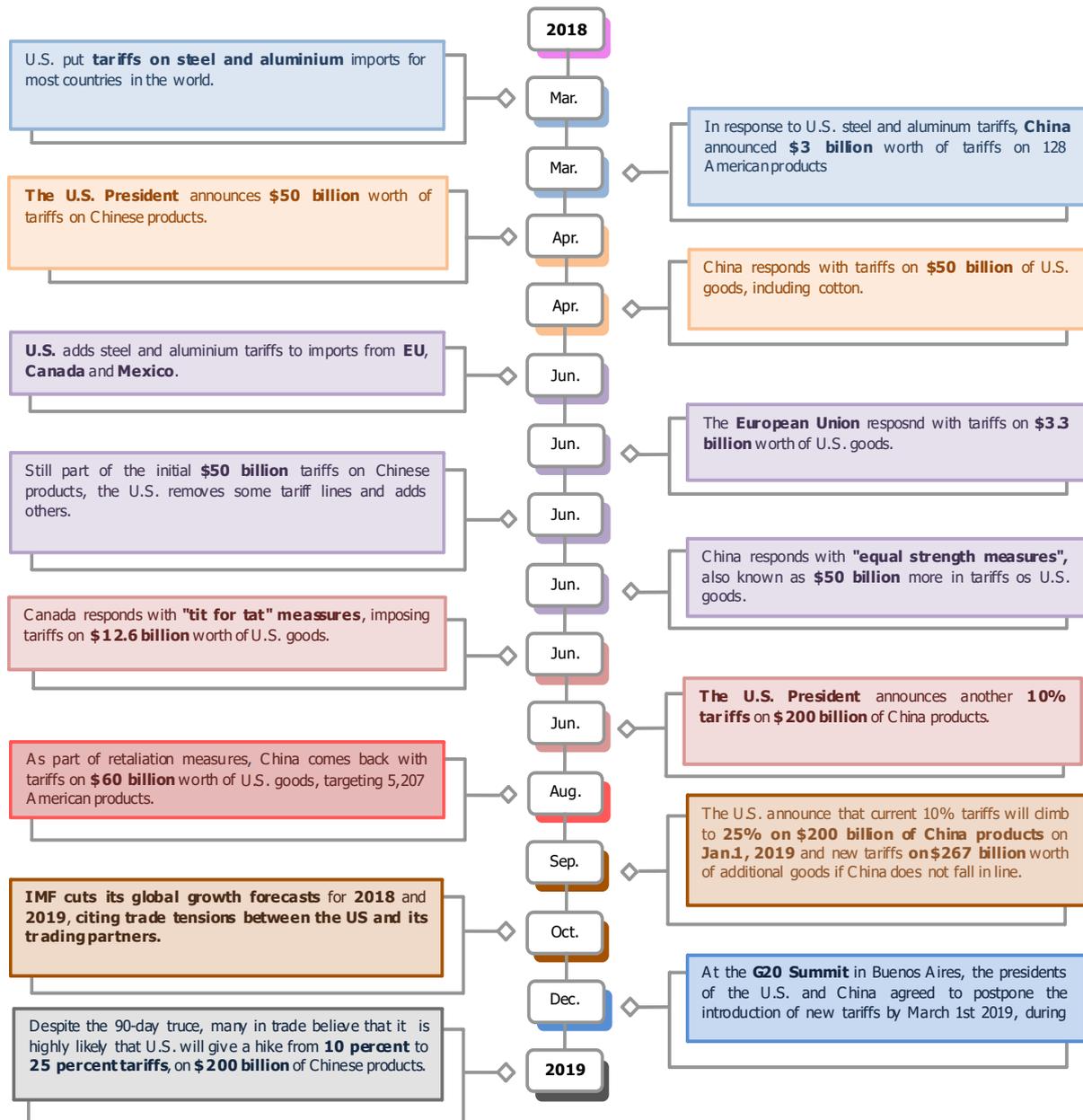
VI. Foreign Reserves Management

In 2018, the international financial markets movements intensified the several-year challenges in foreign reserves management in the Republic of North Macedonia (hereinafter: foreign reserves) amid low and negative yields. Namely, at the beginning of the year optimism dominated on European markets, influenced by expectations for positive economic performances and possible announcement of monetary policy normalization by the ECB. However, the intensified political risks in the euro area, the increased concerns about the US trade war with its largest trading partners, the gradual deceleration of economic activity in the euro area and the increased concerns for the deceleration of the global growth led to reduced expectations for faster normalization of the ECB's monetary policy. In such circumstances, the demand for European government bonds increased, leading to a rise in their prices and lower yields compared to the end of 2017. Besides the volatile market movements during the year, an additional challenge was the historically highest growth of foreign reserves (in the amount of Euro 531 million) , influenced by the National Bank purchase in the foreign exchange market with the market makers, as well as the net inflows in the transactions on behalf of the government. In such conditions, foreign reserves management was flexible, with investment decisions made in line with the main foreign reserves investment objectives: safety, liquidity and profitability.

6.1. Developments in the international financial markets in 2018

In 2018, international financial market movements were characterized by volatility and increased risk aversion especially in the last quarter of the year, amid concerns for global economic activity deceleration. The beginning of the year was marked by optimism to boost the euro area economy, which was limited by the ECB's cautious stance to keep interest rates low for a longer period after the end of the asset purchase program. Market movements were also influenced by growing concerns about trade restrictions globally. The risk aversion intensified towards the middle of the year, after the USA announcing sanctions against China, and introducing import duties for EU, Canada and Mexico on 1 June, followed by countermeasures from these economies towards US during June. In August, global trade tensions intensified and certain developing countries' currencies depreciated strongly. The value of the Turkish lira dropped significantly as the political relations between the United States and Turkey deteriorated. The temporary investors' concerns about the spillover effects of lira's depreciation, due to the exposure of certain euro area banks to Turkey's banking sector have led to a decline of stock prices in the euro area and directing investors towards safe instruments. Trade tensions, especially between the USA and China influenced the market movements until the end of the year. Namely, in the wake of G20 Summit in Argentina, USA announced that it would increase import duties on Chinese products starting from 1 January 2019. Although the outcome of the meeting between USA and Chinese leaders was positive i.e. they reached an agreement for starting negotiations on structural changes related to technology transfer, protection of intellectual property, non-tariff barriers, services and agricultural products, the markets had a reduced optimism about these events.

Timeline of selected events that contributed to the intensified trade tensions in 2018



Influenced by trade tensions, which led to lower net-exports of the euro area, the economic growth slowed down to 0.4% on a quarterly basis, beginning from the first quarter of the year, thus maintaining the same level in the second quarter. The euro area economic activity slowed down further in the third quarter, with a growth rate of 0.1% on a quarterly basis, which is the lowest level since the second quarter of 2014. The slowdown in economic activity was also taken into account by the ECB, which made a downward revision to the forecasts of economic growth rate and inflation at its last monetary policy meeting in December 2018, but confirmed its intention to begin gradual monetary policy normalization⁶⁷, in line with the market expectations., Investors' concerns regarding the deceleration of the global growth as well as the euro area growth in 2019 increased, which intensified after publishing the downward revisions of the IMF's forecasts and European Commission's autumn forecasts, due to perceptions for downward risks amid intensified trade pressures globally.

⁶⁷ In this regard, ECB has confirmed that the asset purchase program will end by the end of 2018, and it will only reinvest the matured securities in 2019. Thus, the reinvesting policy will continue after the beginning of the interest rate increase cycle. ECB did not change the referent interest rates and confirmed the intention of maintaining them to the same level until summer 2019.

These macroeconomic developments, supplemented with the increased political uncertainty⁶⁸ in the euro area, which started in the second quarter of the year as a result of the developments in Italy⁶⁹, contributed to volatile performances in European debt securities yields. By the end of the year, amid growing concerns about the deceleration of the euro area economic growth, investors reduced their expectations for faster ECB monetary policy normalization, prompting increased demand of government bonds issued by euro area core and semi-core countries and increase of their prices, so that yields on the medium and long-term segment of the curve have dropped to a lower levels compared to the end of 2017.

Chart 81
Changes of German government bond yields (in basis points)

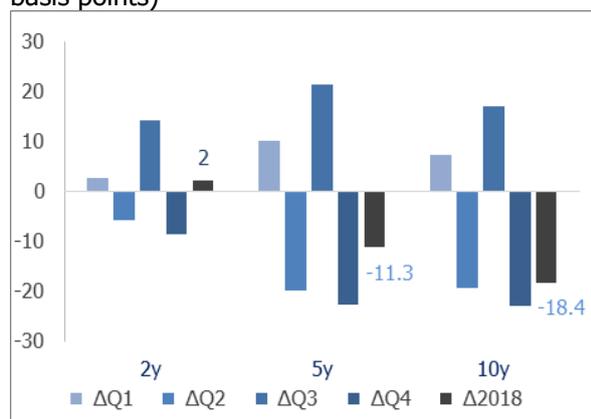
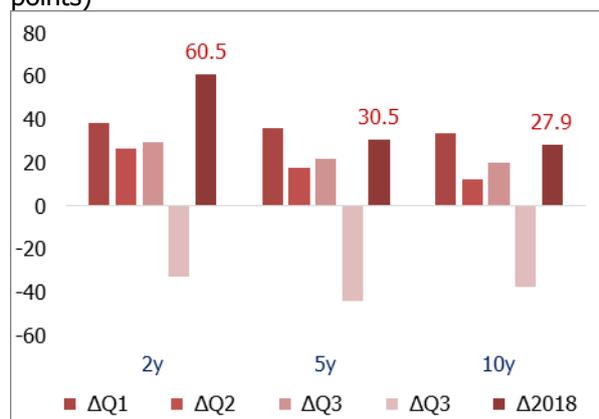


Chart 82
Changes of US government bonds yields (in basis points)



The uncertainty regarding US-China trade relations, as well as the increasing concerns about slowing global economic growth, led to lower yields of US government debt securities at the end of the year. However, yields of US government debt securities have had an increasing trend for most of the year, amid solid performances in the US economy which conditioned further tightening of the FED monetary policy. Namely, FED continued with the monetary policy normalization, increasing the target range for the Federal Funds Rate four times in 2018, each by 25 basis points reaching the interval of 2.25% to 2.50%. During the year, the US government yield curve gradually flattened i.e. short-term yields increased due to monetary policy tightening, while the increase of long-term yields was limited due to the presence of geopolitical and trade tensions.

⁶⁸ Despite the political developments in Italy, there was uncertainty due to the political developments in the UK related to the country's exit agreement from the European Union, with the deal not being resolved at the British Parliament by the end of 2018.

⁶⁹ Concerns over the Italian public debt sustainability and the country's euro area membership raised during the second quarter, after prime minister's views were presented that the government will implement the policies proposed by populist parties that won the majority votes in Italy. By the end of the year, Italy's fiscal problems intensified once again. Namely, according to the preliminary draft budget of the Italian government published in September, it was planned that the budget deficit would be 2.4% of GDP in the three following years, which was in opposition with the recommendations of the European Commission, which repeatedly requested the Italian government to revise the budget forecasts downwards. The conflict was resolved only in mid-December, when the Italian government revised its 2019 draft budget deficit proposal to 2.04% of GDP.

Chart 83
Sovereign yield curves
in %

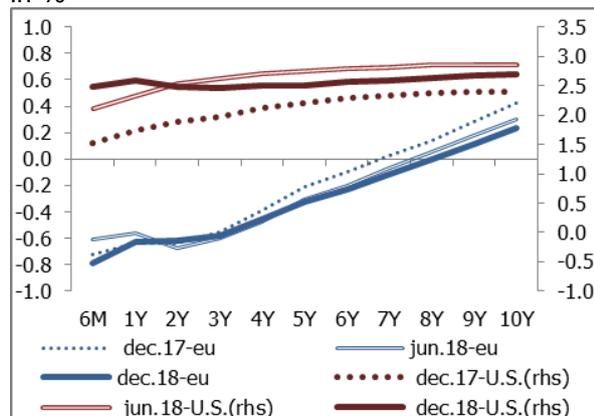


Chart 84
Referent interest rates
in %

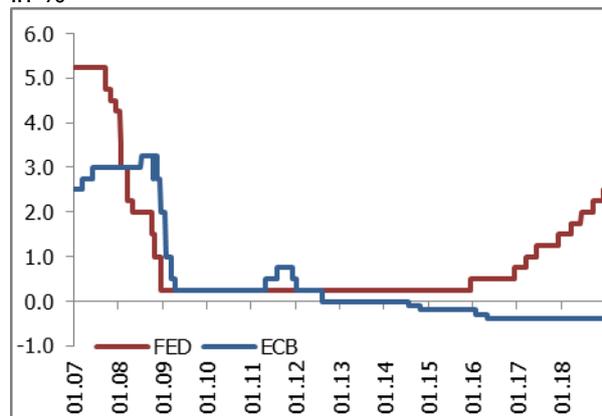


Chart 85
EUR/USD and gold price



Given that there was no convergence of monetary cycles in the euro area and USA during the year, amid weaker economic performances and numerous political problems in the euro area, the value of the common currency against the US Dollar decreased. At the same time, there has been an increasing demand for US dollars as a safe-haven currency amid global geopolitical and trade tensions, which led to appreciation of around 4.5% on an annual basis. On the other hand, the price of gold at the end of 2018 decreased to USD 1,127.1 per ounce, which is a decline of around USD 25 per ounce compared to the end of 2017.

6.2. Basic guidelines for foreign reserves management

The tactical allocation of foreign reserves for 2018⁷⁰ was based on the expectations of the ECB announcing the end of the quantitative easing program by the end of the year, the forecasted path of FED's monetary policy normalization and planned dynamics of reducing its balance sheet. Consequently, the assumptions included a decline in the prices of securities due to the upward movement of yields of investments in euros, especially in the second half of the year, as well as the depreciation of the US dollar against the euro, due to the convergence of monetary cycles in the USA and euro area. In such circumstances, the basic guidelines for foreign reserves management included reducing the exposure to interest rate risk i.e. maintaining a relatively short modified duration, as well as increasing of the amount of held-to-maturity securities within the euro tranche, for protection against the drop of the market values of financial instruments. In order to achieve a positive yield, the plan envisaged purchase of euro debt securities with longer maturity by simultaneously matching with the

⁷⁰ Tactical asset allocation of the foreign reserves is done prior the beginning of each year pursuant to the Foreign reserves management and investment Policy and Guidelines (Official Gazette of the Republic of Macedonia No. 223/15 и 141/16) and Foreign reserves management and investment Guidelines (internal document). During the year, a new tactical asset allocation of the foreign reserves is set in place if needed, due to new circumstances in the markets. This dynamic approach is applied by most central banks in the world, ensuring rapid adjustment to market conditions and preserving the value of the foreign reserves.

determined modified duration of tranches with the application of appropriate futures positions. At the same time, the National Bank also aimed to reduce the currency risk i.e. US Dollar investments were to be reduced to 10% of foreign currency (excluding gold), at the level providing risk coverage with the forecasted revaluation reserves at the end of 2017. In fact, US dollar investments have been used to meet operational needs, while most investments were within the held-to-maturity tranche.

By mid-2018, it was determined that the growth of yields until the end of the year may lag behind, due to the instability on the international financial markets triggered by risks of increased protectionism worldwide, ECB's relaxing tone for exiting the s expansive monetary policy, as well as the possibility for delayed implementation of budget reforms in Italy. In this regard, changes were made in the tactical asset allocation of foreign reserves by increasing the modified duration of both tranches in euros and six-months, respectively, and therefore simultaneously creating a possibility to close the opened futures positions for hedging the interest rate risk.

Box 4. Activities related to improving the institutional capacity for foreign reserves management

On 16 February 2018, the National Bank in cooperation with The Reinventing Bretton Woods Committee – RBWC organized an international conference *A New Normal? The Global Economic Expansion, Inflation Dynamics, Financial Stability and Its Meaning for Global Asset Management*. This remarkable event brought together many senior officials from international financial institutions, central banks, finance ministries and global business banks, who debated on current issues in the area of monetary policy and financial management. The organization of this conference had several benefits for the National Bank. The conference contributed to the extension of knowledge, the acquisition of new information and the exchange of experiences with other central banks and international institutions, which ultimately contributes to further strengthening of the institutional capacity and successful implementation of the central bank's mandate for monetary policy implementation and foreign reserves management. New opportunities also opened up for extending the international cooperation of the National Bank and the event provided promoted North Macedonia to the international expert public.

At the end of June 2018, the existing agreement with the World Bank for participation in the Reserve Advisory & Management Program (RAMP) was completed. Considering the benefits of participating in this program, as well as the results of improved institutional capacity of the National Bank, which were positively assessed by the World Bank, a cooperation was proposed under the new so-called The Continuous Learning Program (CLP program of RAMP) which is concluded with central banks that have achieved high levels of progress under the basic three-year program. This program provides managing part of the National Bank foreign reserves by World Bank portfolio managers and once again contains technical assistance and advisory services from dedicated financial experts. The program contributes to maintaining of a high level of efficiency, professionalism and quality of the human resources engaged in the foreign reserves management process.

In September, a World Bank mission visit was held aimed at applying futures while actively managing the foreign reserve tranches. The mission contributed to advancing the active foreign reserves management by using interest rate futures, with ways for improving risk per unit of return. During the mission, tools and concrete measures for setting and monitoring strategies for active tranche management were analyzed through the use of futures contracts. The current application of futures in the National Bank was positively assessed and guidelines were given for their further improvement. Namely, tools and models for monitoring and measuring risk exposure during the use of futures were revised and the possibility of producing a more detailed preview of the risk sources and the allocation of the risk budget was reviewed.

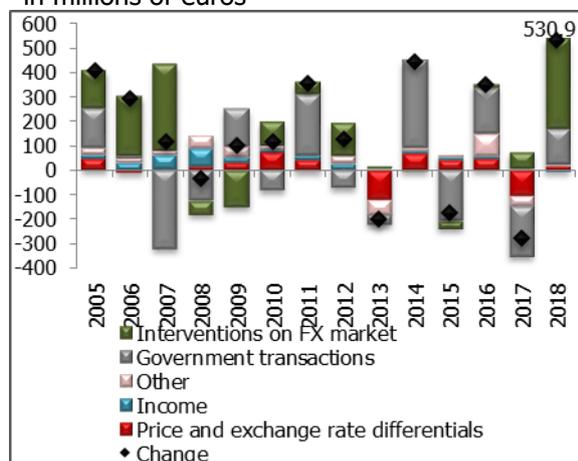
6.3. Foreign reserves investment

6.3.1. Asset allocation by tranche

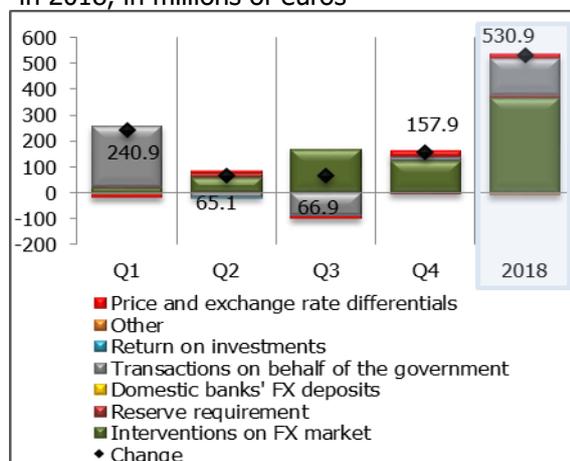
During 2018, foreign reserves increased by Euro 530.9 million, reaching Euro 2,867 million by the end of 2018. This is the highest historic increase in foreign reserves in the past 14 years. Thus, this high growth of foreign reserves for the most part (69% i.e. Euro 368 million) is an inflow of foreign currencies based on the National Bank purchase in transactions with the banks market makers on the foreign exchange market. Also, transactions on behalf

of the government in the net amount of Euro 142 million made significant contribution to the foreign reserves increase.

Chart 86
Foreign reserves change factors
in millions of euros



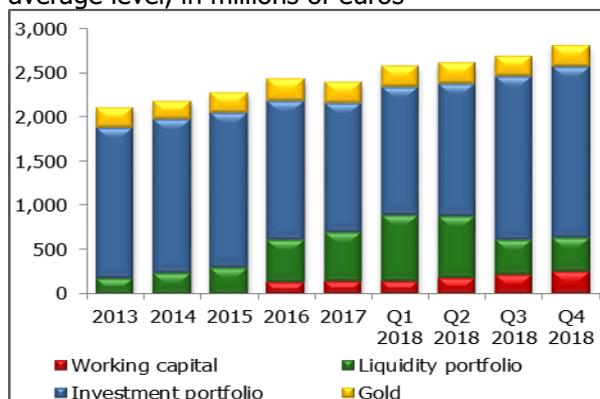
in 2018, in millions of euros



Source: NBRNM.

Dynamically, throughout the year, foreign reserves increased continuously. In the first quarter of the year, there was a significant increase due to transactions on behalf of the government, primarily influenced by net inflows after issuing the sixth Eurobond on the foreign markets. Namely, the nominal amount of the bond was Euro 500 million (market amount of Euro 492.2 million), but the inflow was reduced by the simultaneous early repayment of part of the Eurobond maturing in December 2020 (market amount of Euro 101.4 million). Also, in January, the Ministry of Finance repaid principal and interest on commercial loans in the amount of Euro 100 million and other smaller payments, thus, net inflows of Euro 236.8 million were registered in the foreign reserves from transactions on behalf of the government. Beginning from the second quarter of the year, the main factor contributing to the foreign reserves increase was the purchase of foreign currency by the National Bank in the transactions with the market makers in the foreign exchange market, amid positive movements in the foreign exchange market with banks' clients.

Chart 87
Foreign Reserves Tranching
average level, in millions of euros



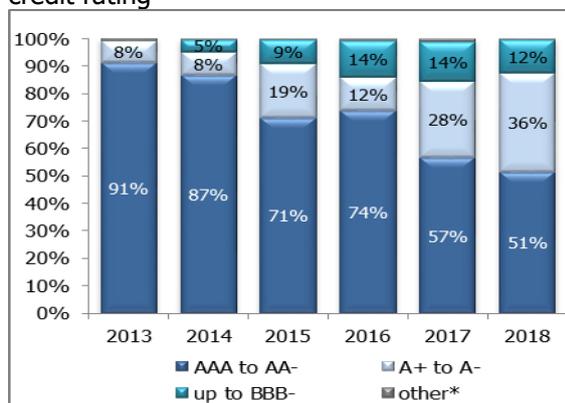
Source: NBRNM.

In accordance with the basic investment guidelines, much of the inflow in the first quarter was directed to short-term investments within the liquidity tranche. During the third quarter, this tranche was reduced to the target level by transferring securities (total market amount of around Euro 170 million) to the investment tranche in euros for trading. Amid high foreign currency purchase from the market makers, assets were temporarily kept in current accounts which increased the average level of the operational tranche.

6.3.2. Credit exposure and instruments

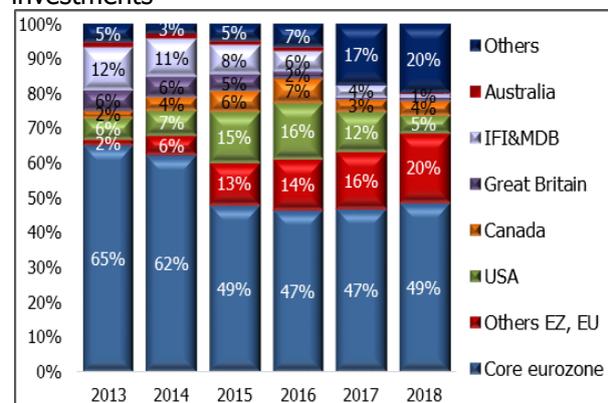
The safety of foreign reserves investments is of great importance in determining the National Bank's investment strategy. In accordance with the investment framework, most of the foreign reserves or an average of around 51% were invested in financial instruments with the highest credit rating (from AAA to AA-) i.e. with the lowest credit risk exposure. In order to comply with the principle of value preservation amid low and negative yields, part of foreign reserves investments or 36% were invested in instruments with credit rating ranging from A+ to A-, which were also characterized with high safety and enabled moderate positive return of assets. In order to achieve a higher return on investments, part of assets were placed in short-term instruments in high-quality commercial banks in China, which contributed to the increase of the investment credit rating from A.

Chart 88
Average annual structure of investments by credit rating



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

Chart 89
Average annual geographical structure of investments



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

A limited part of investments within the liquidity tranche in euros and the investment held-to-maturity tranche in euros is directed towards countries and instruments that have a moderately lower credit rating (BBB), but higher than the minimum investment rating. This way, in accordance with the safety principle, the National Bank seeks to achieve optimum return on investment through careful and simultaneous active foreign reserves management, in conditions of strictly controlled credit risk.

Geographically, significant part of foreign reserves investments are in euro area core countries, but the negative yields of these fixed income instruments on the European markets resulted in moderately higher exposure to other economies from the euro area and the European Union. In this context, investments in the other EC, EU category increased as a result of the investments in government bonds issued by the peripheral countries in the euro area (primarily Italy and Portugal for the first time), which offer positive yields with shorter maturity. These securities are mostly invested within the held-to-maturity tranche, given that their yields are volatile compared to the investments in the core countries and may have a significant effect on the periodical valuation of securities. Also, investments in the category others registered a moderate increase, compared to last year, primarily due to the increased placements in short-term instruments on the money markets (securities and deposits) in highly-ranked commercial banks in China.

The tendency to follow the safety principle of foreign reserves investment, combined with maintaining an adequate liquidity level is also evident in the structure of financial instruments.

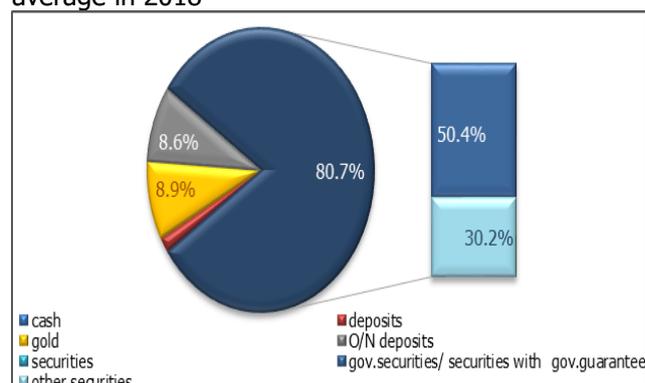
Part of the foreign reserves were also kept in the current accounts (around 8.6% on an average) comprising the operational tranche. In order to optimize costs, besides in the accounts with the central banks, part of the funds was kept in current accounts with foreign commercial banks. Deposits were also placed in foreign commercial banks, within the liquidity

and investment tranches⁷¹, where their share decreased moderately (from average 4% in 2017 to 1.7% in 2018). The gradual decline in the US dollar investments in foreign reserves also contributed to the decrease in the share of deposits in the structure by instruments, given that the previous year they included short-term deposits.

Gold, which is usually a lower yielding financial instrument, during the year was placed in short-term deposits with first class foreign commercial banks. The average share of gold within the foreign reserves structure, registered a moderate decrease from 10.3% to 8.9% of foreign reserves, as a result to the higher level of foreign reserves compared to the previous year amid unchanged gold quantity.

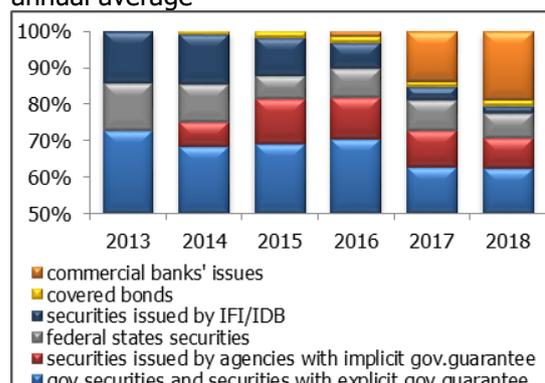
Given that securities are included in the both investment and liquidity tranche these financial instruments prevail within the structure of foreign reserves. Thus, in order to maintain appropriate modified duration of tranches in euros, long-term investments in government securities, as the most dominant, are combined with investments in short-term commercial bills and certificates for deposits issued from high quality foreign commercial banks. The National Bank invests in securities with expected government support (implicit government guarantee), which despite the high safety level, also provide higher yields compared to government securities. A moderate share of investments was directed towards securities issued by multilateral organizations⁷² as well as securities issued by the regional governments of Germany, Australia and Canada.

Chart 90
Structure of investments by instrument
average in 2018



Source: NBRNM.

Chart 91
Structure by securities type
annual average



Regarding other operations with foreign reserves, the National Bank continued with securities lending by simultaneously concluding repo and reverse repo transactions. In addition to the transactions with a German Bank, the National Bank expanded its cooperation with a new contractual party (Canadian Bank). The transactions with the latter included reposing out securities from the investment tranches in euros and US dollars, and taking as collateral high-quality securities eligible for investing pursuant to the Foreign Reserves Management and Investment Guidelines. The tenor of the transactions is maximum one-month. In order to compensate part of the costs for the accounts maintenance and custody fees, the National Bank continued the use of depositories' services for automatic securities lending.

⁷¹Investments in deposits within the investment tranches are limited to one-year maturity.

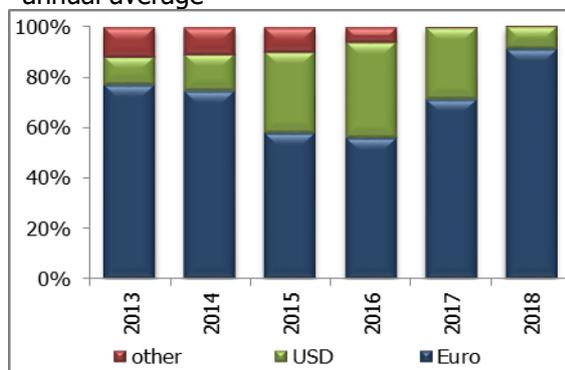
⁷²The European Investment Bank (EIB), Council of Europe Development Bank (CEB), European Company for the Financing of Railroad Rolling Stock (EUROFIMA), International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Nordic Investment Bank (NIB), Asian Development Bank (ADB), Inter-American Development Bank (IADB).

6.3.3. Currency structure⁷³

The currency breakdown of the foreign reserves was done according to the guidelines given with the tactical asset allocation of foreign reserves, and with the primary purpose of supporting the exchange rate targeting as a monetary strategy. Subsequently, assets invested in financial instruments denominated in euros prevail within the foreign reserves, with an average share of around 91% during 2018. When formulating the tactical allocation for 2018, the basic assumptions regarding the currency structure of foreign reserves were the expectations for the depreciation of the US dollar. Hence, further decrease of investments in US dollars was envisaged, given the low value of revaluation reserves as a criterion of acceptable level of currency risk.

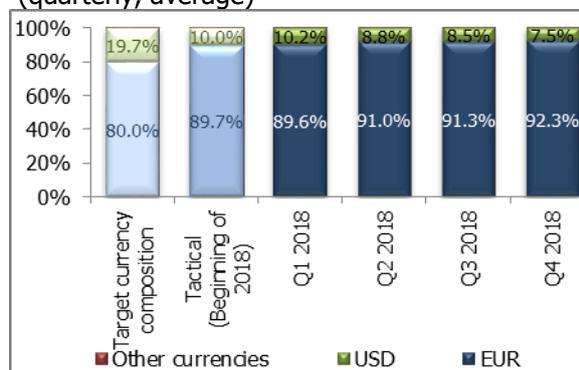
Chart 92

Currency structure of the foreign reserves annual average



Source: NBRNM.

Changes in currency structure (quarterly, average)



At the beginning of the year, the US dollar strongly depreciated (3.5%), which amid low revaluation reserves contributed for the need of full hedge against currency risk. In such conditions, the options for offsetting the currency risk were reviewed and it was decided short-term forward foreign exchange transactions to be concluded. The US dollar value increased against the euro for the rest of the year, which contributed to replenishment of the revaluation reserves and reduced the need for hedging. However, in order to minimize currency risk, matured securities in the US dollar held-to-maturity tranche in the first half of the year were converted to euros and were invested in the held-to-maturity euro tranche. In accordance with this commitment, the share of investments in US dollars until the end of 2018 was reduced down to 7.5% in the currency structure of foreign reserves.

6.3.4. Exposure to interest rate risk and performance

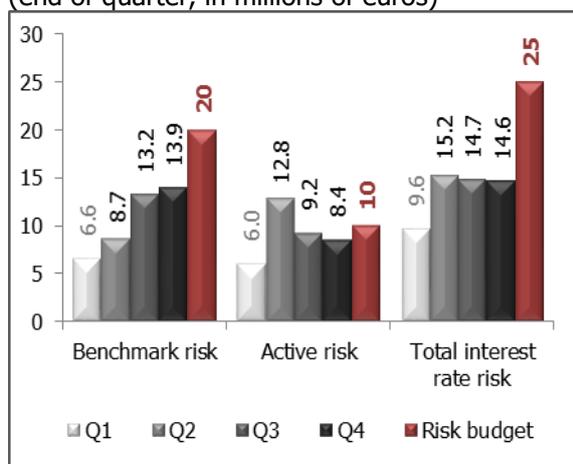
At the beginning of 2018, amid expectations for upward movement of yields on fixed income debt securities in euros, the modified duration of the tranches was maintained around tactical modified durations (1 year for the liquidity tranche in euros and 1.5 years for the investment tranche in euros). In this regard, the inflow in the first quarter was partially invested in short-term credit instruments, while securities on the medium segment of the yield curve from the core and semi-core euro area were also purchased, where exposure to interest rate risk was reduced by selling German bond futures.

However, opportunities to maintain yields around current levels were observed by mid-year, which deviated from their growth expectations by the end of the year. In such

⁷³ The currency structure is analyzed taking into account the stock of foreign reserves reduced by the amount of gold.

circumstances, the modified duration was increased by 6 months for both tranches, i.e. from 1 to 1.5 years in the liquidity tranche in euros and from 1.5 to 2 years in the investment tranche for trading in euros. The adjustment to the new tactical durations was made at the end of the second quarter through pre-sale of the securities from the liquidity tranche in euros, as well as by reducing the position with futures contracts used to hedge interest rate risk. Otherwise, in addition to the primary objective for introducing futures i.e. flexible interest rate risk management, these derivative instruments were used for implementing strategies based on expectations for the movements of the credit spreads in the euro area, shift of the yield curves in the euro area and USA (or only certain segments of the curve), as well as future increase of the reference interest rates of global central banks.

Chart 93
Value at interest rate risk
(end of quarter, in millions of euros)



Source: NBRNM.

interest rate risk was reduced within the limits.

The performance of the foreign reserves investments is mostly due to the market conditions prevalent at the moment of investing, as well as the return of the benchmarks⁷⁵ that serve as investment guidance. The operational tranche, given the need for maintaining funds in Euros, has a negative impact⁷⁶ on revenues from foreign reserves investment, but less negative than the benchmark. The volatile yields for most of the year led to moderate yields growth, which was partially changed in the last quarter of 2018. In such circumstances, price movements of securities in the liquidity and investment tranche led to negative annual rates of return, which were still better compared to the benchmarks.

In order to reduce exposure to interest rate risk, part of the invested securities within the foreign reserves is recorded as held-to-maturity securities, which are predictable and have stable return. The held-to-maturity tranche in euros increased at the beginning of the year, in accordance with the investment plan. The positive performance of this tranche is due to investments in government bonds issued by the peripheral euro area member countries, with relatively high yield. Thus, its return in the second half of 2018 was slightly higher compared to the return in the first half of the year. In order to achieve greater currency risk management

The interest rate risk management, in addition to the modified duration, is also monitored in terms of interest rate risk tolerance limits⁷⁴, which was kept within the limits during the year, which suggests that the investment strategy is appropriate. During the year, the total interest rate risk and interest rate risk on the benchmark portfolios were within the limits. However, during the second quarter, the active interest rate risk was moderately higher than the determined acceptable level, due to the increased yields volatility in the euro area. Otherwise, the reason for the high volatility of yields was assessed as an extraordinary movement on the financial markets and by the end of the third quarter, the active

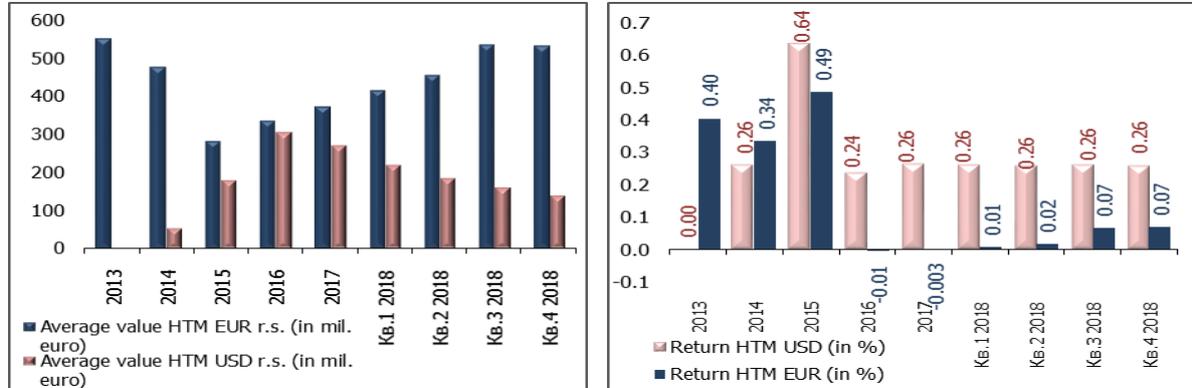
⁷⁴ The acceptable level of interest rate risk according to the Foreign Reserves Management and Investment Policy is limited to the probability for reducing the market value of the foreign reserves by 1% at a confidence level of 95% during the investment period of one year.

⁷⁵ Benchmark index of securities' prices and money market index, comprised of financial instruments, with modified duration, which corresponds to the target modified duration of the investment portfolio.

⁷⁶ The assets within the operational tranche, due to their function, are primarily placed in current accounts with the central banks in the euro area, where negative interest rate of 0.40% is applied. However, in order to limit the negative effect on revenues, part of the assets are kept on current accounts with commercial banks, in the amount for which these banks do not charge negative interest.

flexibility, assets that matured within the investment held-to-maturity tranche in US dollars during the second half of the year were transferred to current accounts within the operational tranche in US dollars, which reduced the residual maturity of this tranche.

Chart 94
 Characteristics of the Held-to-maturity tranches in 2018
 in millions of euros



*XTM (HTM – Held-to-maturity)
 Source: NBRNM.

The total rate of return on the foreign reserves investments which in addition to the realized income includes the price changes of securities, as well as the realized exchange rates differentials stemming from foreign currency transactions, amounted to 0.09%. Given the unfavorable conditions on the international financial markets, the total rate of return was significantly lower compared to the previous year (0.55%).

VII. Payment systems and payment services

Safe and efficient payment execution is one of the key prerequisites for sustainable growth in any economy, which requires an appropriate payment infrastructure and a sound legal framework for the role, rights and obligations of each participant. The NBRNM plays a central role in providing conditions for safe and efficient payment operations in the Republic of North Macedonia i.e. it is the operator of the Large-Value and Urgent Interbank Payment System (MIPS), which is also a payment settlement system through other payment systems, with regulatory and oversight powers. NBRNM is also a payment services provider for the government authorities. In addition to this, the NBRNM has a development role and holds activities for promoting and enhancing the legislation in the area of payments and payment systems. In this regard, a series of activities were undertaken during 2018 to improve and digitize payment services and payment infrastructure in the country, as well as to further harmonize the legislation with EU legislation.

7.1. Significant activities

During 2018, the activities for harmonizing the national legislation with the European legislation in the area of payment services continued. Namely, the NBRNM and the Ministry of Finance finalized the Draft Law on payment services and payment systems which transposed the main acts of the EU legislation in the area of payments: Directive on payment services in the internal market (2015/2366/EU), Directive on settlement finality in payment and securities settlement systems (98/26/EU and 2009/44/EU), E-Money Directive (2009/110/EU), Directive on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features (2014/92/EU), Regulation on interchange fees for card-based payment transactions (2015/751/EU) and the Regulation establishing technical and business requirements for credit transfers and direct debits in euro (260/2012/EU), in the provisions referring to direct debits. The objective is through a completely new legal framework which will significantly be harmonized with the European legislative and operational standards, to expand the types and quality of the payment systems and create conditions for reducing prices by entering new players in the payment services market (fintech sector), as well as provide higher protection for the payment service users, higher stability of the payment systems and thus greater payment safety and efficiency.

Pursuant to the oversight framework: The Decision on the manner and methodology for payment systems oversight (Official Gazette of the Republic of Macedonia no. 17/16) and the Decision on the criteria and standards for payment systems operations (Official Gazette of the Republic of Macedonia no. 17/16), based on internationally accepted standards known as Principles for Financial Market Infrastructures, at the beginning of 2018, the NBRNM performed a partial direct oversight on KIBS⁷⁷ regarding the compliance with two principles (number 7 liquidity risk management and number 17 operational risk). At the same time, it was assessed that KBIS generally respect these principles i.e. has developed appropriate mechanisms for liquidity and operational risk management. By the end of 2018, NBRNM started a partial oversight on KIBS for assessing the compliance with principles number 8 for settlement finality, number 9 for money settlements, number 21 for efficiency and effectiveness and number 23 for disclosure of rules, key procedures and market data. At the same time, off-site (indirect) payment systems oversight was carried out on regular basis, in accordance with the Manual for reporting of the operators of payment systems. Based on the off-site oversight it was determined that during 2018, the payment systems in the Republic of North Macedonia operated without serious interruptions. The operation, availability and efficiency of payment systems were on a high level, with no major falls and disruptions.

⁷⁷ The Clearing House - Clearing InterBank Systems AD Skopje (KIBS) operates the system for multilateral deferred net settlement for processing of small-value payments that does not exceed Denar 1,000,000.

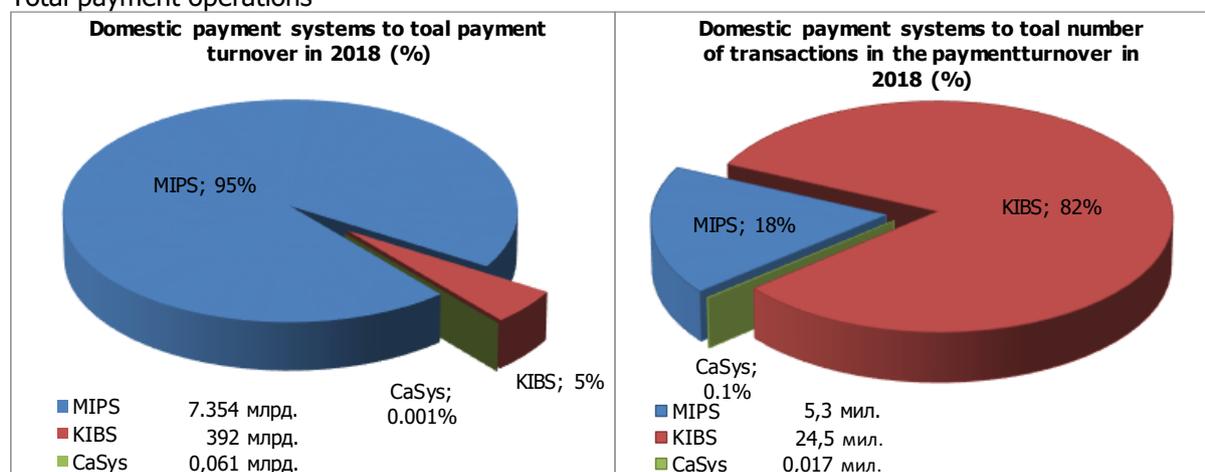
Payment transactions initiated by payment system participants on their own account or on behalf of their clients were settled on the same day and there were no systemic payment transaction problems.

In June 2018, the NBRNM organized the eleventh international conference on payment and market infrastructures *Let's Get Digital*. At the Conference, in the presence of a professional core of the country and abroad, significant topics in the sphere of payments on global, European and national levels were elaborated. In addition to its educational character, the Conference also contributed to raising awareness among all stakeholders in the country (NBRNM, MF, banks, payment system operators, telecommunication operators) for the benefits of digital transformation of payment systems.

7.2. Payment systems

Payment systems are a key component of each financial system because they provide the necessary services for smooth and efficient payment operations. Payment systems operate on the basis of regulations, rules, business processes and technical solutions that allow transfer of funds between participants. In 2018, the total value of payment transactions in the country through payment systems reached Denar 7.745 billion, most of which are carried out through the large-value payment settlement system, MIPS, which accounts for 95% of total payment systems in the country. The rest is realized through the payment system KIBS (5%) and CaSys⁷⁸ (0.001%). The number of transactions through payment systems in the country in 2018 amounted to 29.9 million transactions. The largest share in the number of transactions through payment systems in the country was registered by KIBS (82%), followed by MIPS and CaSys with 18% and 0.1%, respectively.

Chart 95
Total payment operations



Source: NBRNM

In addition to denar payments, since the beginning of 2017, the National Bank, through MIPS, enables banks to make payments in euros in the country and abroad through TARGET 2 of the European System of Central Banks. In 2018, there was a significant increase in the number and value of outflow and inflow transactions compared to 2017. Namely, the total value of outflow payments in euros through MIPS reached Euro 981 million, with total outflow payment number of 9.4 thousand transactions, compared to 2017 when 4.6 thousand transactions worth Euro 343 million were realized. In terms of inflows in euros, around 1.7

⁷⁸ International Card System AD Skopje (CaSys) is a system of multilateral deferred net settlement of payments with domestic brands of payment cards.

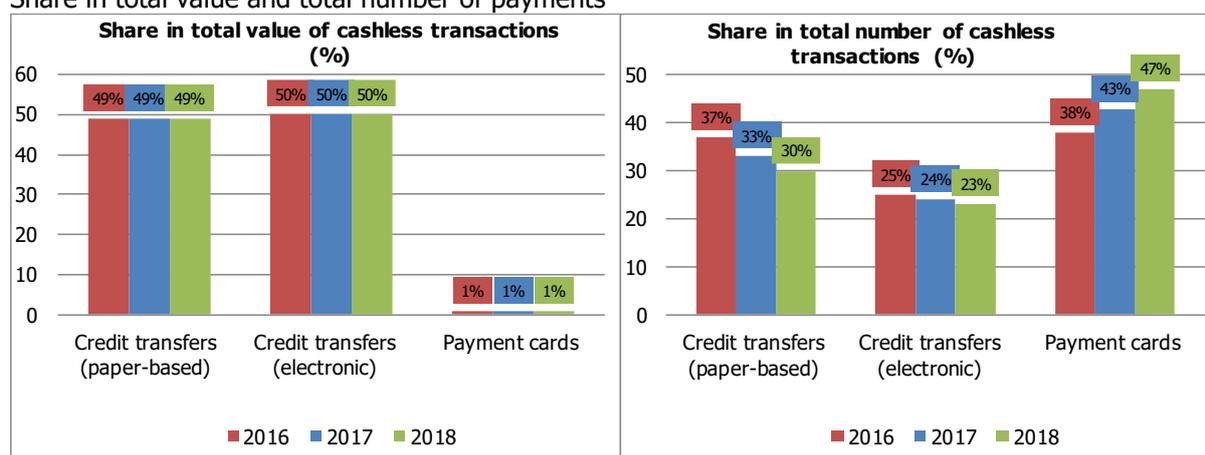
billion transactions with a total value of Euro 969 million have been realized through TARGET 2 and MIPS, compared to 2017 when 0.5 thousand transactions in the value of Euro 303 million were realized.

7.3. Payment services

The total value of payments⁷⁹ in the country in 2018 registered an annual growth of 10.2% and amounted to Denar 3,813 million. The largest portion of the value of transactions (99%) is made through credit transfers (with almost equal share of paper-based and electronic credit transfers), and only a small part (1%) of the value was made with the use of payment cards. The total number of realized transactions for payments in 2018 amounted to 114 million transactions, which is an annual growth of 11%. Thus, almost half of the transactions (47%) have been carried out using payment cards (as opposed to the insignificant share of cards in the value of transactions), while the rest are executed through paper-based credit transfers (30%) and electronic credit transfers (23%). The increasing trend of the number and value of card payment transactions in the past several years also continued in 2018, mainly influenced by the growth of consumer payments (natural persons) at the POS terminals, which points to an increasing use of payment cards in trade.

Chart 96

Share in total value and total number of payments



Source: NBRNM

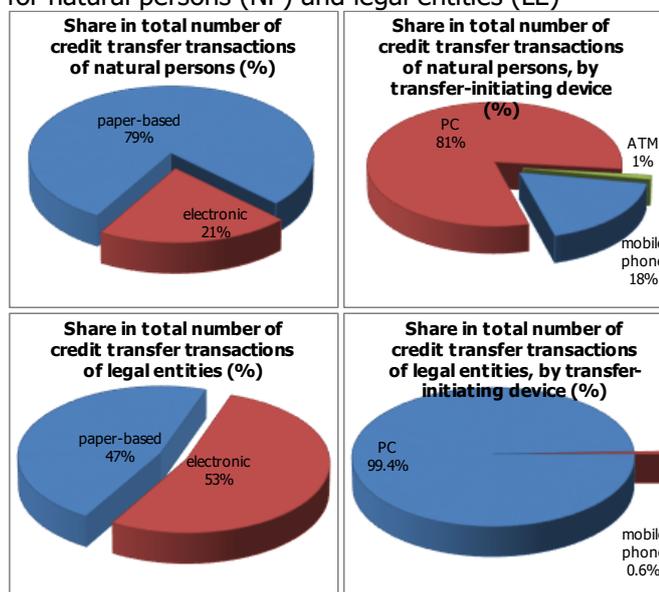
⁷⁹ Payments refer to transactions of natural persons and legal entities (excluding the monetary financial institutions sector). The payment instruments used for making payments in the Republic of North Macedonia are credit transfers and payment cards, whereas cheques were used until 2007, and direct debits are still not introduced as a payment instrument. At the same time, despite the legal possibility, there are no e-money transactions.

7.3.1. Credit transfers

In 2018, the total number of credit transfer transactions was 60.4 million (53% of the total number of transactions) and registered a growth of 3%. The structure of the number of credit transfer transactions carried out by legal entities and natural persons remained stable in 2018, with a share of 71% and 29%, respectively. The share of electronically initiated credit transfers in the total number of credit transfers in 2018 was 43.8% and registered moderate growth compared to the share in 2017 (42%). Legal entities mostly use e-banking services compared to natural persons (53% of the total number of credit transfers are initiated electronically, while among natural persons, only 21% of credit transfers are initiated electronically).

Chart 97

Credit transfers (CT) as cashless payment instrument for natural persons (NP) and legal entities (LE)



In terms of the device in which transfers were initiated in 2018, the largest use (almost 100%) among legal entities remains the personal computer, while among natural persons there is a significant change in payment habits i.e. increased use of cell phones (with a structural share of 18% in the total number of electronically initiated credit transfers from natural persons). However, the comparative data show that the Republic of North Macedonia has a relatively low structural share in the electronically initiated credit transfer transactions (43.8%), compared to the old EU⁸⁰ member states from CESEE⁸¹, where the share of electronically initiated credit transfers within the total number of credit transfer transactions is 92% and 87%,⁸² respectively.

7.3.2. Payment cards

In 2018, total number of transactions with domestic payment cards for purchasing products and services in the country was 53 million, which is an annual increase of 22%.

Regarding the use of payment cards issued by resident PSPs at terminals located in the country, there is a clear trend of increasing the use of payment cards for making payments at POS terminals. Namely, POS transactions accounted for 64% of the total number of transactions with payment cards issued by resident PSPs that are carried out at terminals located in the country, which is an increase of 4 percentage points compared to 2017, at the expense of the reduced use of payment cards for ATM cash withdrawals by 3 percentage points (from 36% in 2017 to 33% in 2018). The use of payment cards for making payments at virtual points of sale in 2018 is still low and their share equals 3%, and the share of ATMs cash deposits is very low.

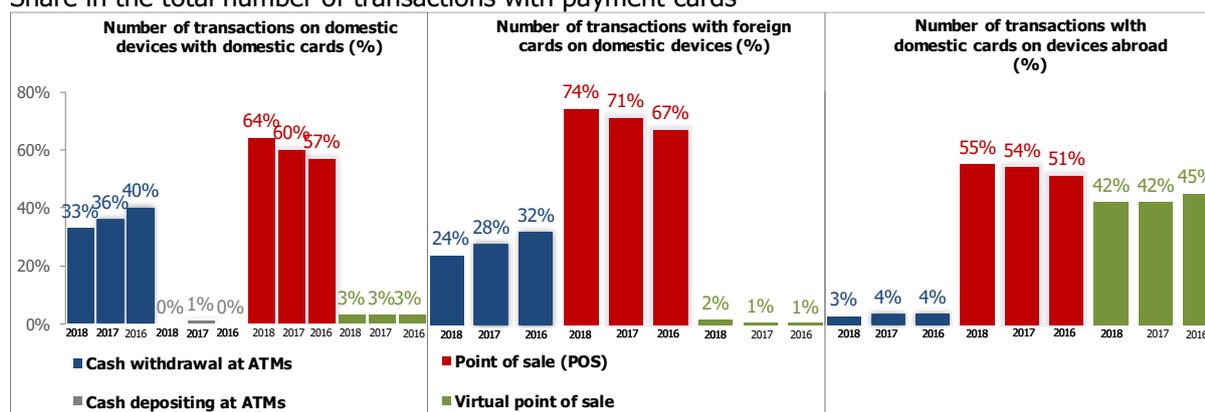
⁸⁰ Austria, Belgium, Germany, Greece, Denmark, Ireland, Italy, the United Kingdom, Portugal, Finland, France, the Netherlands, Sweden and Spain.

⁸¹ Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Poland, the Czech Republic, Romania, Slovakia, Slovenia, Hungary and Croatia.

⁸²The latest available data for the EU member states are as of 2017.

Chart 98

Share in the total number of transactions with payment cards



Source: NBRNM.

The number of transactions with cards issued by non-resident PSPs in terminals located abroad in 2018 amounted to Denar 6.7 billion. Moreover, there is an increased use of payment cards at POS terminals (whose share is 55% which is a slight increase of 1 percentage point compared to 2017), at the expense of the reduced share of ATM cash withdrawals (3%, or a decrease of 1 percentage point, compared to 2017), while the use of payment cards at virtual points of sale remains stable (42%).

A similar trend of increasing the use of payment cards for payments at POS terminals at the expense of the reduced share of ATM cash withdrawals was also registered in the use of payment cards issued by non-resident PSPs at terminals located in the country. Namely, 5.5 million transactions were realized in 2018, from which 74% were executed at the POS terminals, 24% for cash withdrawal from ATMs and 2% for online payments, compared with 2017, when this percentage share was 71%, 28% and 1%, respectively.

7.4. Payment infrastructure

The total number of transaction accounts at the end of 2018 was 3.95 million, which is a moderate annual growth of 2.4%. The number of accounts available for payments initiated electronically in 2018 registered a relatively high growth of 19.4% compared to 2017, but the use of the digital banking channels for electronic payments remains low given that these accounts have a share of only 9.8% in the total number of denar transaction accounts.

Table 3
Payment infrastructure

| | 2016 | 2017 | 2018 |
|--|------------------|------------------|------------------|
| Transaction accounts | 3,865,479 | 3,858,644 | 3,952,593 |
| accounts available for payments initiated electronically | 261,266 | 324,319 | 387,120 |
| Total payment function cards | 1,818,676 | 1,821,997 | 1,821,483 |
| <i>of which by payment technology</i> | | | |
| contact/contactless | 252,851 | 498,199 | 757,161 |
| Online | 18,764 | 19,337 | 19,753 |
| ATM | 1,039 | 1,031 | 1,040 |
| for cash deposit | 86 | 256 | 138 |
| for credit transfer | 256 | 280 | 290 |
| Electronic transfer devices at POS | 34,826 | 31,995 | 31,542 |
| contact/contactless | 12,056 | 15,807 | 18,492 |
| Virtual POS (online POS) | 711 | 832 | 871 |

In 2018, there was a change in the structure of issued cards with payment function with regard to the applied payment technology i.e. increase of 52% in the number of contact-contactless cards on an annual basis, amid share of 41.6% in the total number of payment function cards in use (around 1.8 million). The number of installed devices at the points of sale that support contact-contactless card technology also registered an increase of 17% on an annual basis, reaching a share of 58.6% in the total number of electronic payment devices at the points of sale at the end of 2018 i.e. share growth of 9.2 percentage points. The trend

of increased offer and use of modern digital payment devices is also confirmed by the growth of the number of ATMs with additional function for initiating credit transfers in 2018 (annual growth of 3.6%). In addition, there is a continuous increase of the number of ATMs cash deposits (138 ATMs cash deposits in 2018 i.e. annual increase of 17% or increase of 60.5% compared to 2016 when their number was only 86). The current tendency among banks to increasingly offer digital banking services would lead to a reduction in cash payments or paper-based orders at bank counters, as well as a reduction to the risks of manual data entry by counter workers, thereby increasing the payments security and efficiency.

On the other hand, despite the increase of PSPs at the points of sale what support contact/contactless technology, the total number of PSPs at the point of sale registered an annual decline of 1.4% and at the end of 2018 amounted to 31.542. At the end of 2018, the total number of retailers in the country accepting cards was 12.422. Thus, in 2018, retailers who accept payments at POS terminals have the largest share (11,629), which includes payments at POS terminals 93.6%, while the rest (6.4%) are retailers who accept payments at virtual points of sale and payments on other devices (micropayment service providers⁸³).

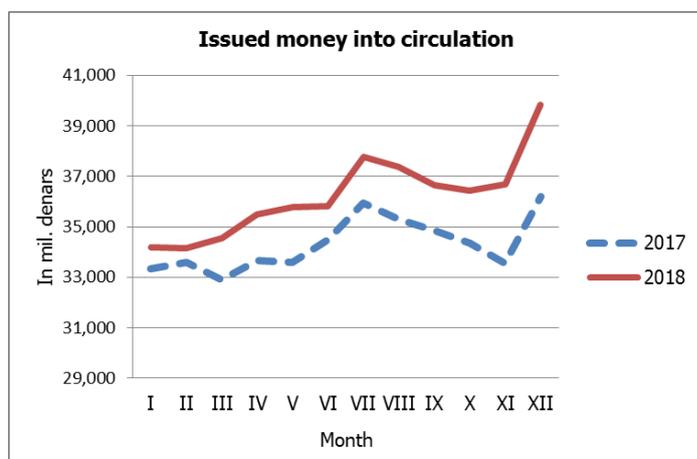
⁸³ Micropayment refers to payment of products and services in a single amount not exceeding Denar 1,000, with the approval for making the payment being issued through telecommunication, digital or IT devices.

VIII. Issuing and managing banknotes and coins of the Republic of North Macedonia - Vault operations

8.1. Currency in circulation

As of 31 December 2018, the total amount of the currency in circulation amounted to Denar 39,825 million, which is by Denar 3,617 million or 10,0%⁸⁴ more compared to the end of 2017. The structure of the currency in circulation suggests that at the end of the year, banknotes and coins make up 97% and 3% of the total value, respectively. In terms of the number of pieces of currency in circulation, the share of banknotes equals 26.1% (89.8 million pieces), and the share of coins equals 73.9% (254.9 million pieces).

Chart 99



Banknotes in denomination of Denar 1000 (58%), Denar 2000 (24.9%) and Denar 500 (10.8%) account for the most of the total value of banknotes in circulation. Other banknotes account for 6.3% of the total value. In 2018, coins in denominations of Denar 10 (33.7%), Denar 50 (31.9%) and Denar 5 (14.9%) had the largest share in the value of coins.

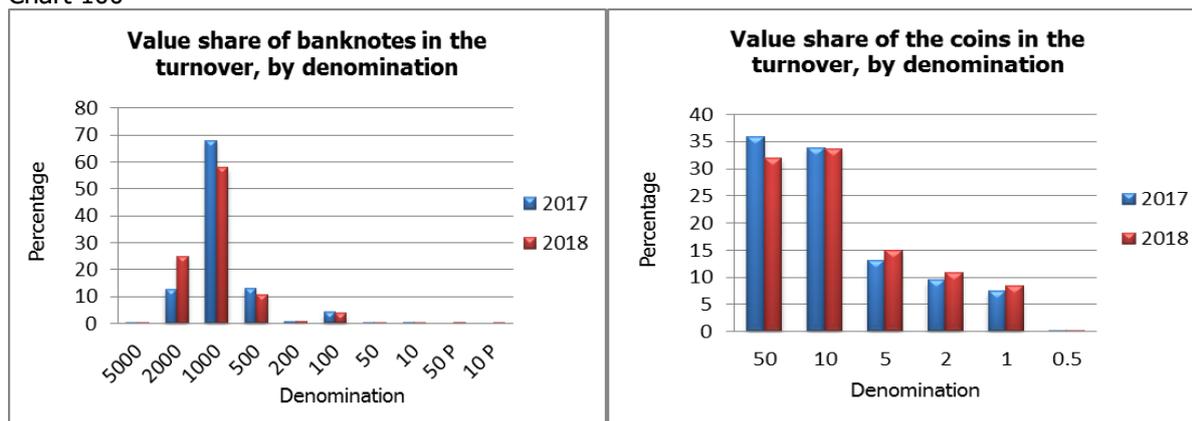
Source: NBRNM.

In the structure of the currency in circulation, according to the number of pieces, banknotes in denomination of Denar 1000 (24.9%), Denar 10 (19.1%) and Denar 100 (16.6%) and the new polymer banknotes of Denar 10 have the largest share. Other banknotes constitute 23.3% of the total quantity of banknotes in circulation. Coins in denomination of Denar 1 (40.1%) and Denar 2 (25.4%) account for the most of total coins in circulation.

Since 15 May 2018, the National Bank issued the first polymer banknotes in denominations of 10 and 50 denars and simultaneously withdrew from circulation the banknotes with the same denominations. Putting the polymer banknotes into circulation is an important momentum for the National Bank, as the Republic of North Macedonia found itself among countries whose central banks have started the process of national currency polymerization. Thus, the Macedonian denar will be among currencies whose banknotes with lower denomination, which are most common in conducting cash transactions, are made in the most modern way and of the most modern material.

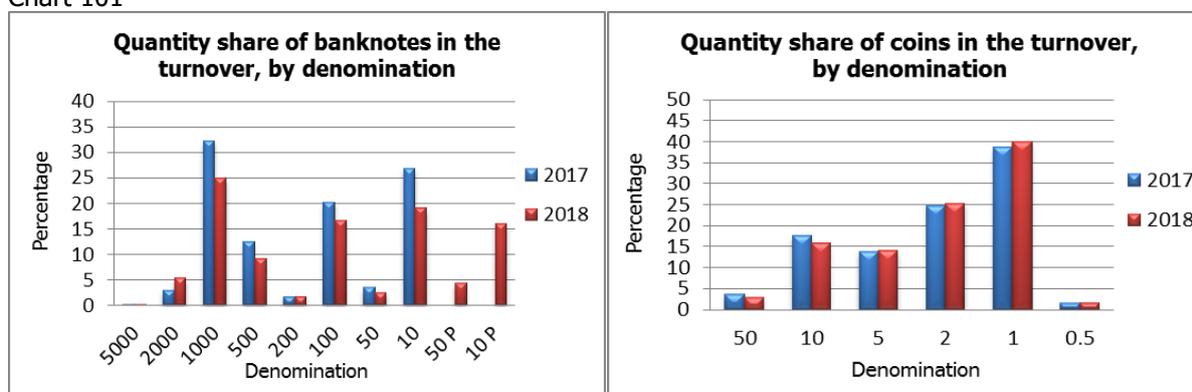
⁸⁴ The presented data on currency in circulation do not include the quantities and value of the collector coins, which were made and put into circulation by the National Bank for artistic, cultural and promotional reasons. Collector coins are available primarily abroad, but also in the Republic of North Macedonia. The value of the collector coins in circulation, as of 31 December 2018, was Denar 10.3 million.

Chart 100⁸⁵



Source: NBRNM.

Chart 101



Source: NBRNM.

Although a relatively short period has passed since putting them into circulation, it is noteworthy that polymer banknotes fully met the expectations given their acceptance and application in conducting cash transactions, thus successfully replacing the existing banknote issues and partially the coins in these denominations. Consequently, for less than 8 months since the polymer banknotes of Denar 10 and 50 were put into circulation, their share in the total quantity of banknotes in circulation is 20.4% with a tendency for further increase.

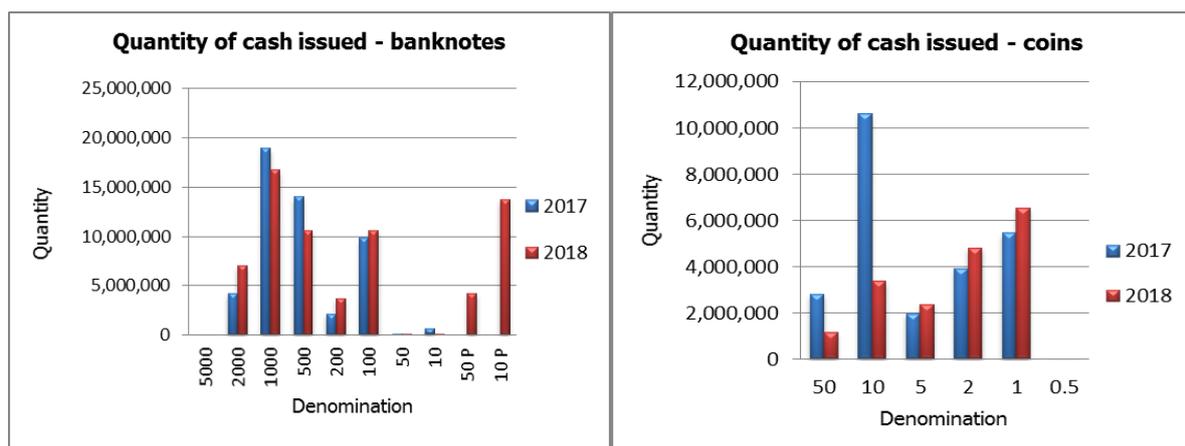
8.2. Supplying banks and cash centers with banknotes and coins

During 2018, the National Bank issued cash to banks and cash centers⁸⁶ in the amount of Denar 38,358 million (increase of 6.2% compared to 2017). At the same time, they received cash from banks and cash centers in the amount of Denar 34,739 million (increase of 1.3% compared to 2017). The analysis of the denomination structure of banknotes and coins suggests that, when issuing and receiving banknotes and coins, the largest share in total turnover is the denomination of Denar 1000 with a share of 29.4% in 2018 (i.e. 38.2% in 2017) and the most common coin is the denomination of Denar 10 with a share of 31.3% in 2018 (versus 39.0% in 2017).

⁸⁵ Letter p in the chart denotes polymer banknotes.

⁸⁶ During 2018, in the activities related to the cash supplying process, two cash centers were actively included thus infiltrating the private sector in the operational distribution segment of cash flows through transferring cash operations from individual banks to the cash centers. In this period, three business banks concluded contract for business cooperation with the cash centers and redirected their activities related to the cash supply process.

Chart 102



Source: NBRNM.

8.3. Processing and destroying banknotes and coins

During 2018, the quality control process of banknotes in circulation covered all received banknotes. Of the total 51.9 million banknotes processed, 12.7 million banknotes (16.7 million in 2017) were destroyed due to unfitness for circulation. Most destroyed banknotes were denominated in Denar 100 and Denar 1000 (71.4%). In 2018, 15.8 million pieces of coins in denominations of 1, 2, 5, 10 and 50 denars were processed, 227.5 thousand pieces of which being withdrawn as unfit for circulation.

8.4. Expertise of suspicious / counterfeit money

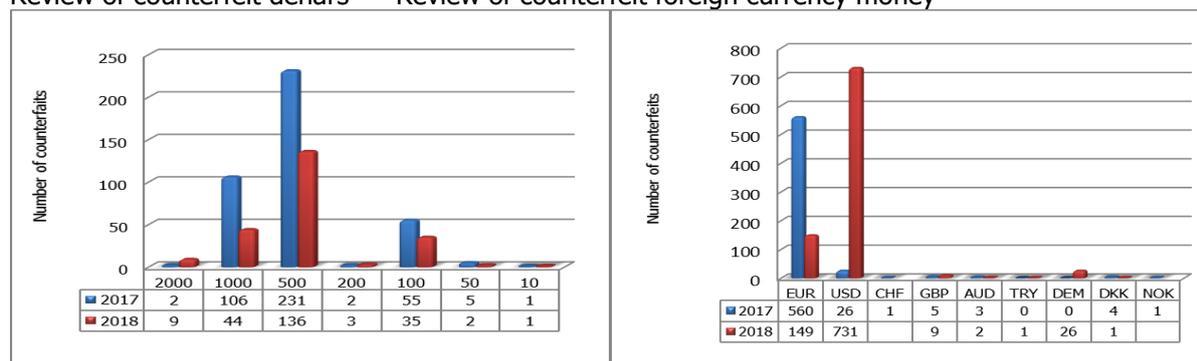
In 2018, the National Bank, as a single institution authorized to determine the authenticity of banknotes and coins denominated in denars and in foreign currencies, successfully performed the expert analysis of counterfeit money. In order to strengthen the capacities for accurate detection of suspicious and counterfeit money with officers engaged in daily cash handling, in 2018, the National Bank continued with the specialized training of staff in banks and cash centers. A total of 547 employees from 12 banks and 2 cash centers have been trained, through presentations and direct handling of authentic and counterfeit money. In these trainings, expertise was conveyed to participants that would be applied in their future activities.

As for the number of expert analyses performed during 2018, of the total 358 suspicious Denar banknotes received, the expert analysis found that 128 banknotes were genuine, while the remaining 230 were counterfeit banknotes. The number of identified counterfeit banknotes detected during 2018 decreased by 43% compared to 2017. Of the total number of detected counterfeit Denar banknotes in 2018, the most common is the denomination of Denar 500 (136 piece), or 59.1 % of the total number of counterfeits⁸⁷, followed by the denomination of Denar 1000 (44 pieces), or 19.1% of the total number of counterfeits and the denomination of Denar 100 (35 pieces), or 15.2% of the total number of counterfeits. The total value of Denar counterfeits in 2018 amounted to Denar 134,210.00, which is a negligible share compared with the total value of the currency in circulation.

⁸⁷ 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 put into circulation in an organized manner in recent years, are still delivered.

Chart 103

Review of counterfeit denars Review of counterfeit foreign currency money



Source: NBRNM.

In terms of committed expert analyses of received suspicious banknotes and coins denominated in foreign currency in 2018, of total 1,031 analyses, 919 counterfeit and 112 original money were identified. Of the total number of counterfeit banknotes, the Euro banknotes (731 pieces) and US dollars (149 pieces) prevailed.

Similar to the previous year, the number of registered counterfeit coins is insignificant and is reduced to a total quantity of four pieces in denomination of 2 euros.

The general conclusion is that counterfeit banknotes and coins are of relatively poor quality, allowing simple and easy identification and determination of their properties⁸⁸.

8.5. Implementation of cash operations standards and criteria in banks and cash centers

For full implementation of standards and criteria aimed to rise the quality and protect the integrity of the domestic monetary unit, the National Bank continued implementing its supervision activities in banks and cash centers by conducting off-site and on-site examinations. In the course of 2018, nine on-site examinations were conducted, seven of which of commercial banks and two of cash centers.

In addition, the National Bank conducts regular tests, i.e. verification of the functional features of banknote and coin processing machines. During 2018, 50 cash processing machines were tested as part of the regular annual verification of these machines, as well as due to the irregularities in machines identified during on-site examinations.

As part of the training courses for strengthening the capacities for precise detection of suspicious and counterfeit money, the staff of banks and cash centers is trained for manual processing of the money for the purposes of returning to circulation.

Summarizing the effects of these activities, there was an undoubted confirmation of the National Bank's expectations for establishing a stable cash supply system and maintaining a high-quality standard of banknotes and coins in circulation.

⁸⁸ 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.

8.6. Issuance of collector coins

Collector coins are unique, representative and of great artistic value that promote the Republic of North Macedonia abroad. Although the sale of collector coins is primarily intended for and takes place abroad, they have aroused great interest in the country⁸⁹.

During 2018, the National Bank enhanced its already rich collection of collector coins with new issues by completing the second Zodiac Signs collection and the issuance of the Orthodox Saints collection composed of four collector coins.

In 2018, 428 pieces of collector coins were sold, 369 of which through the National Bank and 59 through the commission agent.

⁸⁹ In order to increase the interest in these coins and to make them available, the National Bank enabled commission sale through the Mother Teresa Memorial House, Skopje in the afternoon and on non-working days.

IX. Supervision and inspection

During 2018, pursuant to the Annual Supervision Plan, the National Bank carried out 12 regular examinations (on-site risk-based supervision) in 10 banks and two savings houses, as well as inspections (on-site compliance examinations) in 13 banks, two savings houses, three money transfer services, five subagents and 167 examinations of licensed exchange offices.

In 2018, the National Bank also performed targeted supervision of the interest rate risk management in the banking book in the banking system. For this purpose, a questionnaire was prepared and submitted to all banks.

9.1. On-site risk-based supervision

Banks in the Republic of North Macedonia are usually involved in traditional banking activities and their risk profile is mostly determined by their credit risk⁹⁰. Hence, the exposure to this risk, as well as its management quality, with special emphasis on the properness of estimating impairment losses is most often subject to on-site supervision. Last year, the credit risk was examined in 10 banks and two savings houses.

In the reporting period, five banks were examined for the suitability of the anti-money laundering systems, seven banks were examined for operational risk management, and seven banks for corporate governance. Additionally, in the reporting period, information security adequacy was also examined in four banks. The accuracy of capital adequacy reports was examined in seven banks, while the accuracy of reports on transactions with persons connected to banks was examined in 10 banks.

The examinations showed that banks' risk management was adequate and they were largely responsive to the corrective measures imposed by the National Bank in the previous periods.

In order to improve the banks' credit risk management rules and practices, the National Bank made several recommendations. They mainly focus on the promotion of the credit risk exposure classification in terms of greater impact on the client's creditworthiness, inclusion of early warning indicators, and use of higher percentage of impairment for the given range for exposures classified in the same risk category. Recommendations were also made for improving the existing credit risk identification processes by strengthening the criteria for approving exposure to non-financial legal entities and monitoring their credit exposure.

Some banks were given recommendations for improving internal controls of the appropriateness of the use of loans, the accounting records, management of exposures approved as an exception, as well as for improving the process for identifying connected parties. In the household segment, recommendations were given primarily to tighten banks' criteria for approving credit risk exposures and their internal controls.

As for the actions and measures for anti-money laundering and financing of terrorism, recommendations were also given to increase their effectiveness in risk management. The recommendations refer to strengthening the measures for determining and confirming the identity of the rightful owner of the clients, expanding the analyzes and controls when establishing a business relationship and in transactions with non-residents, strengthening the analyses of clients who establish a business relationship without a physical presence or clients that are non-profit organizations, associations or foundations. Some banks were given a

⁹⁰ The analysis of risks in the banking sector is elaborated in the Report on the risks in the banking sector in 2018.

recommendation to provide additional documentation to determine consistency of clients' transactions with their activity, to extend the list of offshore countries for the purpose of adequate determination of the geographical risk, to extend the inherent risk assessment analyses and to revise suspicious transactions indicators. During this period, some banks were given a recommendation for improving the management information system regarding this risk and expanding the controls carried out by the internal audit.

Banks' corporate governance was found to be satisfactory. In general, banks' bodies comply with the laws and bylaws and are involved in the strategic and operational risk management. There were findings for appropriate organizational structure, satisfactory remuneration system and satisfactory implementation of the three control functions: risk management, compliance and internal audit. For further improvement of corporate governance, recommendations were given for adoption and annual review of risk management policies by the supervisory board, strengthening the compliance activities, improving the process of introducing new products/services, improving the process and internal acts that regulate the selection and dismissal of persons with special rights and responsibilities, extending the content of the reports on meetings of the bank's bodies and implementing and reviewing internal acts that regulate remuneration in the bank. A few banks were given a recommendation to improve internal audit activities, through changes to the audit cycle, scope of audits, staffing and internal work methodologies. Most of the banks were given a recommendation to enhance the role of the independent members of the supervisory board and the audit committee in carrying out activities set out in the law and the rules of procedure.

In terms of operational risk management, recommendations were given for improving the process of risk identification, measurement and monitoring. The recommendations refer to setting limits on key risk indicators, revising the manner of monitoring harmful events, and appropriately defining key risk indicators, centralized risk monitoring and reporting, and employee training to determine and report on operational risk exposures. Also, recommendations were given for enhancing the internal audit activities, revising the operational risk management framework regarding the use of outsourcing, improving the business continuity plan and improving the risk identification process by establishing a process of operational risk exposure self-assessment.

In assessing banks' IT or information security risk, recommendations were given for proper segregation of duties of IT system administrators, strengthening the established audit trail system, improving system configurations, improving the protection of IT system confidentiality, improving the business continuity plan, improving the process of testing the existing functionalities in the case of changes to applications and drafting an IT system development strategy. The other recommendations refer to: increasing the rate of implementation of IT projects deriving from the business plan and operations, expanding the analyzes resulting from the annual IT risk assessments, as well as greater commitment and information IT infrastructure-based risks, as well as expanding internal audit activities. Also, a recommendation was given for reviewing the configuration files and establishing a user identifier and password management process, proper procurement and resources planning, and establishing an independent audit trail system of card operations.

The examinations mainly found that banks are in compliance with the regulations that pertain to the accuracy of information in the capital adequacy reports. Some banks were given a recommendation to strengthen internal controls.

Examinations targeted to accuracy of reporting on transactions with related parties found no material failure. Recommendations given to some of the banks refer to strengthening of internal controls for the purpose of proper identification of persons connected to persons with special rights and responsibilities, as well as the extension of information contained in

the reports to the supervisory board for adequate coverage of all transactions with these persons.

9.2. On-site compliance examinations

The on-site compliance examinations are focused on the assessment of the banks and savings houses compliance with the Law on the National Bank of the Republic of Macedonia, the Law on Foreign Exchange Operations, the Law on Consumer Protection in Case of Consumer Loan Agreements, the Law on Providing Fast Money Transfer Services and the Law on Payment Operations. All supervised entities are mainly complied with the regulations.

On-site examination of non-banking financial institutions or licensed exchange offices, money transfer services and their subagents aimed to assess their compliance with the Law on Foreign Exchange Operations, the Law on Providing Fast Money Transfer Services and the Law on Prevention of Money Laundering and Financing of Terrorism. Overall, these institutions were found to be complied with the regulations.

9.3. Licensing of banks and savings houses in 2018

Within the regular activities in the area of licensing of banks and savings houses in accordance with the Banking Law, during 2018, the National Bank processed 60 applications for issuing approvals. Applications processed during the year are shown in the table below.

Table 4
Processed applications for issuance of prior approval in 2018

| Type of license/approval (banks) | issued | rejected | halted |
|--|---------------|-----------------|---------------|
| Approval for acquiring shares in a bank | 1 | 1 | 1 |
| Approval for start of conduct of financial activity | 3 | | 1 |
| Approval for statute amendment | 12 | / | 2 |
| Approval for appointment of a Supervisory Board member | 17 | / | 1 |
| Approval for appointment of a Management Board member | 11 | / | / |
| Approval for including a capital instrument in Common Equity Tier 1 capital | 3 | / | / |
| Approval for including a gain in Common Equity Tier 1 capital | 5 | / | / |
| Approval for reducing the value of instruments that are part of the Common Equity Tier I capital | 1 | / | / |
| Approval for acquiring share holding in a bank | 1 | / | / |
| Type of license/approval (savings hoses) | issued | rejected | halted |
| | / | / | / |
| Total | 54 | 1 | 5 |

X. Statistics

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

During 2018, the National Bank continually collected, prepared and published statistical data in the area of external and monetary statistics. Also, certain segments were further developed and upgraded. This includes both methodological aspects and existing infrastructure, aimed to reduce the reporting burden and to increase effectiveness and efficiency in the compilation as well as the dissemination of statistical surveys.

Concerning statistics, 2018 was marked by activities related to the accession to the IMF Special Data Dissemination Standard Plus (SDDS⁹¹ Plus). During 2018, the National Bank completed the final stage of accession to the IMF SDDS Plus by conducting activities for technical and qualitative adjustment of the statistical system to the Standard requirements. The successful execution of these activities enabled the formal accession of the Republic of North Macedonia to the SDSS Plus on 28 January 2019, making the country one of the 18 countries in the world that have met the statistical reporting requirements under this standard. Also, during 2018, activities were carried out that improve the quality and the details of the external and monetary statistics and their communication with the public through the dissemination of statistical data and issuing press releases.

In terms of methodological improvements and harmonization with international standards, progress was made in 2018 in the following areas:

In the area of **monetary statistics**, the National Bank continued its further harmonization with the international and the European standards, especially with the latest 2016 IMF Monetary and Financial Statistics Manual. In the period July - August 2018, the National Bank published data on the monetary statistics, the statistics of other financial corporations and the interest rate statistics, based on the new methodology with advanced division of financial instruments, by sector and currency. At the same time, the National Bank also prepared a new definition of broad money, with an identical scope as the EU countries. Also, for the purpose of timely, appropriate and quality informing of the users about the novelties, the National Bank issued an announcement and press release for the planned methodological changes and made a new structure of the section concerning the monetary statistics on its web site.

In the area of **financial accounts statistics**, beside the constant improvements in data sources and methodological aspects, in 2018, the National Bank prepared detailed data on the flows of the financial assets and liabilities for the government sector, by sub-sector, for the period 2014-2017. The compilation of these data is the key input to the compilation of some of the excessive deficit procedure (EDP) tables that the State Statistical Office first prepared and submitted to Eurostat. The National Bank also performed a second annual transmission of detailed financial account data (balances) to Eurostat, for the period 2013-2017⁹².

In the area of **securities statistics**, the activities for software connection of all available databases for domestic and international trade in securities, which are in an advanced stage, continued. The promotion of this statistics creates prerequisites for enriching

⁹¹ Special Data Dissemination Standard Plus.

⁹² The data have an experimental status, until reaching the scope and details appropriate for their dissemination.

the data sources and improving the quality of financial accounts statistics. More specifically, data were compiled for calculating balances and transactions of government bonds, thereby completing the process of providing data on government securities (bills and bonds) for which the National Bank is a fiscal agent. Data infrastructure for calculating the investment in debt securities indicator was compiled, as one of the additional indicators required for the fulfillment of the SDDS Plus requirements provided for in the five-year transition period.

In terms of improving the infrastructure for collecting, compiling and disseminating statistics, in 2018, there was progress in the following areas:

- For the purposes of increasing the availability and improving access of external users to statistical data, in September 2018, the National Bank successfully delivered the project ***Development of a tool for internal analysis of statistical data and statistical web portal to external users***, intended for easier browsing through data by users (available from the second half of 2019). The web portal will provide greater flexibility to users for designing the form and content of statistical data, adjusted to their individual needs. This will increase the usefulness of published data and reduce the time necessary for data browsing.

- In 2018, the National Bank continued with the activities within the long-term project for **establishing an integrated reporting system for statistical and supervisory purposes - ISIDORA**, which will significantly reduce the reporting burden and will allow a much richer data base for the existing statistical purposes, as well as for further harmonizations with the international statistical requirements. During the year, a number of crucial activities were undertaken to design data structure required for reporting in the new system.

- Activities within the long-term project for **establishing a single statistical data warehouse for the purposes of external statistics**, continued in 2018. This project would facilitate further harmonization with the requirements of the European Union and other international organizations and external users.

- Within the ongoing activities of the National Bank for improving the communication with reporting entities and reducing the reporting burden, in June 2018, **the procedure for recording credit operations with non-residents was simplified**, by reducing the volume of documentation necessary for recording. Also, in 2018, the National Bank **used the sample method for the first time**, in lieu of the census method, in reporting on capital investments in the country, which significantly reduced the reporting burden. In the period ahead, the gradual introduction of electronic reporting would further contribute to improving the efficiency of the reporting system without reducing the quality of statistics.

- In terms of additional activities in 2018, we should underline the activities for adjusting the National Bank IT-system for processing foreign trade data to the new system in the Customs Office. The adjustment is important as it could affect the compilation of external statistics, as well as the solutions for this segment in the data warehouse project.

The National Bank, the Ministry of Finance and the State Statistical Office continued working together in the area of financial accounts statistics, fiscal statistics on excessive deficit procedure, consistent sectoral division of economic agents, as well as in the joint technical assistance projects for further development of several statistical areas.

XI. Internal audit

In 2018, 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 2018, 20 regular audits were carried out for 23 business processes, with 22 recommendations to improve the internal control system. The recommendations were followed up on a regular quarterly basis and the findings of the monitoring suggest that the recommendations are mainly observed and implemented within the given deadlines. In 2018, 95% of the recommendations were implemented.

Besides the ongoing activities, the internal audit also implemented the Quality Assurance and Improvement Program in the Internal Audit Department. In this light, in 2018, this program also included amendments to the Instructions and the internal work procedures of the Internal Audit Department, selective review of the working papers from two audits in terms of compliance, completion of the automation of the monitoring of the given recommendations, as well as other internal audit activities.

The operation of the Internal Audit Department was closely supervised by the Audit Committee, which held regular meetings during 2018.

XII. Improving the National Bank institutional capacity

12.1. Strategic planning

In May 2018, the new Strategic Plan of the National Bank for 2019-2021 was adopted. The Strategic Plan contains eleven strategic objectives which clearly show the National Bank commitment for maintaining low and stable inflation through the strategy of maintaining a stable exchange rate of the denar against the euro, maintaining financial stability as an integral element of macroeconomic stability and precondition for achieving economic growth and prosperity. The Strategic Plan for 2019-2021 is a continuation of previously established strategic objectives in the area of establishment and implementation of monetary policy and support of financial markets, management of foreign reserves, financial stability maintenance, issuance and management of banknotes and coins, payment systems, statistics and research. The strategic plan also expresses the National Bank commitment for further development of corporate governance and for deepening the value system through modern and competent human capital, state-of-the-art technology in business processes, efficient risk management and cooperation with domestic and foreign institutions. Based on these strategic goals, in December 2018, the National Bank adopted the Plan of Activities for 2019, unifying the program activities of the National Bank organizational units and ensuring coordination of activities, better assessment of the planned and expected results, as well as adequate allocation of available resources for efficient achievement of the strategic objectives.

The strategic planning process also includes National Bank project management activities. For further advancement of project management, in November 2018, the National Bank in cooperation with De Nedelrlandsche Bank hosted a workshop and seminar focused on project management practices, with recommendations for enhancing efficiency in planning and project delivery.

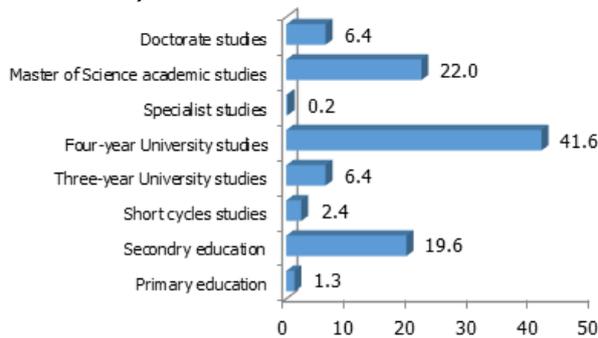
12.2. Human resources management

The National Bank of the Republic of North Macedonia is an institution that has been taking care and investing in its employees in order to strengthen their skills and competencies and increase their expert knowledge for creating highly educated staff to fight off any challenge while achieving its goals.

At the end of 2018, the number of employees⁹³ in the National Bank was 446. In 2018, the National Bank gender structure remained the same compared to previous years, i.e. 59% females, and 41% males.

⁹³ The total number of employees, including those hired through temporary employment agency, was 454. The charts in this section take into account the total number of employees.

Chart 104
Qualification structure of the employees in the National Bank according to the Macedonia Qualifications Framework (in percentages, as of 31.12.2018)

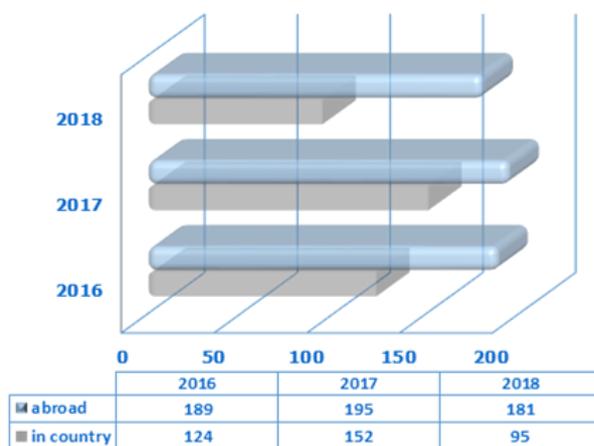


Source: NBRNM.

employees on their performance. The National Bank uses this system as a tool for greater engagement, productivity and utilization of knowledge and creative potential in the institution. As every year, these processes require development of the professional and soft skills of the employees and managers in the institution.

The National Bank has been constantly investing in the professional training of the staff in order to achieve its strategic objectives, mission and vision. During 2018, 276 professional training courses were attended in the country and abroad.

Chart 105
Number of professional training courses in the country and abroad



Source: NBRNM.

the National Bank's major partners in the mutual cooperation programs. 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 the National Bank operations.

12.3. Research activity

In 2018, the National Bank's research activities were directed towards areas important for the major operating goals, support of the decision-making process, timely consideration of future challenges, as well as further strengthening of institutional capacity.

In terms of age structure, similar to 2017, the average age of employees in 2018 was 44.9 years. Employees with higher education (four-year university studies) dominate the qualification structure with 41.6%, followed by employees with master's degree (22%).

Professional training, performance evaluation and remuneration are processes that affect the career development of the National Bank employees. As every year, consultations were held across departments about impartial evaluation and providing appropriate feedback to

Compared to the previous year, the total number of professional training courses decreased by 20.5%, largely due to the lower number of training courses in the country which decreased by 37.5% amid the decrease of 7.2% in training courses abroad. In 2018, the number of employees who attended professional training course decreased by 17.1% compared to the previous year.

Main international institutions that organize professional training courses include the European central banks, the International Monetary Fund in cooperation with the Joint Vienna Institute and the World Bank who are

During 2018, several research projects were delivered, related to: analysis of corporate sector indebtedness using microdata, new methods for current and short-term GDP forecast and preparation of working papers, analysis of the features of export companies using microdata, research on the impact of trade in services on economic growth, as well as analysis of the relationship between the credit market and the dynamics of apartment prices. In addition, during the year, the National Bank was involved in other research projects whose delivery is underway, mainly in the field of macroeconomic modeling, financial stability and banking system. The research program for 2019 - 2021, adopted in mid-2018, points to further activities in the main research areas, supplemented with a few new projects.

On 12-13 April 2018, the National Bank hosted the seventh research conference *Around a Decade after the Crisis: Heading to the New Global Cycle and Monetary Policy Normalization*, in Ohrid for the first time. This is a traditional conference marking the monetary independence. The first Conference day was dedicated to the presentation of research papers from central banks and academic institutions, and the second day was scheduled for high-level panel discussions, including the panel discussion of governors of the central banks in the region and the EU. At this event, the National Bank bestowed an 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 National Bank, continued operating as a part of the activities to support the development of research and analytical activity. In 2018, the Club held four quarterly sessions where participants presented and discussed several research papers that addressed topics in the field of monetary policy, banking, output, public debt, sectoral structure of the economy. During 2018, in the area of research activity, the National Bank had technical cooperation with the Central Bank of Croatia, through the exchange of experiences in the field of the setup of research activity in the two central banks. Also, in cooperation with the Czech Central Bank, an expert visit was paid within the technical assistance for building the Dynamic Stochastic General Equilibrium (DSGE). Employees of the National Bank participated in many conferences and international events with their papers and presentations.

12.4. Operational risk management

During the year, activities were carried out to improve the operational risk management by further developing the internal acts and expanding the overview of the potential sources of operational risks of the National Bank, taking into account the estimated risks of the current operations. Furthermore, the National Bank updated the registry of working processes and their criticality, made a new operational risk assessment and worked out action plans with operational risk management measures. The National Bank is in the process of developing strategies and measures for operational risks management. Moreover, presentations and training courses were held throughout the year for the organizational units concerning the latest trends in central banks' operational risk management, as well as introduction of changes to internal acts.

12.5. Business continuity

According to the National Bank Business Continuity Policy, there is a system in place for coordinated planning, updating and testing of measures necessary to ensure business continuity in a crisis.

In 2018, business continuity plans (BCPs) for 98 business processes were revised. Moreover, to check the completeness and feasibility of the business continuity plans of the critical business processes, in 2018, activities were conducted for preparation of the necessary

documentation, training of employees and testing the business continuity plans to ensure continuity of critical work processes, with pre-defined crises scenarios and scope of testing. In this regard, eight organizational units of the National Bank tested their business continuity plans for 15 critical business processes. Detailed reports were prepared for the results of the conducted tests with appropriate action plans for the implementation of measures to improve the business continuity plans.

12.6. Information security and personal data protection

To ensure compliance of the relevant internal regulations with the data protection regulations, the National Bank conducted control of the compliance of nine internal regulations with the data protection regulations and assessed the need for their amending due to the changes in the environment.

Regarding the information security of the National Bank and ensuring confidentiality and protection of data processing, the National Bank conducted periodical controls of the compliance and gave recommendations for addressing the identified shortcomings. Additionally, incidents were analyzed and the annual report thereon was reviewed by the Information Security Steering Committee.

Considering the National Bank Information Security Policy that rise employees' awareness of the information security, in 2018, training courses for information security, data protection and security of classified information were held, attended by 103 National Bank employees.

In 2018, the National Bank's compliance with all mandatory security controls provided for in the SWIFT Customer Security Control Framework (CSCF)⁹⁴ in the KYC⁹⁵ application was verified and verified.

12.7. IT development

During 2018, there were 8,282 working cases in the field of information technology, which is 27% up compared to 2017 (6,518 cases). Of these, the majority, or 57%, were requests for IT services, 34% relate to resolving incidents, while 9% account for the regular maintenance and improvement of the information infrastructure. The IT Department maintains around 129 servers, 460 workstations, 199 applications (mainly software solutions developed within the National Bank, and a small portion purchased from outsourcers), as well as a wide range of other IT resources used by the National Bank employees on an ongoing basis.

In 2018, 17 IT-software development projects were delivered, four were carried over into 2019, and four were canceled. Also, additional IT software projects were developed which were not scheduled but proved to be necessary during 2018. The scheduled to unscheduled activities ratio is 77% to 23%, which is a significant improvement of the National Bank's planning process in managing and executing IT projects, especially given that some activities are not dependent on the National Bank but are initiated by external factors.

In 2018, efforts were made to improve the SWIFT infrastructure, namely the systems were upgraded according to the SWIFT recommendations and the regular annual maintenance services, and changes were made to other systems that contribute to the information security. Furthermore, there were activities for installing a new print control software, a new SAN (Storage Area Network) infrastructure for MIPS, for replacing the firewall, the database management software and the email system, as well as several telecommunication lines, and

⁹⁴ Customer Security Controls Framework.

⁹⁵ Know Your Customer application is used to exchange information between SWIFT members.

for introducing a second, backup optic line to the disaster recovery locations. In the period May-June 2018, a new system was introduced, installed and configured for recording of working hours and access control and its connection to new entry/exit terminals with contactless cards.

In June 2018, the National Bank hosted the International IT Forum, which was attended by 34 IT specialists from fifteen central banks. The Forum participants, through presentations and open debate, shared their knowledge and experiences on various aspects of the development and maintenance of applications and IT services.

In November 2018, the National Bank applied the Business Continuity Plan from the disaster recovery location, successfully testing and checking whether the IT equipment used for the MIPS business processes operates properly in a crisis.

XIII. Other activities

13.1. International cooperation

The multilateral cooperation of the National Bank with the International Monetary Fund (IMF) and the World Bank continued in 2018, when IMF representatives paid a regular visit to the National Bank concerning consultations under Article IV of the Articles of Agreement. During 2018, a joint IMF-World Bank team implemented the FSAP mission making a comprehensive and thorough assessment of the country's financial sector. The FSAP, *inter alia*, analyzed financial sector sustainability, quality of regulatory and supervisory framework, supervisors' capacity, payment systems quality and financial market infrastructure, and ability for financial crises management and resolution. Furthermore, the National Bank continued its cooperation with the IMF in the area of statistics, aimed to improve statistics within the National Bank jurisdiction.

Within the cooperation with the World Bank, an expert technical assistance mission was carried out in the area of banking supervision, conducted by the FinSAC (World Bank Financial Sector Advisory Centre) for establishing a bank resolution and recovery framework as well as for implementing IFRS9. Moreover, within RAMP, World Bank experts visited the National Bank, sharing their knowledge of the application of futures contracts in foreign reserves portfolio management.

The National Bank Governor and Vice Governors attended the annual Spring Meetings of the World Bank Group and the International Monetary Fund, where they held meetings with representatives of international financial institutions, commercial banks and other institutions. In 2018, the National Bank participated in some of the meetings of the Bank for International Settlements in Basel and in the meetings of the Central Bank Governors' Club of the Central Asia, Black Sea Region and Balkan Countries.

In 2018, the National Bank continued its effective bilateral technical cooperation with several central banks, among which the Dutch Central Bank, the Central Bank of Germany, the National Bank of Belgium, the National Bank of Poland as the most important strategic partners, and other central banks from the EU and the countries in the region.

Moreover, in 2018, the NBRNM and the ECB concluded a Memorandum of Understanding aimed at effective exchange of supervisory information. The implementation of the Memorandum will be of great importance for the NBRNM's commitment to continue developing banking supervision in accordance with the latest European and international standards and recommendations.

Also, within the established regional cooperation between the ECB and the central banks of the Western Balkans, seminars were held on the functioning of the European System of Central Banks attended by representatives of the NBRNM.

In 2018, the NBRNM was again involved in the national strategic activities related to the process of accession of the Republic of Macedonia to the European Union, by taking part in the regular dialog with the European Commission within the subcommittees derived from the Stabilization and Association Committee, in the development and implementation of the National Programme for the Adoption of the Acquis (NPAA), in the preparation of the input of the Republic of Macedonia to the Annual Report of the European Commission, and in the development of the Economic Reforms Programme (ERP).

Regarding the available EU pre-accession funds, in 2018, the NBRNM was a beneficiary of projects funded by the Instrument for Pre-Accession Assistance (IPA) and the Technical Assistance and Information Exchange Instrument (TAIEX).

Concerning the IPA funds, the National Bank was engaged in the 2012 National Programme as well as in the IPA Multi-Country Programme for 2017. In 2018, the project

Development of a Tool for Internal Analysis of Statistical Data and Statistics Web Portal to External Users was delivered (available to external users from the second half of 2019). In 2018, the proposal for the twinning project *Strengthening of the Institutional Capacity of the National Bank in the Process of Its Accession to the ESCB* was brought out again. This project focuses on several key National Bank operations: payment systems, banking regulation and banking supervision, statistics and monetary policy, and economic research. At the end of 2018, the National Bank submitted an application for funding the twinning project, which was approved by the European Commission in February 2019. This project will be financed under the IPA2 Programme.

Financial support was provided under the Multi-beneficiary *Statistical Co-operation Programme IPA 2017* for participation of the NBRNM representatives in the regular Eurostat meetings and committees in the area of balance of payments statistics in 2018.

During 2018, two technical cooperation projects within the Technical Assistance and Information Exchange Instrument (TAIEX) were arranged, due to start in 2019.

13.2. Public relations

The ongoing strengthening of transparency and development of communication with the public, including with media representatives, was challenging for the National Bank in 2018. Over two hundred press releases were published and eight press conferences were held, three of which international (the most in the past seven years), as well as two briefings with journalists concerning the international events hosted by the National Bank. All received journalistic questions (over seven hundred) were answered in the due course and at the media request, a large number of interviews were held with representatives of the National Bank management.

Web contents were published, including press releases and reports of the National Bank, announcements of monetary policy instruments and new data reporting, same as publications and working papers in Macedonian and English, with much of the content also being available in Albanian. The annual report of the National Bank was also published in hard copy.

The official social networking sites of the National Bank have evolved as platforms for direct communication with the public, making them more accessible and more acceptable to the audience. Following the best practices of the central banking community, activities were identified for further development of such institutional pages in 2019.

The e-mails serving for direct communication with the public also were also efficient, responsive to all questions sent by legal entities and natural persons, as well as those received through the contact forms on the social networking sites. Also, the e-mail address was used for free access to public information.

In 2018, a project was launched for the introduction of a centralized electronic public relations coordination system. Furthermore, following the example of a number of central banks, the ECB, the IMF and other international institutions and organizations, the National Bank introduced a digital monitoring of all media releases concerning central bank operations in the country, in order to inform employees and improve public relations.

In 2018 there was an informative and educational campaign aimed at the general public on the introduction of the first polymer banknotes in our country. During the campaign, numerous educational and informative texts and materials were published on the National Bank website and/or social networking sites, as well as a number of materials intended for timely briefing of journalists. The public was also informed through informative and educational posters in all bank branches in the country. In the last month of the year, the

National Bank hosted the traditional journalist workshop, presenting and discussing current topics concerning its operations. This helps the media better understand the National Bank operations and thus better inform the public about the central bank activities in the country.

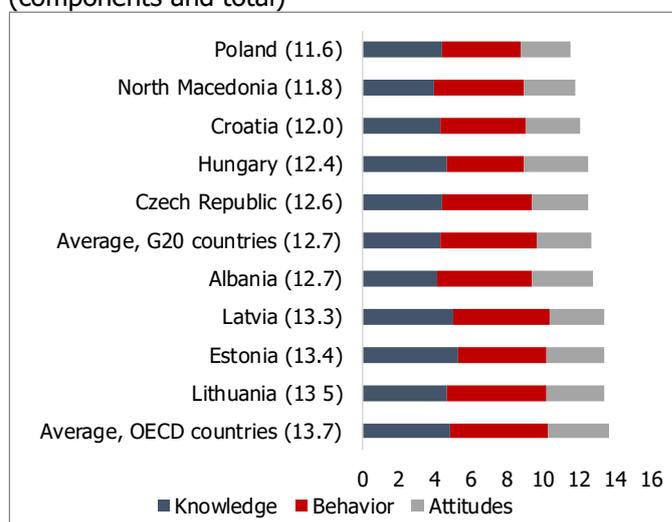
13.3. Financial education

In 2018, the National Bank implemented numerous financial education activities aimed at rising financial literacy in the country. Throughout the year, interactive educational lectures were held at the NBRNM for students from primary and secondary schools, as well as faculties, in both Macedonian and Albanian. Roughly, 1300 students were included, accompanied by teachers and professors. Lectures were held and visits were paid during the Global Money Week in March.

In 2018, the National Bank published several publications such as *Smart Money Management - A Guide to Personal Finance*. This Guide is intended to bring the general public closer to the basic personal finance management concepts and terminology. Also, the *Comic Book with Denarko* was published, and in cooperation with the Development Facility of the European Fund for Southeast Europe (EFSE DF), the National Bank developed two educational brochures: *A Journey to the World of Money* and *A Guide to Financial Education* targeted to the youth of this country.

In February 2018, the National Bank announced the competition for best educational game (web/mobile application). The game *Earn and Save* was developed by an IT student (contestant) and published on the website as a Windows and Android application. The game will help young people to entertain themselves, to show interest in economics and finance and to broaden their knowledge.

Chart 106
Adult financial literacy, by country
(components and total)



Source: *Adult Financial Literacy Competencies in Macedonia, INFE methodology.*

financial knowledge, financial behavior and financial attitudes is below the G20 and OECD average, yet comparable with the countries in the region. According to the answers, the population in our country has relatively good financial knowledge (45% of the respondents). In terms of behavior towards finances, 42% of respondents indicated responsible management of money and domestic budget (settling liabilities on time, setting long-term financial goals, carefully choosing financial products and services). Regarding the third component, only 20% of the respondents expressed positive attitudes to finances (whether to save or spend and how to manage them in the long term). Overall, the data suggest that there is a need for greater awareness and

In April 2018, the findings were presented of the measurement of the financial literacy among the adult population in the country conducted by the National Bank in cooperation with an external agency funded by the European Fund of Southeast Europe. The measurement results are internationally comparable, since the survey and the overall measurement were carried out in accordance with the methodology of the OECD International Network on Financial Education (INFE). The level of financial literacy in our country presented through the three major components of financial literacy:

education of the population about the use of various modern banking and other financial products and services.

From 13 to 15 May 2018, the National Bank, together with other financial regulatory institutions, marked the Financial Literacy Day. At the event, visitors were informed about all financial topics of interest through an exhibition. This multimedia event was also attended by representatives of financial institutions including banks, savings houses, insurance companies, investment fund management companies, pension funds management companies and microfinance institutions.

At the end of September 2018, the five-year financial education project (2018-2022) was officially launched with the support of the Dutch Ministry of Finance and the OECD International Network for Financial Education (INFE-OECD), which is taking place in seven countries of the Dutch constituency at the IMF and the World Bank. Besides the National Bank, this five-year project will also be supported by the Ministry of Finance, the Securities and Exchange Commission, the Insurance Supervision Agency, and the Agency for Supervision of Fully Funded Pension Insurance. The project is focused on building financial education capacity and developing a national strategy for financial education of the population.

The National Bank, the Ministry of Finance and the Insurance Supervision Agency marked the World Savings Day - 31 October and the Insurance Day - 1 November by announcing the regular competition for primary education students on two topics: *I can save, too*, and *What does home and family insurance mean for me*. High school students were given the opportunity for the first time at this year's contest to submit an essay on the topic *I save - I think about my future*.

In December 2018, the National Bank concluded a Memorandum of Understanding with the Macedonian Banking Association (MBA) in the field of financial education and financial inclusion. In the period ahead, the National Bank and the MBA will undertake a number of joint activities to raise the level of financial literacy, promote and develop financial inclusion, as well as activities to better inform the population about the banking services in the country.

13.4. Annual Report on the Activities of the National Bank Museum and the National Bank Library and Archive for 2018

Last year, the National Bank Museum carried out a number of everyday activities related to the documentation and conservation of the National Bank's Numismatic Collection. Several events were organized for direct museum education of children and youth and other visitors of the Museum. To this end, two publications were prepared and published for promotion of the numismatic and monetary cultural heritage of North Macedonia. In addition, the Museum was among those responsible for the Money Week activities conducted in March 2018. In terms of research work, the Museum took part in the international conference *Between East and West, Stobi and the Cities in the Roman Provinces on the Balkans*, held in September 2018 in Stobi, organized by the National Institution for Management of the Archaeological Site of Stobi. In addition, as part of its museological work, the Museum commenced activities for launching the new permanent museum exhibit at the National Bank's new facility.

During the year, the library and archive carried out activities for enriching and protecting the library and archive fund and its availability to users. Currently, the archival material derived from the National Bank operations has been digitized, and the archival research related to the collection and digitization of materials relevant to the history of central bank operations in the country has been conducted.